

# Briefing on the Adoption of the Maui Island Water Use and Development Plan Update

Presentation to the Commission on Water Resource Management

March 21, 2023



# Outline

- Background on the Hawai'i Water Plan and Water Use and Development Plan
- History of the current update of the Maui Island Water Use and Development Plan (Maui Island WUDP)
- Issues raised through public hearing process
- Staff analysis and recommendations
- Next steps

# References

- Hawai'i Water Plan:

<https://dlnr.hawaii.gov/cwrm/planning/hiwaterplan/>

- Hawai'i Water Plan Framework:

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

- Maui Island Water Use and Development Plan:

<https://waterresources.mauicounty.gov/DocumentCenter/View/608/Ord-5335>

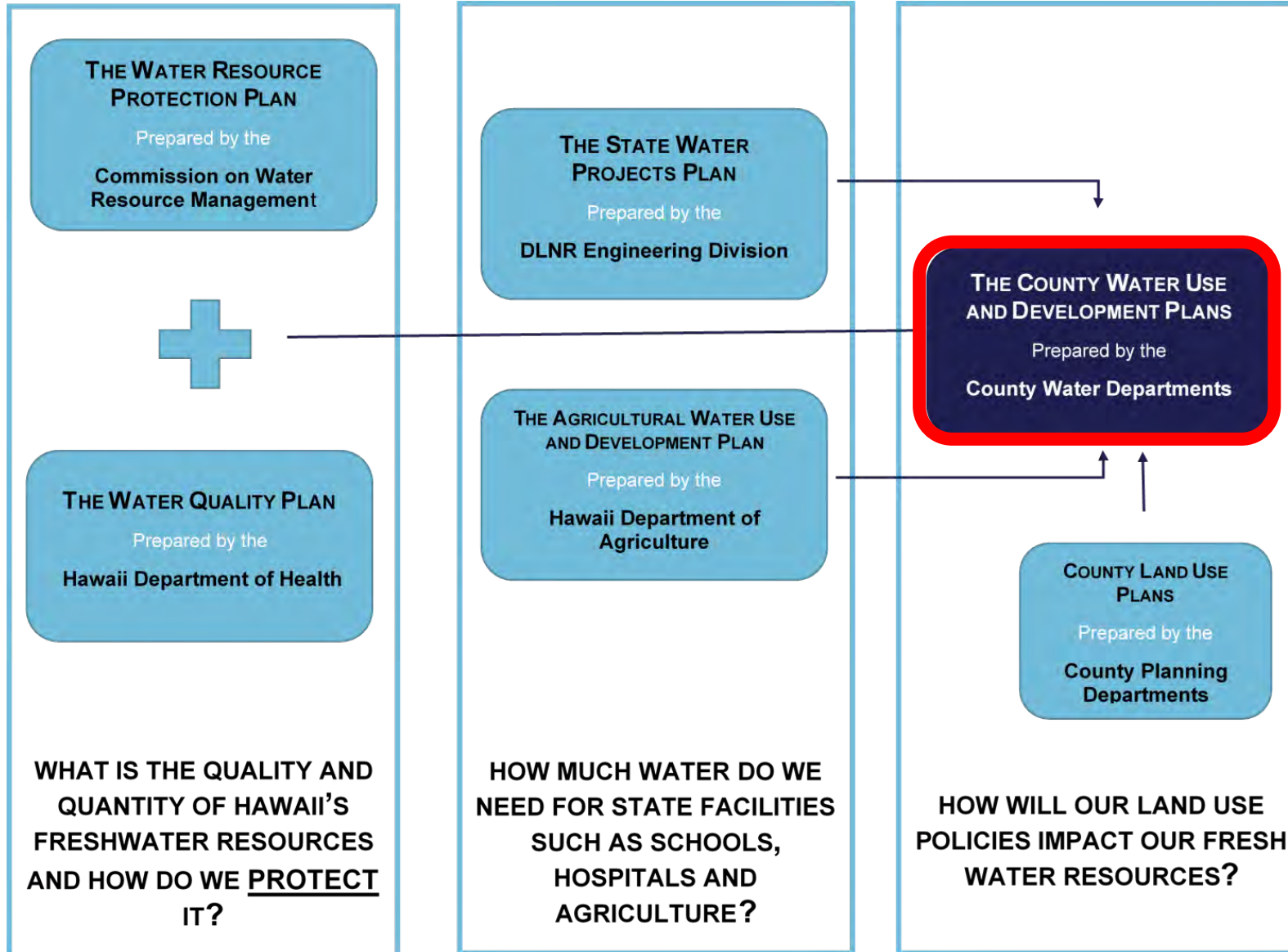
- Draft Staff Submittal:

