

BOARD OF WATER SUPPLY
COUNTY OF MAUI

REGULAR MEETING
MINUTES OF NOVEMBER 15, 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 Thursday, November 15, 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
Agnes Nolan, Private Secretary
Jennifer Oana, Deputy Corporation Counsel
Gaye Hayashida, Commission Support Clerk

ANNOUNCEMENTS

None.

APPROVAL OF MINUTES

Minutes of September 24, 2012

Chair Boteilho asked for approval of the minutes.

Motion: Member Joslin moved to approve the minutes of September 24, 2012

Second: Member Hoxie

Discussion: None.

Vote: Unanimous. Motion carried. The minutes of September 24, 2012 were approved.

TESTIMONY FROM THE PUBLIC

There being no public testifiers Chair Boteilho closed public testimony.

APPEALS

There were no appeals scheduled.

UNFINISHED BUSINESS

None.

OTHER BUSINESS

Report by the Board Water Supply's Investigative Committee on the Council's Proposed Bill to Establish a Lana'i Water Advisory Committee

Member Gerbig reported that this proposed bill did not pass the full council. Instead, it was sent back to the Water Resources Committee. He noted that this time there was strong opposition to this. The ILWU had over 300 people who opposed it compared to the previous meeting where there were 3 or 4 people who were for it.

He noted that the Planning Department also strongly opposed it and several testifiers stated that it would just add another layer of bureaucracy. The Lana'i Water Use and Development Plan is not enforceable.

Director Taylor added that the Water Resources Committee is holding a meeting on the Monday after Thanksgiving and he believes that the committee chair, Mike Victorino intends to put this item on that agenda. He promised that his staff will inform the BWS Investigative Committee when this gets scheduled.

Presentation by Director Taylor on Future of Upcountry Water Plans as presented to the Council's Water Resources Committee

At this time, the director played a video of his presentation of September 18th to the Council's Water Resources Committee on the future of the Upcountry water plans. A copy of the power point presentation is attached and made a part of these minutes.

After the presentation, Member Hoxie asked for an update on the status of the 3 ordinances that was brought up in the video.

Director Taylor described the 3 proposed ordinances. One was an ordinance establishing a last day to sign up for the Upcountry Water Meter List. The next one was a budget amendment establishing drought rates and the third one was a housekeeping update to the drought ordinance.

The budget amendment was sent to the Council's Budget and Finance Committee and it has yet to be scheduled. It will probably be on sometime next year.

The Upcountry Meter Issuance ordinance and the update for the drought ordinance were both heard at a previous Council Water Resources Committee meeting. (Note: the Upcountry Water Meter Issuance ordinance past first reading at the Council's November 16, 2012 meeting.)

The Director added that he believes that the drought update bill along with the Lana'i Water Advisory Committee issue will be on the November 26th Water Resources Committee meeting's agenda.

At the last WRC meeting the concerns regarding the budget amendment establishing a drought rate were the actual rates and should ag users be part of this. He believes that it is more than likely that this amendment is going to be packaged with the FY14 budget discussion in March or April of 2013.

Member Hoxie asked if it would help if this board makes a recommendation.

The Director replied that it is up to the board and he will not push one way or the other. What the department is trying to do is to make sure everyone understands the options and what all the pieces are.

Member Gerbig asked if there is anything more that needs to be done beyond what has already been planned for the Waikamoi Flume.

Director Taylor explained that they have a low bidder whose bid is within the budget; the contracts are being prepared; the 30-day challenge period of the EA, he believes, ends sometime next week. If no one challenges the EA then they will be ready to execute the contract and the contractor can get started.

Right now, they have no idea whether replacing the flume will add a lot of water or a little water but it certainly won't hurt. So knowing this, they did not include it in their analysis. If they get any increase it will be the icing on the cake.

The Hamakuapoko wells' final EA has not yet been published but they intend on publishing it this year. They are currently wrapping up some technical issues that need to be done.

Member Rust asked about the costs for repairing the Waikamoi Flume.

Director Taylor believes that the low bidder, Global Technology submitted a bid just under \$12 million. This company has done a number of large projects like bridges for the Department of Public Works.

Member Rust asked whether the Upcountry and Central systems will ever be connected.

The director said that since the systems are less than a mile apart it is a physically possible though at this time it is not a priority. Whether it is worth the expenditure and effort he doesn't know. But it is certainly on their option list.

Member Rust stated that in the video presentation the director said that Upcountry residents are paying less than \$3 per thousand gallons, so does that mean that the rest of the consumers are making up for the shortage.

