

BOARD OF WATER SUPPLY  
COUNTY OF MAUI

REGULAR MEETING  
MINUTES OF SEPTEMBER 24, 2012

The regular meeting of the Maui County Board of Water Supply was held at the Department of Planning Conference Room, 250 South High Street, Wailuku, Maui, on Monday, September 24, 2012.

CALL TO ORDER

The meeting was called to order by Chair Kevin Boteilho at 9:00 a.m.

ATTENDANCE

Members present: Kevin Boteilho, Chair  
John Hoxie, Vice Chair  
Patricia Eason  
Donald Gerbig  
Robert Joslin  
Cyrus Kodani  
James Rust

Excused: William Kamai  
Michael Suzuki

Staff present: Dave Taylor, Director  
Paul Meyer, Deputy Director  
James Giroux, Deputy Corporation Counsel  
Gaye Hayashida, Commission Support Clerk

ANNOUNCEMENTS

None.

APPROVAL OF MINUTES

Minutes of August 30, 2012

Chair Boteilho asked for approval of the minutes.

Motion: Member Rust moved to approve the minutes of August 30, 2012

Second: Member Gerbig

Discussion: None.

Vote: Unanimous. Motion carried. The minutes of August 30, 2012 approved.

## TESTIMONY FROM THE PUBLIC

There being no public testifiers Chair Boteilho closed public testimony.

## APPEALS

Appeal No. 12-01, an appeal by Roseliann P. Say. Findings of Fact, Conclusions of Law, Decision and Order of the Board of Water Supply and Decision in the Matter of the Appeal Fee

The Board heard from the Appellant and the Director's legal counsel on their Proposed Findings of Fact, Conclusions of Law, and Decision and Order and then went into closed session to deliberate on the matter.

## UNFINISHED BUSINESS

None.

## OTHER BUSINESS

Presentation by Pam Pogue, Water Resources and Planning Manager, on the Water Use and Development Plan Schedule

Ms. Pogue presented an overview and a timeline of the Maui Water Use and Development Plan process. She explained that the Water Use and Development Plan (WUDP) was mandated by the State Commission on Water Resource Management (Commission) and it is one of 5 elements of the state water plan. The handout of her power point presentation has been made a part of these minutes.

One of the issues the Commission had was that they wanted to see all water systems within the WUDP. They asked the County of Maui to include all water systems and uses throughout the island and not only focus on the Department of Water Supply's (DWS) systems. The second issue was that they wanted the DWS to tie it between land use and water supply. The Maui Island Water Use and Development Plan will now be the supporting technical document to the Maui Island Plan.

In August, the Director and Ms. Pogue met with the Commission and submitted a new project description and a new timeline for the Maui Island Water Use Development Plan which they received unanimous approval on.

This one plan will be a holistic integrated approach looking at all the water systems and water uses on Maui. It will not be "DWS-centric" and all previous work done for Central, Upcountry and West Maui will not be lost. Much of that very technical information and data is already being used in the Water Optimization Study and capital improvement projects by the Director.

The Commission wanted a closer look at alternatives, weighing the scales and looking at trade-offs that could be used in terms of the planning objectives. They wanted the counties to consider putting something like resource protection in their plans. Maui is the only county in Hawai'i that has written a well-head protection ordinance and was awarded \$750,000 to implement that. The DWS will be tying that directly to the WUDP.

The Commission asked the counties to look at watershed protection in terms of how it ties to recharge, source and so forth. Again, Maui is ahead of the rest of the counties on this.

Oahu has chosen to do each of their WUDP by watershed, whereas, the Big Island is doing it by regional aquifer districts. The Commission allows each county to do what is most effective within that county.

The final thing the Commission has asked the counties to look at is the impact of sea level rise and climate change on water resources. This is something new that will be added to the plan.

Ms. Pogue went on to explain that the public process is a strong component and a requirement of all WUDP. There has been a long tradition and a strong foundation of public input into the plan. It started with Focus Maui Nui which started the Maui Island Plan, which led to General Plan Committee. The point of these meetings was about the philosophy of water and the water policies which are contained within the Maui Island Plan.

The Department does not plan to appoint any citizen advisory committee in doing the Maui Island WUDP. The most effective way of getting public input will be through open meetings in various locations where the public is given the opportunity to testify or share information at each draft stage.