[https://files.hawaii.gov/dlnr/cwrm/downloads/Maui\\_WUDP\\_Submittal\\_DRAFT.pdf](https://files.hawaii.gov/dlnr/cwrm/downloads/Maui_WUDP_Submittal_DRAFT.pdf)

# The Hawai'i Water Plan

*There is a need for a **program of comprehensive water resources planning** to address the problems of supply and conservation of water. **The Hawaii water plan**, with such future amendments, supplements, and additions as may be necessary, is accepted as the guide for developing and implementing this policy. (§174C-2(b) HRS)*

*\*Additional guidance in the admin rules and framework guidance document*



# Water Use and Development Plan

Requirements from the State Water Code ((§174C-31 HRS):

1. Prepared by each of the four counties and adopted by ordinance
2. Consistent with County land use plans and policies
3. Sets forth the allocation of water to land use through the development of policies and strategies to guide the County in its planning, management, and development of water resources to meet projected demands
4. Periodic updates to maintain consistency with changing land use policies

# History of Maui Island Water Use Development Plan Update

- 2016 – Began update and developed plan
- 2018 – Draft plan submitted to Maui BWS
- 2019 – Draft plan submitted to Maui County Council
  - Maui County Council edits plan through adoption process
  - Additional outreach to community by Councilmember Sinenci
  - 2020 Addendum created as a result
- 2022 – County Council adopts plan as ordinance
  - Draft plan submitted to CWRM for adoption
  - CWRM holds public hearing on draft plan