Director Taylor explained that he didn't bring the exact figures within him but he believes that the countywide average cost to deliver water is around \$3.70 per thousand gallons, maybe closer to \$4. It costs a little less to deliver water to Central, South and West Maui. Upcountry costs about 16% more; Molokai and Hana cost even more. Hana is the most expensive where it costs around \$7 or \$9 per thousand gallons. So Central, South and West Maui pay more than it costs to deliver water to them and the extra money subsidizes Upcountry, Hana and Molokai. Hana is so very expensive because there a very few users and there are still fixed costs so your costs skyrockets per user.

Chair Boteilho asked if they considered the DHHL projects in their analysis.

Director Taylor replied that they did not because DHHL was not on the (meter) list so those projects were not taken into account.

Member Gerbig asked for an explanation of "reliable capacity" and the "Show Me the Water" ordinance.

The director explained that the Water Availability ordinance aka Show Me the Water bill focuses on the act of subdivision. Before a subdivision can be approved the water director has to say there is a long term "reliable capacity" of water source. Exempt from this are subdivisions with 10 units or less, 100% affordable housing units and some other situations.

This ordinance focuses only on the act of subdivisions but says nothing about non-subdivision projects that can use a lot of water. So if you wanted to subdivide and build 11 houses you wouldn't be able to. But if you wanted to you could build a 100,000 gallon a day business center on this one lot.

He is not sure what the intention of the council was when they made this ordinance, whether they were concerned about subdivisions using water or total water usage. He can explain what this ordinance does but not the intention of the law is.

The same is true with reliable capacity. Where do you want the buffer? Do you want the water in your tank before you allow zoning or subdivision changes? Do you want to just let the buyer beware? Where does the water have to be? Who's responsible for developing infrastructure?

They are all tangled into one issue and we need to make all these simultaneous decisions and go forward. We cannot continue to pass one bill and leave the other ones off to the side. We have to decide all of this together.

We cannot afford to tie up our water with reservations for projects that might never happen. A lot of this comes down to growth v. non-growth. The key is to match what you're building with the actual growth that's going to happen. And yet we don't want to take risks with the public's money.

The director stated that the board is free to make recommendations to the council or can remain silent. He doesn't want to push them in any way. But if this board wants to comment on this then it should be on those 2 pages of questions (Priority Policy Issues from the video presentation) and cautioned them not to get into the technical details which is what the department will figure out.

Chair Boteilho asked about the Dual Line.

Director Taylor explained that the Dual Line is a State Department of Agriculture project that has been going on for years. The water from the Kahakapao Reservoirs will bypass the treatment plant and go directly to the ag users. This way, the department won't have to treat ag water to drinking water standards. The Dual Line does not generate more water; it just reduces treatment plant costs.

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

1. Update on the proposed ordinances discussed in the video presentation regarding the Upcountry Water Meter Issuance, the budget amendment establishing drought rates, and water usage during periods of water shortages

COMMUNICATIONS

None.

DIRECTOR'S REPORT

There was no further discussion.

DIVISION REPORT

September and October Division Reports

Director Taylor reported that there was nothing of any significance to report and it is business as usual.

ADJOURNMENT

There being no further business the meeting was adjourned at 10:45 a.m.

Prepared by:

Gaye Hayashida
Commission Support Clerk

Approved by:

Dave Taylor
Director

Video Presentation

Department of Water Supply

**Upcountry Water System
Management &
Optimization Update**

**Water Resources Committee
September 18, 2012**

By Water All Things Find Life

Today's Presentation

- History of Upcountry meter situation
- Detailed Upcountry system operational description
- Plan to resolve meter list over next 2-3 years
- Comparison of plan to major policy issues

Video Presentation

Upcountry meter issuance history

- Limitations since at least 1977
 - Kula Rule 1977 - 1991
- March 16, 1993 Finding of insufficient water supply

Finding of insufficient water supply

On March 16, 1993, the upcountry water system was found to have insufficient water supply developed for fire protection, domestic and irrigation purposes to take on new or additional services without detriment to those already served in the regulated area. Since November 2, 1994, a priority list of premises has been maintained by the department by the date received.

Video Presentation

Waiting list

November 2, 1994 waiting list created to determine priority of applicants denied additional water; orderly process needed to deal with people who were denied service.