Ms. Pogue announced that she will be happy to give the Board an update as well as to the Council's Water Resource Committee (WRC), though the Commission has asked for only 2 quick updates throughout this process. She stated that they already have scheduled public meetings around the county.

The DWS is collaborating with Long Range Planning, Current Planning and other divisions within the county and they hope to form a project team. This way they can tap into their resources and share data and expertise. It will be a very integrated approach in terms of resource and planning.

There are various stages that they have to go through in terms in doing the plan. The black bars represent each draft. The first 2 drafts will require a lot of work in terms of pulling things together. Once they are in the swing of incorporating public input, the Board's input, WRC input and the leadership within the county, things are going to tighten up and it will get much easier.

Stage I - identify planning objectives and evaluation criteria.

Stage II - identify existing and future demand/supply.

Stage III - identify and prioritize options and strategies

Stage IV - integrate state policies and regulations from the Hawaii Water Quality Plan.

Stage V - draft development and agency/public review.

In short, there will be only one document that covers public and private systems in all the districts for Maui Island and it will not be DWS-centric. The plan will be a technical "sister" document to the Maui Island Plan. It will be very technically written on how we are going to address water issues on this island. It will not deal with philosophies or policies. Past studies, data and analytical outcomes will be used. They will continue the extensive public process and the drafts will be available on the Maui County website and hard copies will be available at public libraries. The Commission is very, very happy about this process and they are fully confident that this will be a well vetted plan.

The estimated expected completion date will be early to mid 2015 but Ms. Pogue believes they can do it sooner.

Member Joslin asked Ms. Pogue to give an example of trade-offs.

Ms. Pogue explained that if you are looking at alternative water sources, whether it will come from Haiku or a de-salination plant or from reclamation, you have to look at cost effectiveness, the number of people who will be serviced and impacted. The best way to do that is to identify all the planning objectives and using that to prioritize what you're going to do and where you're going to do it.

Director Taylor added that DWS will use the Maui Island Plan which is a land use document, as a base to supply water for whatever the Maui Island Plan says is the future of Maui. The Department's responsibility is to figure out how to get water to those areas of growth.

Central Maui's growth according to the Maui Island Plan is somewhere around 30% from now to the year 2030. There are several ways to deal with that. You could get more surface water by taking it away from where surface water is being used. You could do more groundwater from East Maui, you could do de-sal, or you could do massive conservation. There are pluses and minuses to all of these. But either way, if the Maui Island Plan says there is going to be 30% more people living in Central/South Maui, one of those or some combination of those has to happen and whichever one happens there will be some people very happy about it and some people unhappy about it. Those are the trade-offs.

Surface water is cheap water but a lot of people want it back in the streams, a lot of people want more for ag. So one of the first questions is, do we want to use the limited but cheap surface water for that or do we want to say no, put the water back in the streams and use more expensive water. Those are the trade-offs that we alone can't

say what is the best thing to do. It is not what is best for the utility but what is best for the island.

The most important thing to remember is that it is not a DWS CIP plan, it is a Maui Island water resource plan and the trade-offs will be who gets the cheap water and who is going to have to use the expensive water like de-sal and who is going to pay for it.

Member Rust asked what is the timeline for de-sal?

Director Taylor replied that de-sal is so expensive from an energy standpoint. It sounds great until you actually run it. There are all these plants around the world that aren't running because people can't afford to run it. Then there's the huge issue of the really salty water -- how do you dispose of it? Return it to the source? Or down an injection well?

Realistically, de-sal is going to be so expensive compared to going to East Maui for groundwater. It is very, very, very unlikely that de-sal will be a real solution for this community.

The Director stated that he believes it will be more about priorities of surface water because that is the cheap water. And ultimately those are the decisions the Commission is making -- how much water to put in the streams, how much to give to ag, how much to give to DWS. The single biggest issue of the Commission has is how to divide up the cheap surface water.

Member Joslin asked if we got 100% surface water are we using 10% of it?

Director Taylor answered that you will get different opinions from different people. There are people who believe that all streams should flow mauka to makai, 24/7, 365 days a year. There may not be enough water in streams to do that even if no one takes any out. Then there is large agriculture and they say that in order to make large agriculture work economically they need to divert as much water as possible to keep ag businesses going, to keep those jobs and the economy going. And then you have water systems like ours trying to keep the rates down. We'd love to have as much as possible. There is not enough water for everyone. Ultimately, the Commission will have to decide this.

