



INTERNATIONAL WATER RESOURCES ASSOCIATION'S
1st ISLANDS WATER CONGRESS
FAROE ISLANDS - SEPTEMBER 4-6, 2024



*International
Water Resources
Association*



JARÐFEINGI
Faroese Geological Survey

Law and Water Management in the Hawaiian Kingdom

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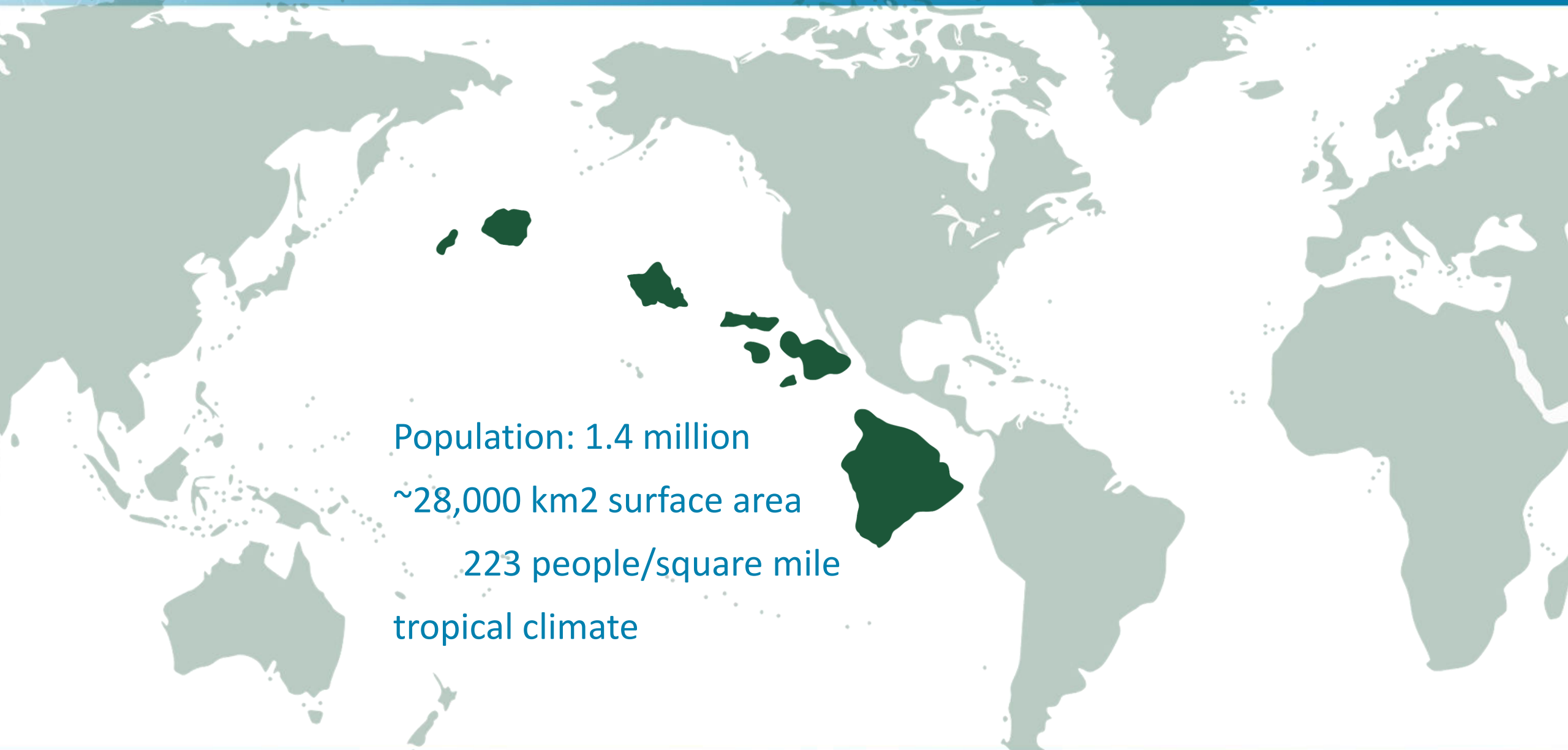
Content

- Ancestral and historical water regulation
- Principles of historical water management
- Industrial agriculture
- Modern Impacts



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A light green world map with several island groups highlighted in dark green. The highlighted islands include the Hawaiian Islands, the Philippines, the Indonesian archipelago, and the island of Sumatra.