# Community Participation & Plan Development Process

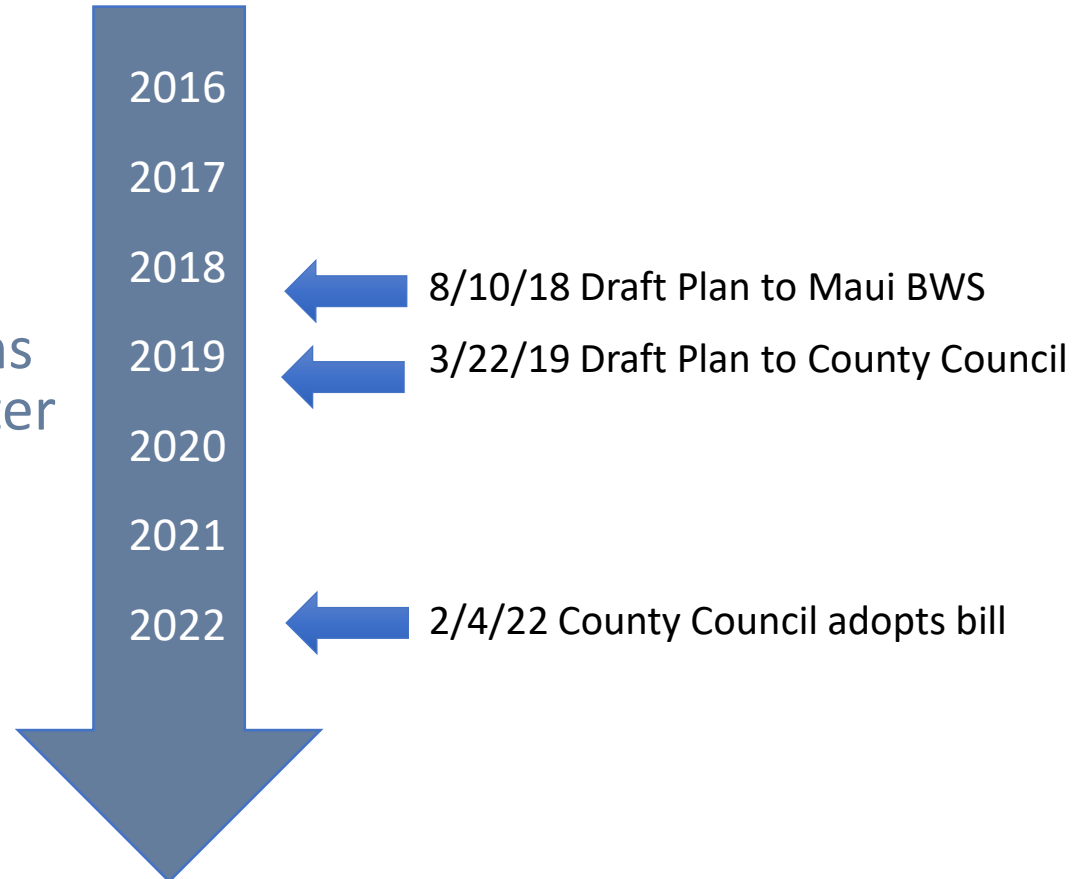
**13** Public meetings & workshops

**8** Targeted stakeholder meetings

**15** Policy body presentations and briefings (Board of Water Supply, CWRM, Cultural Resources Commission)

**5** Board of Water Supply public hearings

**29** County Council & Committee Meetings





# Issues Raised Through Public Hearing Process

- Public hearing held on the evening of September 21, 2022 at the Kihei Community Center
- 33 individuals attended based on sign-in record
- Commission staff received a total of 53 oral and written testimonies on draft plan
- Majority of testifiers oppose adoption of the plan

# Issues Raised Through Public Hearing Process

- The plan is difficult to read and should have been prepared by a planning consultant
- The plan relies on old data and should be updated based on current water use and availability
- The impact of Community Water Authorities need to be considered in the plan
- Elements from the Ha'ikū – Pā'ia community plan needs to be incorporated
- No information about how the Upcountry water meter list will be resolved

# Issues Raised Through Public Hearing Process

- Ha'ikū aquifer is identified as a major source of water for island's population, but little is known about the aquifer
- Certain types of water uses should not be allowed, such as hotel and commercial uses
- Climate change impacts are not considered
- Water conservation targets are not aggressive enough
- Concerns that the Lahaina water management area designation will impact WUDP findings

# Staff Analysis and Recommendations

## Issue:

- The plan is difficult to read and should have been prepared by a planning consultant

## Response:

- Method of preparing WUDP not outlined as a requirement
- Executive summary double the average of other WUDPs due to information added through County Council review process

# Staff Analysis and Recommendations

## Issue:

- The plan relies on old data and should be updated based on current water use and availability

## Response:

- Framework recommends living document approach and range of projections to account for uncertainties
- Addenda added through Council review process updated SY projections, Mahi Pono farm plans, IIFS information
- Commission staff will work with HWP preparers to incorporate USGS Climate Change study into future updates

# Staff Analysis and Recommendations

## Issue:

- The impact of Community Water Authorities needs to be considered in the plan

## Response:

- Commission is still awaiting information on the details of the approved East Maui Community Water Authority
- The nexus to the Commission and role of entity should be part of the next Maui Island WUDP update

# Staff Analysis and Recommendations

## Issue:

- Elements from the Ha'ikū – Pā'ia Community Plan needs to be incorporated

## Response:

- Policies from the 1995 Ha'ikū – Pā'ia Community plan are incorporated into plan strategies in sections 15 and 16
- No groundwater will be transported out of the region before adequate supply is insured for the Ha'ikū – Pā'ia community

# Staff Analysis and Recommendations

## Issue:

- No information about how the Upcountry water meter list will be resolved

## Response:

- Section 15 proposes to assess alternative options and explore new source development to address applicants on list
- Commission staff will work with Maui DWS to determine what data is required to develop new sources



# Staff Analysis and Recommendations

## Issue:

- Ha'ikū aquifer is identified as a major source of water for island's population, but little is known about the aquifer

## Response:

- Commission staff determines sustainable yield for the aquifer based on current data and publishes in WRPP
- Aquifer is subject to comprehensive study and terms of East Maui Consent Decree
- Commission staff will work with Maui DWS to identify data gaps in hydrologic data and report back to the Commission in one year

# Staff Analysis and Recommendations

## Issue:

- Certain types of water uses should not be allowed, such as hotel and commercial uses

## Response:

- WUDP must be consistent with county land use plans
- CWRM staff working with County and other partners to investigate opportunities for expanding R-1 for non-potable needs

# Staff Analysis and Recommendations

## Issue:

- Climate change impacts are not considered

## Response:

- WUDP examined high, medium and low water use scenarios, supply diversification, water conservation and augmentation policies, and vulnerability assessments to identify priority actions as a result of climate change in sections 9, 10, 11, and 12
- Commission staff awaiting USGS study of groundwater recharge impacts resulting from future climate conditions, which will be incorporated into future HWP updates
- Updated HWP Framework has “Kilo” as guiding value, which is to learn from past observations to create a better future