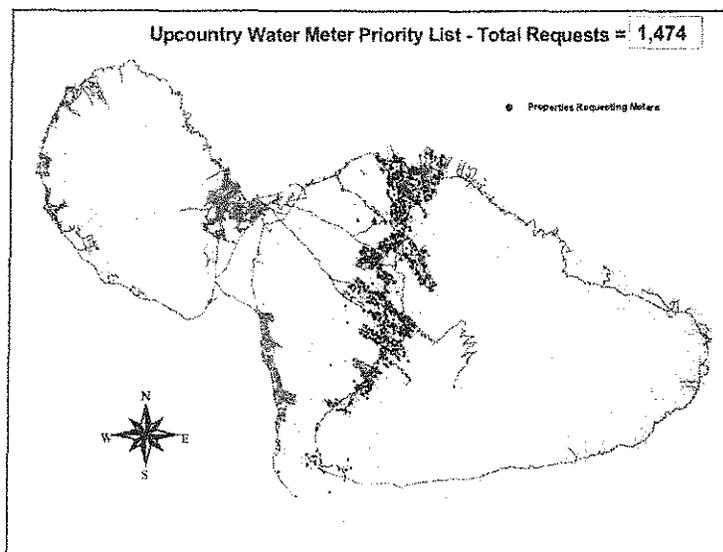
Upcountry Meter Issuance Rule October 4, 2002

Applicants not on list who have pre-existing rights or expended funds in reliance upon official assurances dated before November 2, 1994, could come in and pay for or reserve an allocation of existing source capacity. Pre-existing rights terminated 60 days after effective date of rule (plus an extension), and water service would be offered to applicants on priority list.

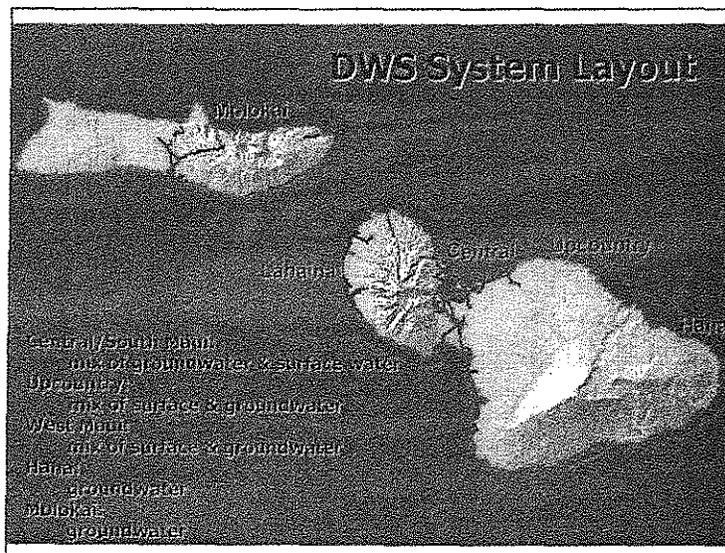
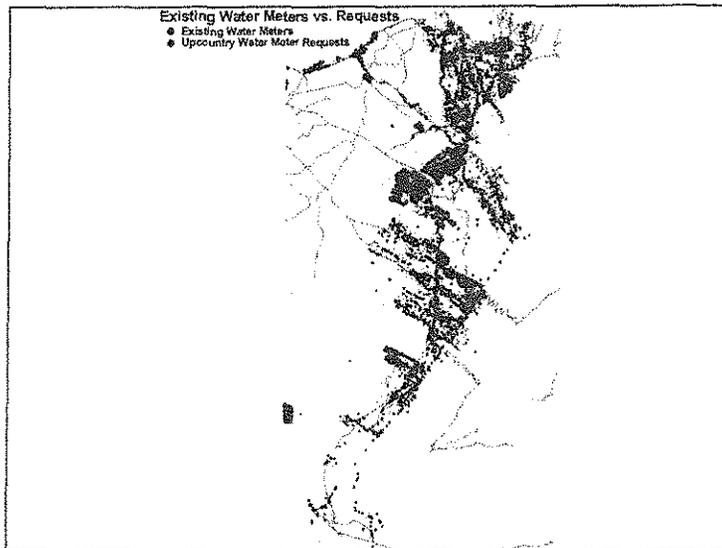
Video Presentation