Population: 1.4 million
~28,000 km² surface area
223 people/square mile
tropical climate

Ancestral Water Regulation

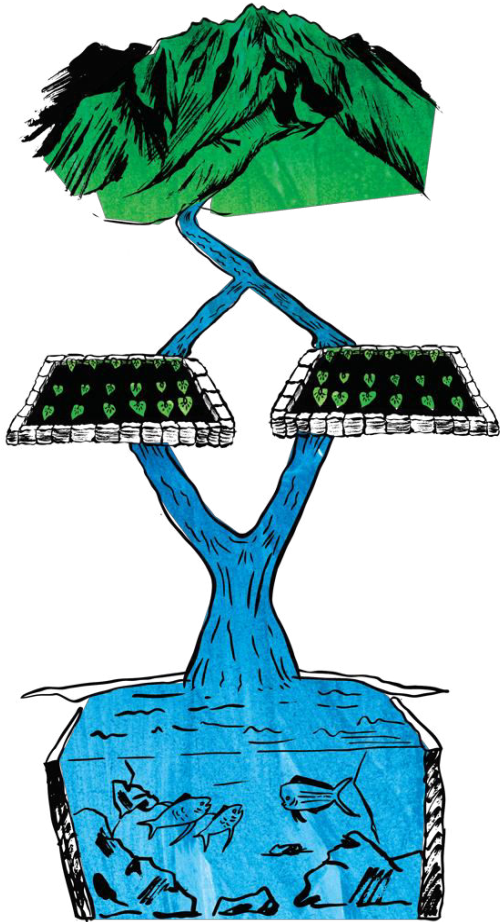
Ancestral



Historical



Modern



Kāneikawaiola
kānāwai
economy

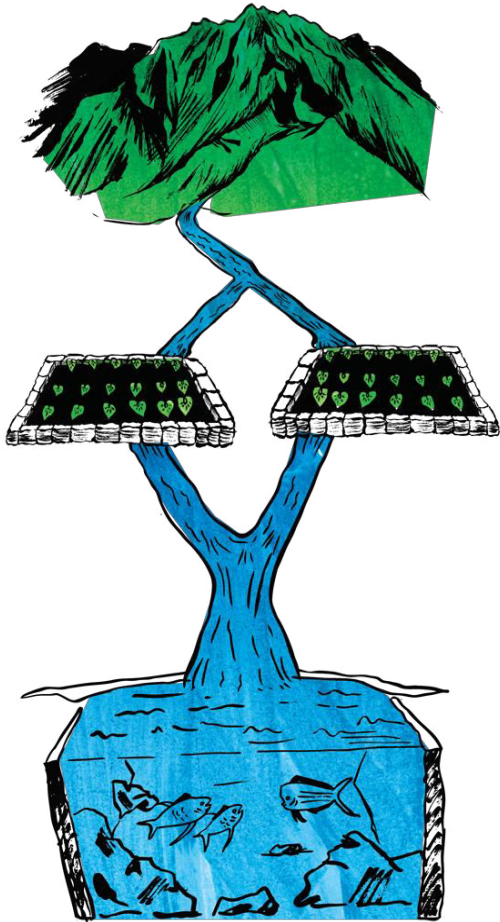
elemental personification of freshwater, springs based on ancient ideas of sharing water equally; earliest laws said to have been in relation to water agriculture dependent on efficient freshwater use