Perhaps the biggest purpose of this document is to tell the state water commission this is what the priorities are for the people of Maui County.

Receipt of Board Member request for agenda items to be placed on future agendas.

No items for future agendas were submitted by the board members at this time.

### COMMUNICATIONS

None.

### DIRECTOR'S REPORT

Director Taylor stated that the biggest thing that happened is the DWS plans for Upcountry water which was presented to the County Council and also the Maui News had an article about this presentation. The Department has obtained a dvd of this presentation and if the Board would like to see this it could be played at the next meeting.

This is about the Department's plan to deal with the Upcountry Water List and it was presented in detail to the Council.

### DIVISION REPORT

#### August Division Reports

Director Taylor said it was business as usual. There was no further discussion on this matter.

### ADJOURNMENT

There being no further business the meeting was adjourned at 10:50 a.m.

Prepared by:

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Gaye Hayashida  
Commission Support Clerk

Approved by:

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Dave Taylor  
Director

# **Maui Island Water Use and Development Plan: Revised Project Description**

**September 24, 2012  
Maui County Board of Water Supply**

## **Commission on Water Resources Management Requested....**

- **A revised project description needed to be submitted to the full Commission for their approval**
- **All water systems/uses on Maui Island be included in the Water Use Development Plan**

## **How Will the Previous WUDP Process be Different?**

- **Only one WUDP for Maui Island**
- **Maui Island WUDP will include all water systems, and all water users**
- **Maui Island WUDP will be the supporting technical document to the Maui Island Plan**

## **WUDP Technical Information**

- **Characterization of the UpCountry, West & Central Districts Strategy Analyses**
- **Planning Objectives**
- **System Reliability and Expansion Criteria**
- **Economic & Feasibility Analysis of Final Candidate Strategies**
- **Uncertainty & Contingency Planning**
- **Water Allocation Policies**
- **Demand Side Management Programs**
- **Resource Protection and Restoration**

## **Public Process Has a Strong Foundation**

- **Focus Maui Nui**
- **GPAC**
- **General Plan Committee**
- **Past WUDP Public Meetings:**
  - **UpCountry**
  - **Central**
  - **West**

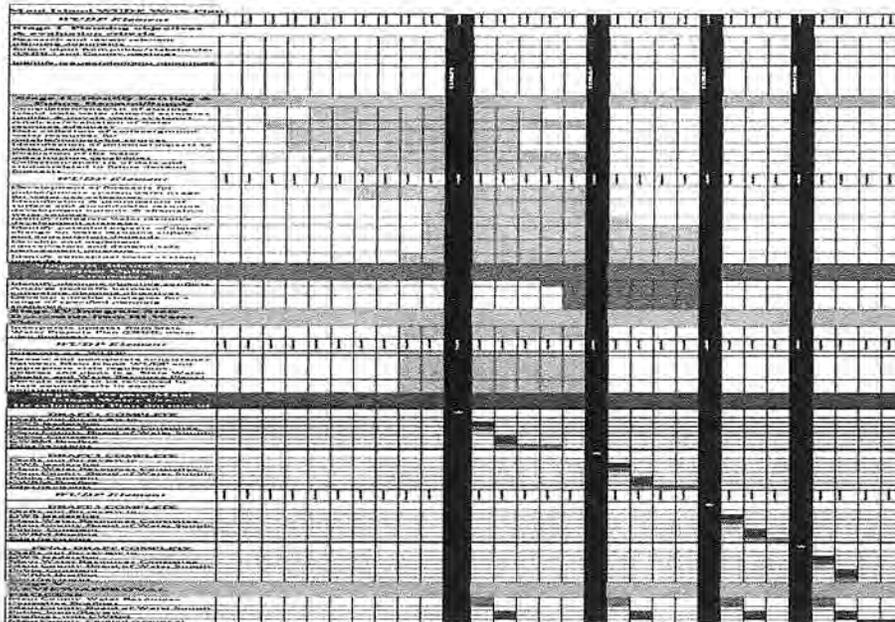
## **Future Public Meetings**

- **Opportunities at each draft stage**
- **Board of Water Supply**
- **Water Resources Committee**
- **Commission on Water Resources Management**
- **Regional Public Meetings**