**Current rule: Administrative Rule
Title 16 Chapter 106**

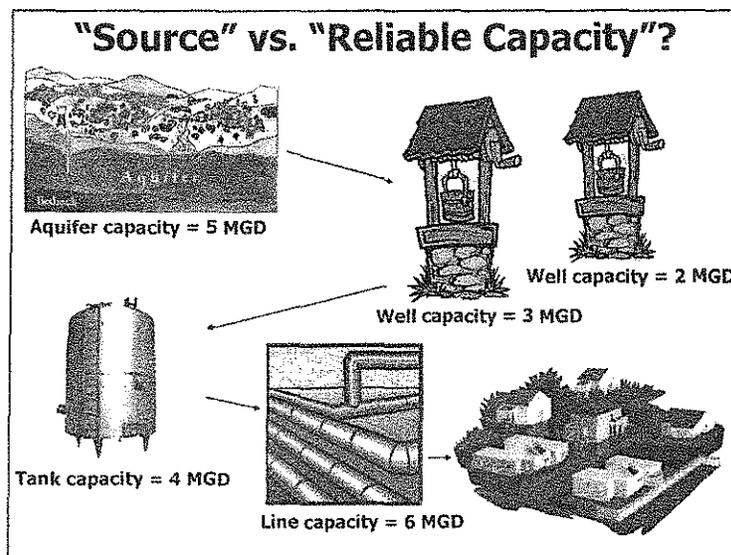
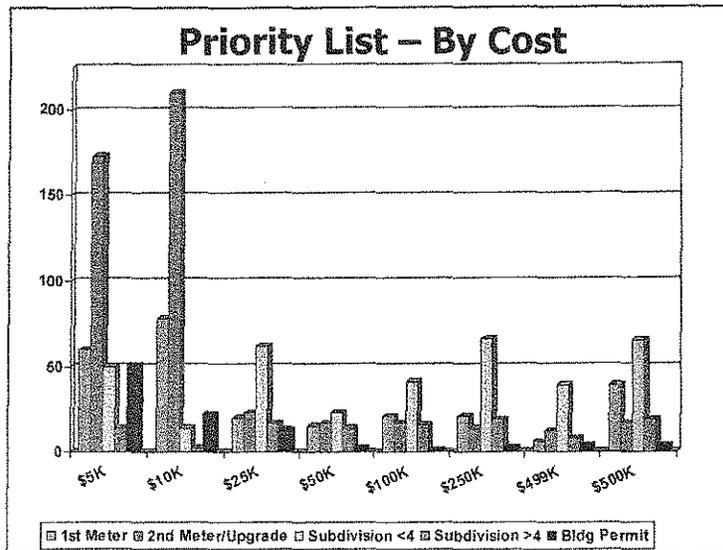
- Effective October 4, 2002 all applicants must get on priority list for water meters.
- 1,474 applications on priority list as of June 30, 2012.



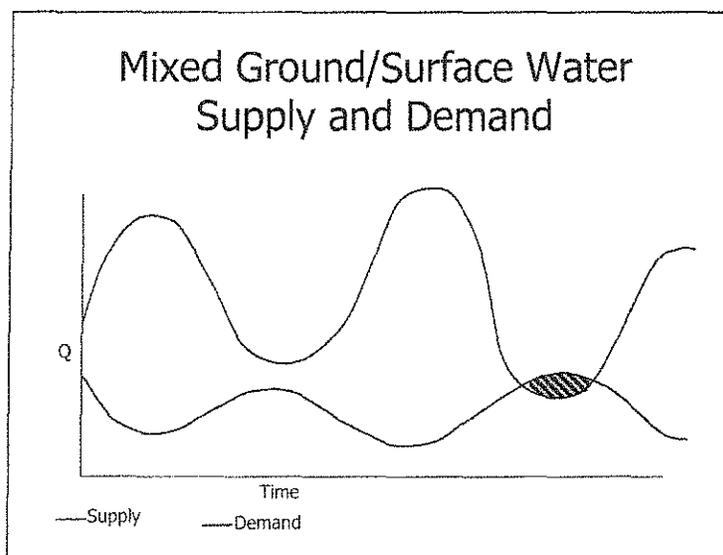
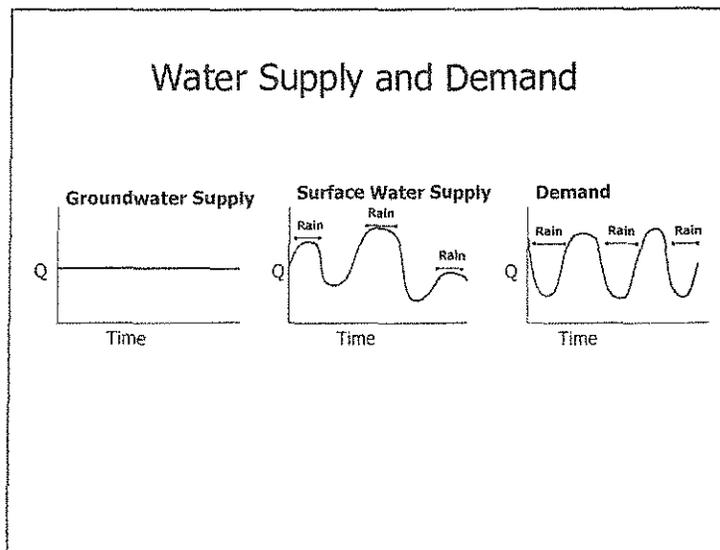
Video Presentation