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based on ancient ideas of sharing water equally;
earliest laws said to have been in relation to water
agriculture dependent on efficient freshwater use

“Any one in the olden times caught breaking a dam ... would be slain by the share holders of that dam, and his body put in the breach he had made ... thus serving as a warning to others” – Emma Nakuina



1840 Kumu Kanawai (Constitution)

codifies ancestral values of resource management; determines resources as public, and their management is assigned to the king as a trustee

O Kamehameha I, oia ke poo o keia aupuni, a nona no na aina a pau mai Hawaii a Niihau, aole nae nona pono, no na kanaka no, a me na'lii, a o Kamehameha no ko lakou poo nana e olelo i ka aina."

KAMEHAMEHA I, was the founder of the kingdom, and to him belonged all the land from one end of the Islands to the other, though it was not his own private property. It belonged to the chiefs and people in common, of whom Kamehameha I was the head, and had the management of the landed property.



The Commission of Private Ways and Water Rights (1860)

- Three representatives appointed as commissioners in each election district
 - place-specific representation with local familiarity at the district level
 - familiarity of customary water rights, residents relationships to place in decision-making
 - 21 districts x 3 = 63 commissioners
- water use determined by day and time, rather than exclusive ownership
- demonstrates commitment to address issues in freshwater management
- residents, community members active and engaged



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An Act for the Protection and Preservation of Woods and Forests (Forestry Act) (1876)

protects woods and forest land that were “best suited for the protection of water sources”

An Act to Prevent the Waste of Artesian Water on O‘ahu (1884)

wells have to be capped by the owner to control water flow, and condemned the waste of water



- **collective investment in freshwater; water as a public trust**
- **law as a tool to protect indigenous values while adapting to changing circumstances**
- **prioritizing environmental protection, regulating water use**
- **community empowerment, local knowledge in decision-making**
- **balancing economic development with resource protection**

