

BOARD OF WATER SUPPLY
COUNTY OF MAUI

REGULAR MEETING
MINUTES OF JULY 21, 2016

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 Thursday, July 21, 2016.

CALL TO ORDER

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

ATTENDANCE

Members present: Anders Lyons, Chair
Robert Joslin, Vice Chair
R. Raymond Cabebe
Sylvia Ho
Cyrus Kodani
Michael Suzuki
Thomas Watanabe

Staff present: Dave Taylor, Director
Paul Meyer, Deputy Director
Edward S. Kushi, Jr., First Deputy Corporation Counsel
Gaye Hayashida, Commission Support Clerk

Others: Jeanne Skog, Maui Economic Development Board

APPROVAL OF MINUTES

Minutes of June 16, 2016

Chair Lyons asked for a motion to approve the minutes of June 16, 2016 as submitted.

Motion: Vice Chair Joslin moved to approve the minutes of June 16, 2016 as submitted

Second: Member Cabebe

Discussion: None

Vote: Unanimous. Motion carried. The minutes of June 16, 2016 were approved as submitted.

TESTIMONY FROM THE PUBLIC

There was no public testimony given at this meeting.

OTHER BUSINESS

Presentation of Water Story by Jeanne Skog (MEDB)

Jeanne Skog, president of the Maui Economic Development Board (MEDB), gave a brief presentation on the "Water Story" which came about as an effort to educate and engage the public on a grassroots level about water resources. She explained how they would form groups, making it easier for people to engage in the discussion, and do exercises and role-playing. MEDB is about diversifying the economy and finding other industries that can strengthen our community and has been very successful in reaching several hundred people this way.

One exercise is to have participants mark on a map where they live and where they think their water comes from. Many are surprised as to where their water actually comes from. They do a short stint on brainstorming, asking the question what factors affect water, water supply, and water demand to get the participants thinking.

The participants are given a slide presentation on the history of water and the current water use. By 2030, it is predicted that the county could be using as much as 47 million gallons per day, which is a huge jump from where it is today. There's an ongoing challenge of balancing water needs and the efforts of the watershed partnerships to contain any damage to the watershed area.

Another exercise breaks the participants into 3 groups, business, government and community, and this gets them to think about water from different perspectives.

The participants are given an informational sheet called "Where In Maui Can I Go?". This gives them information on how they can get involved in water.

Understanding the complexity of decisions affecting water is something that the participants had not really thought about before MEDB's Water Story.

Discussion regarding the Department's Renewable Energy Policy Measures Up To The State of Hawaii's 100% Goal of Renewable Energy Usage By 2035

Director Taylor distributed the department's Energy Utilization Overview to the board members. A copy is attached and made a part of these minutes.

He believes that most likely in Hawaii's long term goals of alternative energy, we will have to be satisfied with large pv facilities that are not on our sites because our sites are

so small and use so much power per square foot. The department is actively looking at being a possible customer of some other county arrangement to make power, such as using recycled water to grow bio-fuels to make "energy pellets" as wind and photovoltaic on our sites are relatively limited.

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

At this time there were no requests for future agenda items.

DIVISION REPORTS

Director Taylor stated that it is business as usual and there no anomalies to report.

ADJOURNMENT

There being no further business the regular meeting was adjourned at 9:45 a.m.

Prepared by:

Gaye Hayashida
Commission Support Clerk

Approved for distribution:

David Taylor
Director

Handout

Department of Water Supply Energy Utilization Overview Board of Water Supply, July 21, 2016

Physical System

- Primary potable water utility for Maui and Molokai. More than 36,000 service connections.
- 6 surface water treatment plants
- 44 wells, 65 booster pump stations & 24 disinfection systems

Electricity Usage and Financial Data

- FY17 Budget: \$92.4 million (\$66.7 M operations & \$25.8 M capital improvement)
- FY17 electricity budget: \$15.6 million
- Calendar year 2014 electricity usage: 30,243,009 kWh
- Calendar year 2014 electricity expenditure: \$11,369,523
- Calendar year 2014 average price (actual price varies at locations): \$ 0.38/kWh
- Calendar year 2015 electricity usage: 32,456,843 kWh
- Calendar year 2015 electricity expenditure: \$10,286,857
- Calendar year 2015 average price (actual price varies at locations): \$ 0.31/kWh
- Electricity utilization driven by precipitation (more rain = lower demand and less pumping)
- Cost per kWh as per MECO rates approved by Public Utility Commission
- Variation in cost primarily driven by global oil prices
- DWS electricity usage and cost can change dramatically based on precipitation and global oil prices

Current Alternative Energy Systems (Power Purchase Agreements)

- Kamole Weir Treatment Plant Photovoltaic: 108,583 kWh @ \$0.16/kWh with 2.5% escalation rate
- Lahaina Treatment Plant Photovoltaic: 179,118 kWh @ \$0.16/kWh with 2.5% escalation rate
- Mahinahina Treatment Plant Photovoltaic: 179,118 kWh @ \$0.16/kWh with 2.5% escalation rate

- Current alternative energy installations: Approximately 1.5 % of total usage
- Photovoltaic systems limited by available surface area

Attempted Alternative Energy Systems (no longer being pursued)

- Kamole Weir Treatment Plant Wind Turbine: 400,000 kWh, not being pursued due to issues related to endangered species in area

Possible Future Projects Under Consideration

- In-line Hydroelectric at Mahinahina sites
- Various photovoltaic installations through third parties serving existing wells

Other Energy Saving Efforts

- High efficiency pump/motor installations
- Reservoir management to reduce pumping need
- Distributed generation investigation with MECO