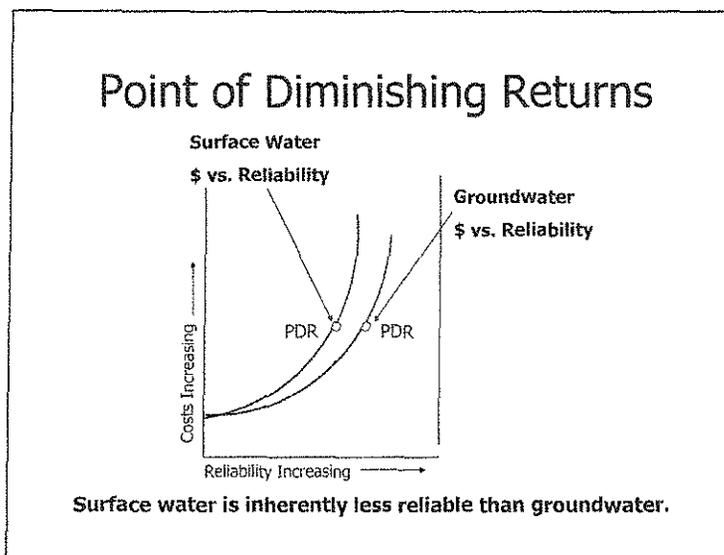
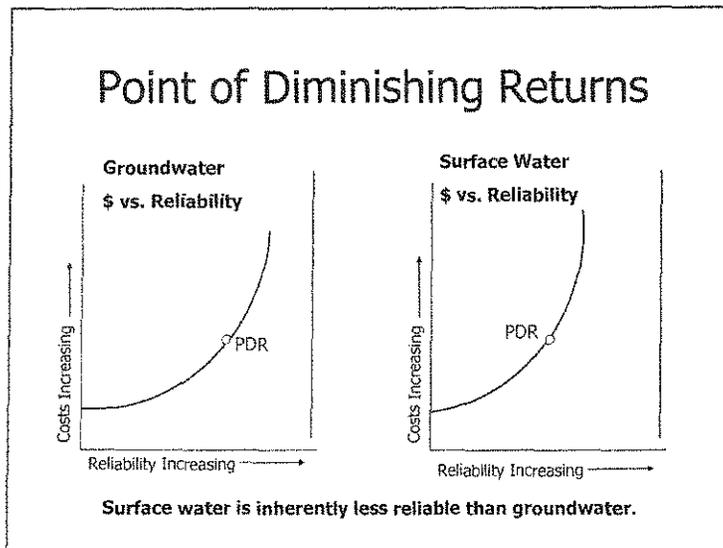
Video Presentation



Video Presentation



Video Presentation



Video Presentation

Pumping Costs are Driven by Elevation

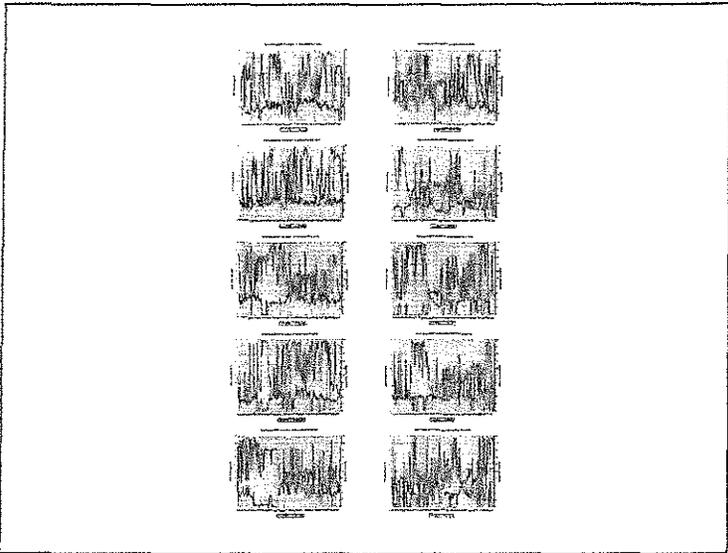
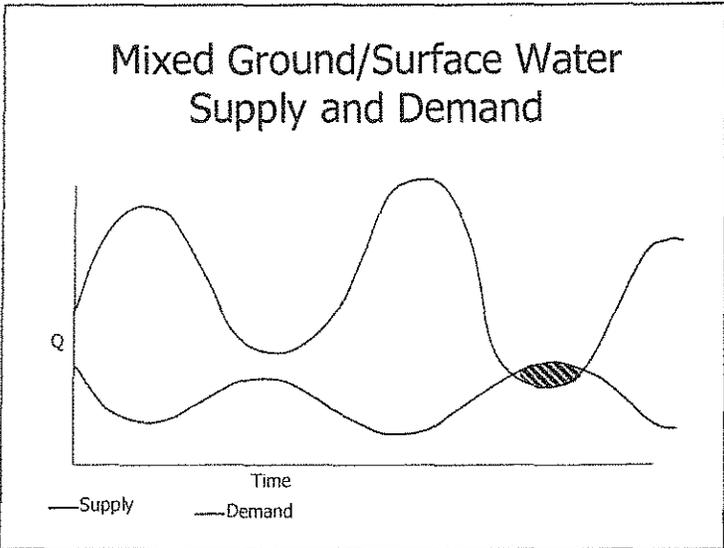
Elevation from Kamole to Olinda is 3,000'