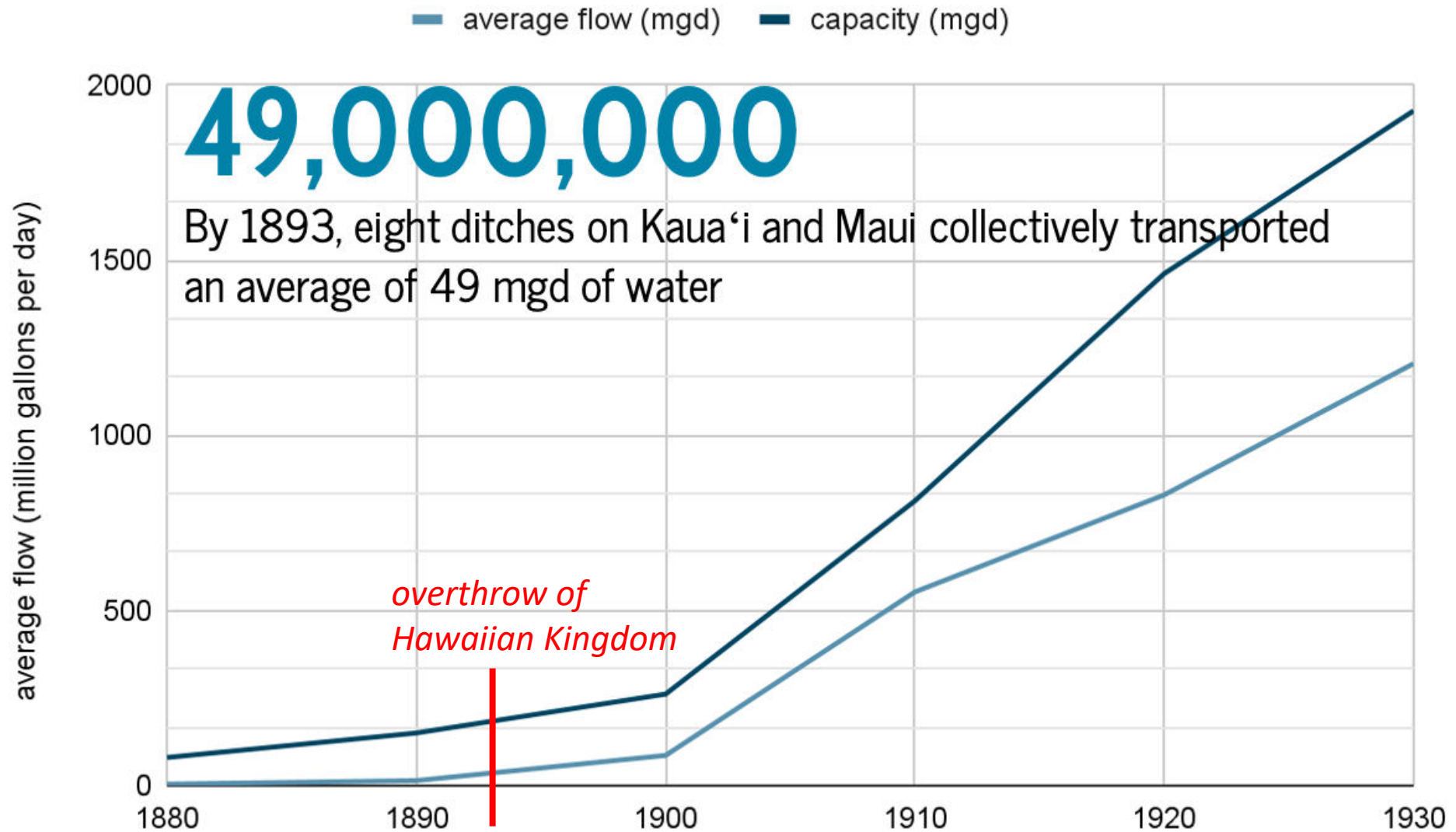


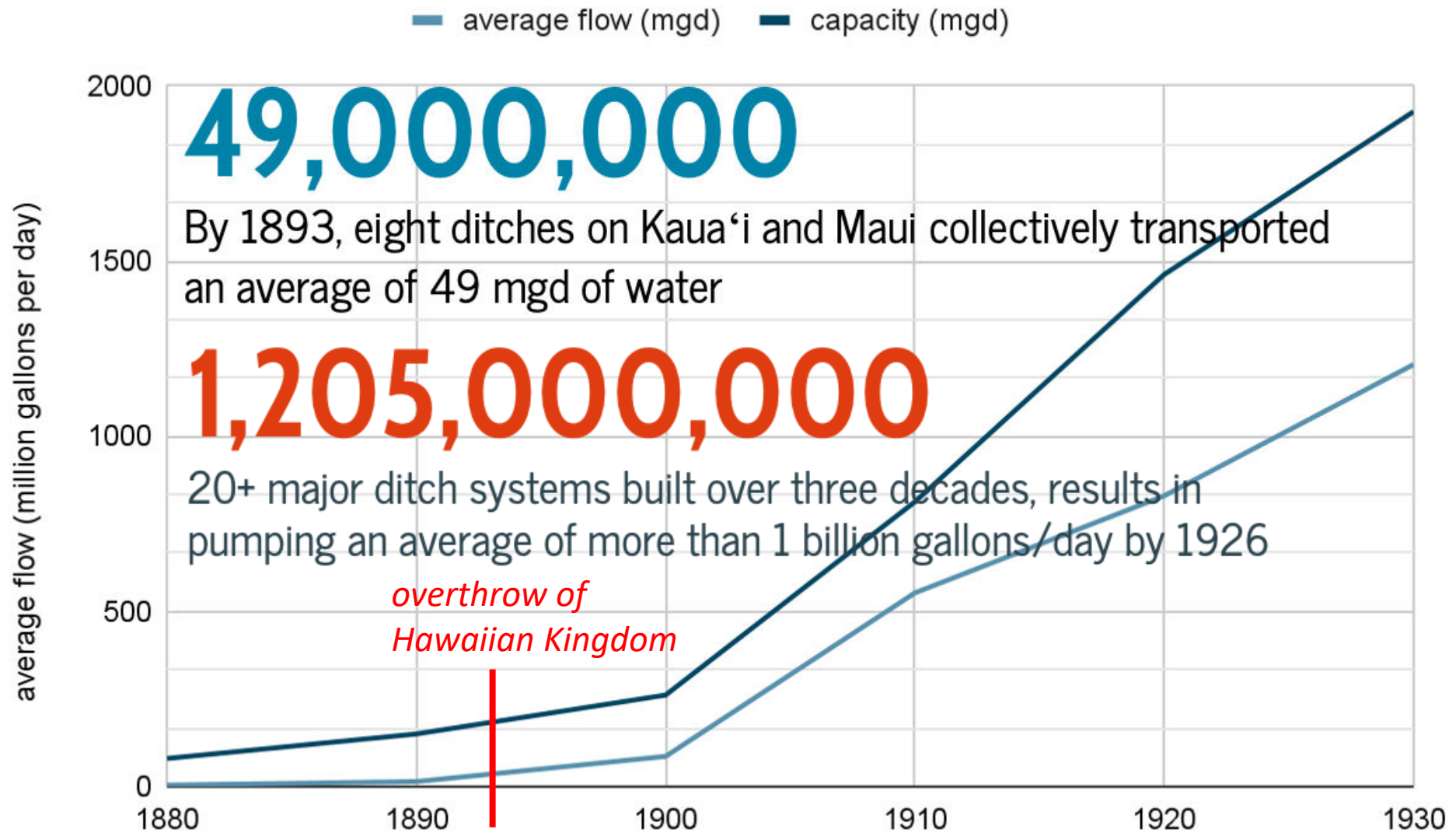
Reciprocity Treaty (1876)