# Staff Analysis and Recommendations

## Issue:

- Water conservation targets are not aggressive enough

## Analysis:

- Water conservation targets not required by Water Code of HWP Framework
- WUDP strategies in section 13 examine conservation measures to reduce per capita demand
- Commission staff will work with County of Maui to look at supply-side efficiencies identified in water system water audits to meet water conservation goals

# Staff Analysis and Recommendations

## Issue:

- Concerns that the Lahaina water management area designation will impact WUDP findings

## Response:

- All new water use permits will be subject to Commission decision
- Information from the Maui Island WUDP will be used to inform Commission decisions, complimenting management and oversight of the region

# Staff Analysis and Recommendations

Consistency with State Water Code Requirements and HWP Framework Recommendations?

Analysis:

Upon review of the document, staff concludes that State Water requirements and HWP Framework recommendations have been met

## Next Steps

- Commission staff to bring submittal for adoption to April meeting

- Link to draft submittal:

[https://files.hawaii.gov/dlnr/cwrn/downloads/Maui\\_WUDP\\_Submittal\\_DRAFT.pdf](https://files.hawaii.gov/dlnr/cwrn/downloads/Maui_WUDP_Submittal_DRAFT.pdf)

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Thank you  
for your  
time

Commission on Water  
Resource Management

<http://hawaii.gov/dlnr/cwrn/>

# Staff Analysis and Recommendations

Requirement/Recommendation	Compliance Achieved?
<i>Status of county water and related land development including an inventory of existing water uses for domestic, municipal, and industrial users, agriculture, aquaculture, hydropower development, drainage, reuse, reclamation, recharge, and resulting problems and constraints</i>	Addendum, Sections 8, 14, 15, 16, 17, 18, and 19
<i>Future land uses and related water needs</i>	Addendum, Sections 9, 14, 15, 16, 17, 18, and 19

# Staff Analysis and Recommendations

Requirement/Recommendation	Compliance Achieved?
<i>Regional plans for water developments including recommended and alternative plans, costs, adequacy of plans, and relationship to the water resource protection plan and water quality plan</i>	Addendum, Sections 14, 15, 16, 17, 18, and 19
<i>Each water use and development plan shall be consistent with the water resource protection plan and the water quality plan</i>	Sections 14, 15, 16, 17, 18, and 19

# Staff Analysis and Recommendations

Requirement/Recommendation	Compliance Achieved?
<i>Each water use and development plan and the state water projects plan shall be consistent with the respective county land use plans and policies, including general plan and zoning as determined by each respective county</i>	Sections 7, 14, 15, 16, 17, 18, and 19
<i>Each water use and development plan shall consider a twenty year projection period for analysis purposes</i>	Sections 9, 14, 15, 16, 17, 18, and 19

# Staff Analysis and Recommendations

Requirement/Recommendation	Compliance Achieved?
<i>The water use and development plan for each county shall also be consistent with the state land use classification and policies</i>	Sections 7, 14, 15, 16, 17, 18, and 19
<i>County-Specific WUDP Project Description approved by CWRM</i>	Approved by CWRM on August 15, 2012

# Staff Analysis and Recommendations

Requirement/Recommendation	Compliance Achieved?
<i>Coordination with CWRM</i>	Maui DWS provided briefings to the Commission and met with Commission staff prior to completing the draft plan. Commission staff also worked closely with Maui DWS to provide data for the plan
<i>Stakeholder and public involvement</i>	Several meetings were held during the development of the Maui Island WUDP. These are summarized in Appendix 11

# Staff Analysis and Recommendations

<b>Requirement/Recommendation</b>	<b>Compliance Achieved?</b>
<i>Development of Policy Objectives and Evaluation Criteria</i>	Executive summary, Sections 2 and 3
<i>Description of water system profiles</i>	Sections 11, 14, 15, 16, 17, 18, and 19
<i>Identification of Resource and Facility Options</i>	Addendum, Sections 11, 14, 15, 16, 17, 18, and 19
<i>Development and Evaluation of Strategy Options</i>	Sections 11, 12, 14, 15, 16, 17, 18, and 19
<i>Implementation Plan</i>	Addendum, Section 13