Pumping groundwater from sea level = Higher water bill

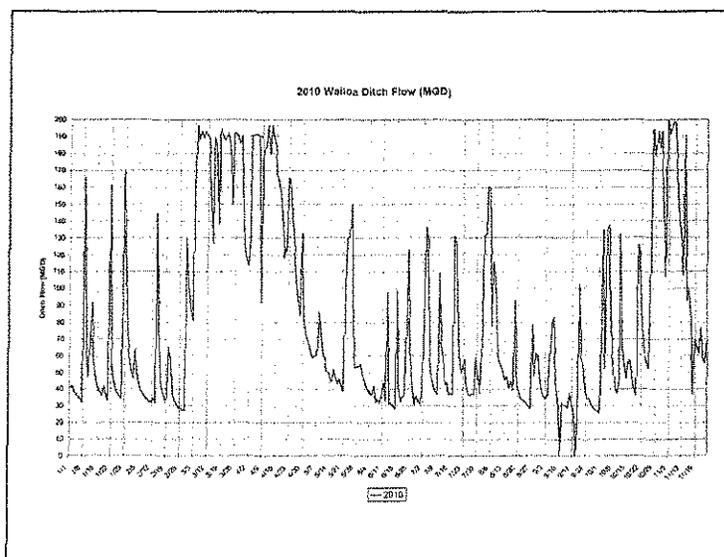
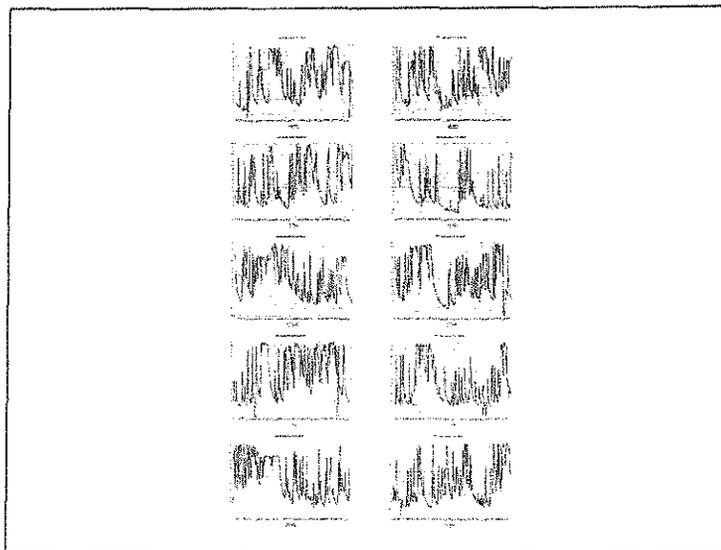
| Source | Capacity | Elevation |
|-----------------|-----------|-----------|
| Olinda WTP | 0 - 2 MGD | 4,136' |
| Piihilo WTP | 0 - 5 MGD | 2,837' |
| Kamole WTP | 0 - 6 MGD | 1,114' |
| Haihu Well | 0.5 MGD | |
| Kaupakalua Well | 0.9 MGD | |
| Pookela Well | 1.3 MGD | |