## Technical Approach

- Synthesis and integration with Maui Island Plan
- Planning is not DWS water system centric
- County Departments/Divisions will collaborate to effectively and efficiently share data and technical resources
- Integrated resource planning approach
- Extensive public process will continue
- All previous work will not be wasted

### Maui Island Water Use Development Plan Timeline



## Stage I Identify Planning Objectives and Evaluation Criteria

WUDP Element	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	
Stage I Planning objectives & evaluation criteria																			
Research and review relevant planning documents																			
Solicit input from public/stakeholder (DHP/L) and County meetings																			
Identify issues/planning objectives																			

- Integrated Resource Planning
- Based upon outcome of Maui Island Plan – growth projections and urban growth boundaries
- Incorporate relevant objectives from State Land Use Plan, HI Water Plan, Maui Island Plan, Watershed Management Plans
- Identify water resource issues and objectives (for surface and ground waters)

## Stage II Identify Existing & Future Demand/Supply

WUDP Element	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13	
Stage II Identify Existing & Future Demand/Supply																			
Compilation/analysis of existing Island wide water demand estimates (public & private water systems)																			
Analysis/evaluation of water resource adequacy																			
Data collection of surface/ground water resources for potable/irrigatable sources																			
Identification of potential impacts to water resources																			
Evaluation of the water infrastructure capabilities																			
Compilation/analysis of data and identification of future demand forecasts																			
Development of forecasts for public-private system water usage for water use applications																			
Identification & prioritization of surface and groundwater resource development options & alternative water sources																			
Identify/integrate water resource development strategies																			
Identify potential impacts of climate change on water resource supply and consumption demands																			
Develop and implement conservation and demand side management programs																			
Identify conceptual water system scenarios																			

- Compilation of existing data
- Analysis of water resource adequacy
- Collection of SW/GW data
- Identification of potential impacts to water resources
- Evaluation of water infrastructure capabilities
- Analysis of studies related to future demand forecasts

## Stage III Identify and Prioritize Options & Strategies

WUDP Element	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13	
Stage III Identify and Prioritize Options & Strategies										DRAFT 1									
Identify planning objective conflicts										DRAFT 1									
Analyze tradeoffs between competing planning objectives										DRAFT 1									
Develop suitable strategies for a range of specified planning scenarios										DRAFT 1									

- Identify planning objectives conflicts
- Analyze tradeoffs
- Develop strategies for various planning scenarios

## Stage IV Integrate State Policies & Regulations from HI Water Plan

WUDP Element	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13	
Stage IV Integrate State Documents from HI Water Plan																			
Incorporate updates from State Water Projects Plan (DHHL water plan findings)																			
Integrate Ag, WUDP, State Water Resources Plan, State Water Quality Plan																			
Review and incorporate consistency between Maui Island WUDP and appropriate state regulations, policies and plans (e.g. State Water Quality and Water Resource Plans)																			
Provide drafts to be reviewed by state counterparts to ensure consistency																			

- Incorporate Ag Water Use Development Plan
- Incorporate State Water Projects Plan
- Consistency with Hawaii Water Quality Plan (Hawaii Water Plan Element)
- Consistency with Water Resource Protection Plan
- Consistency with State Water Code

## Stage V Draft Development & Agency/Public Review

WSP Review	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
<b>Stage V Progress</b>																									
Water Resource Development Plan/Implementation																									
<b>DRAFT 1</b>																									
DWS leadership																									
Maui Water Resources Committee																									
Maui County Board of Water Supply																									
Public Comment																									
CWRM Briefing																									
Public meetings																									
<b>DRAFT 2</b>																									
DWS leadership																									
Maui Water Resources Committee																									
Maui County Board of Water Supply																									
Public Comment																									
CWRM Briefing																									
Public meetings																									
<b>DRAFT 3</b>																									
DWS leadership																									
Maui Water Resources Committee																									
Maui County Board of Water Supply																									
Public Comment																									
CWRM Briefing																									
Public meetings																									
<b>FINAL DRAFT</b>																									
DWS leadership																									
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Public Comment																									
CWRM Briefing																									
Public meetings																									

- Draft completion and the staged approach
- Series of public meetings (BWS, WRC, Public Meeting, CWRM)
- Draft review
- Public process - timing

### In sum...

- One document
- Not DWS centric
- Technical support document to Maui Island Plan
- Previous studies, data collection, analytical outcomes to be used
- Continuation of extensive public process
- Estimated expected completion date: early to mid 2015