- enables free trade between Hawai'i + US
- Hawaii sugar producers no longer paying high taxes to export product

An Act to Aid the Development of the Resources of the Kingdom (1876)

- allowed watercourses to be leased for up to thirty years
- initial effort to regulate irrigation projects across Hawai'i
 - government implemented protections of traditional and customary rights of its people
- licenses as: a source of revenue for developing public infrastructure; method to maintain control







- **environmental;** soil degradation, water pollution, loss of native biodiversity, effects on native ecosystems
- **land use;** large corporations still control significant amounts of land originally seized for plantations; land developed for tourism, real estate
- **water rights;** conflicts over water use and access between landowners, developers and local communities
- **social inequalities;** racial, socioeconomic disparities rooted in plantation-era labor



'Hurting for water': Hawaii resorts worsen Maui's water shortage

How Centuries of Extractive Agriculture Helped Set the Stage for the Maui Fires

The sugar and pineapple plantations that dominate the Hawaiian island changed the landscape, how the water flows, and contributed to the devastation of the fire.

Maui

'Ration Your Water': A Plantation-Era Water System On Maui is Maxed Out

Families who rely on a Maui stream as their only source of running water found their supply suddenly dry.

Ancestral



Historical



Modern

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Flows Restored To Waimea River And "Grand Canyon of the Pacific"

Victory — Historic agreement approved by the State of Hawai'i's Commission on Water Resource Management will end wasteful plantation-era water diversions

Maui

'Ration Your Water': A Plantation-Era Water System On Maui is Maxed Out

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Hawai'i's High Court Issues Another Historic Ruling in Maui "Four Waters" Case

Victory — State Water Commission failed to restore stream flows after closure of last sugar plantation

The ditch was built in 1916 to carry fresh water from Windward streams to vast Leeward sugar cane fields. But as the sugar industry faded, Windward activists and taro farmers fought for the return of the diverted water.



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Mahalo!

Ola i ka wai!