Pumping groundwater from sea level = Higher water bill

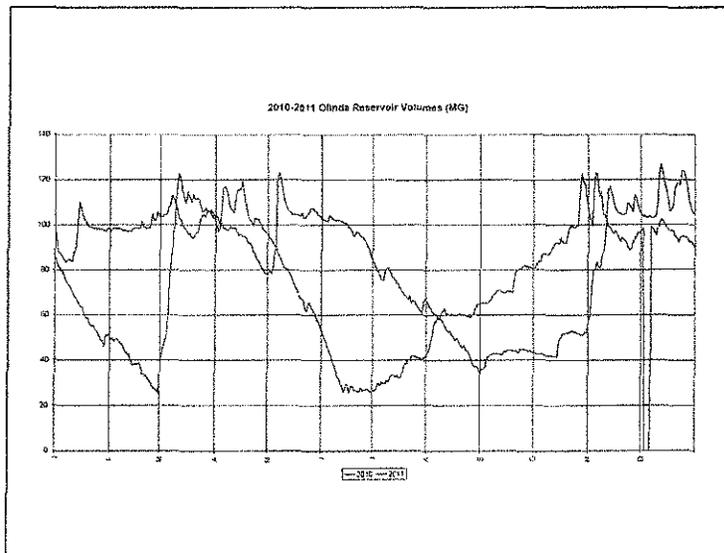
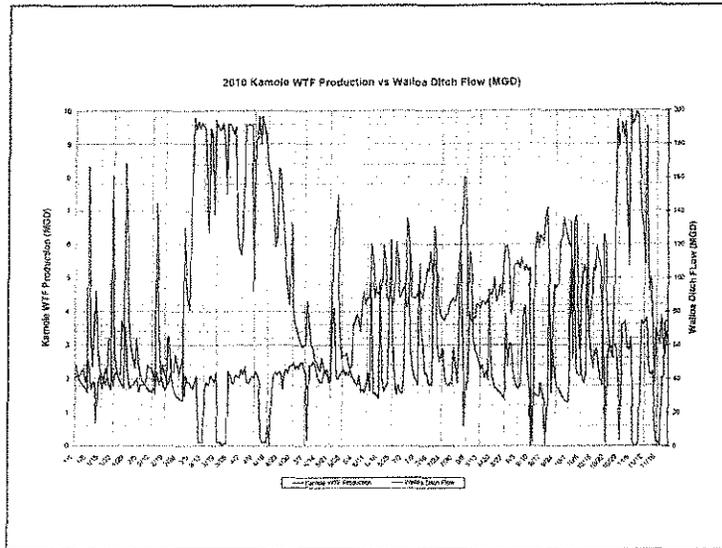
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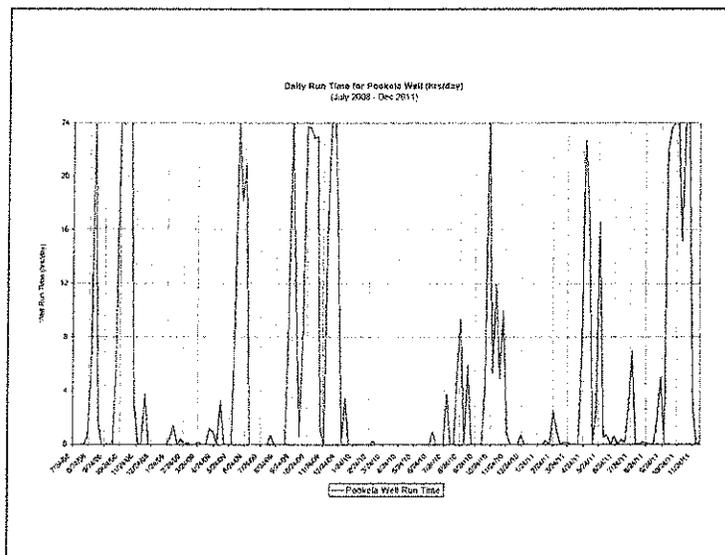
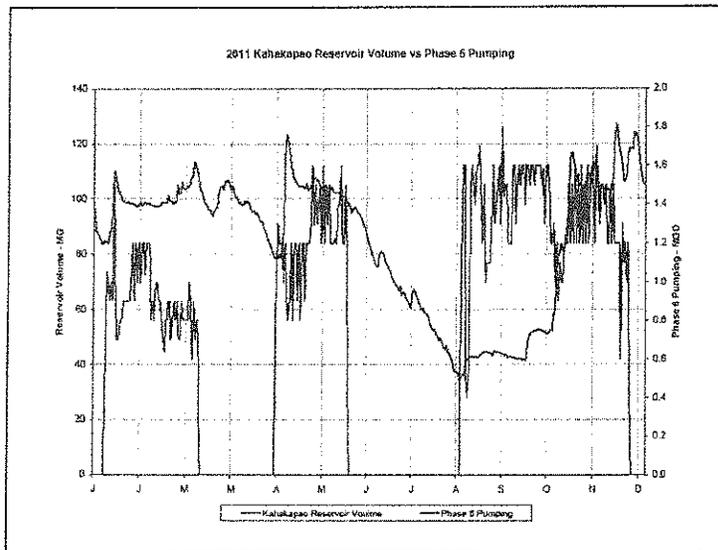
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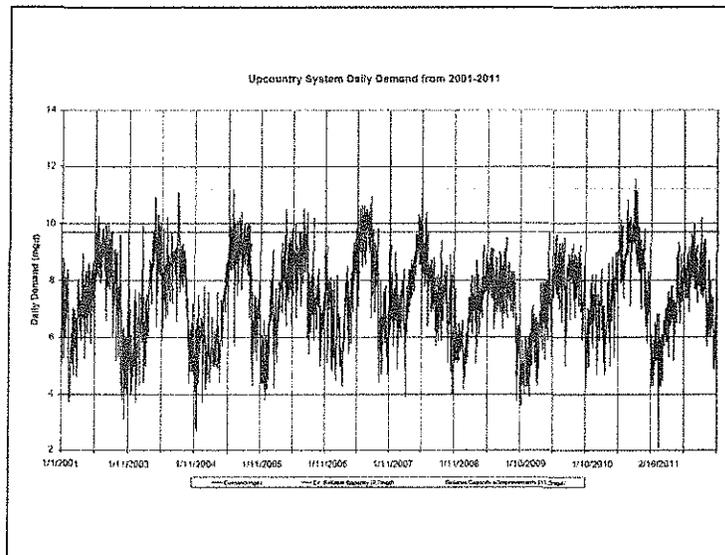
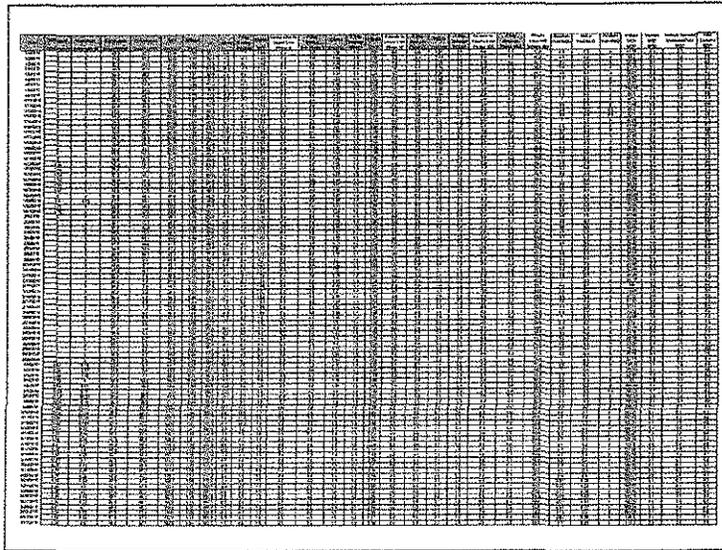
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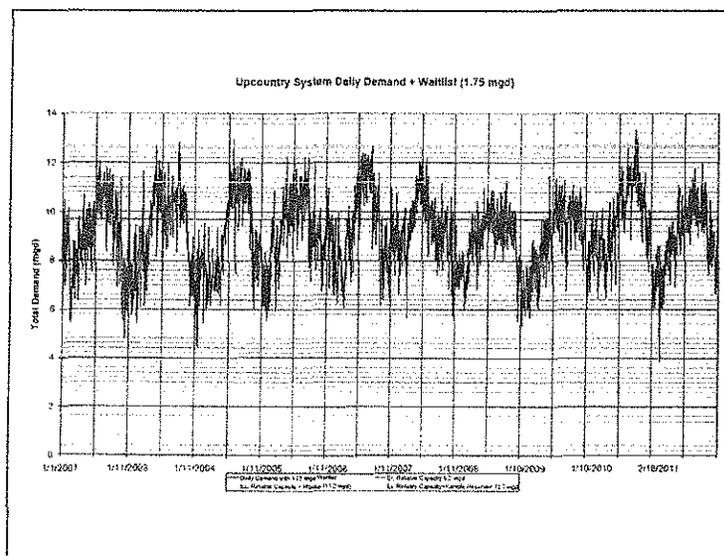
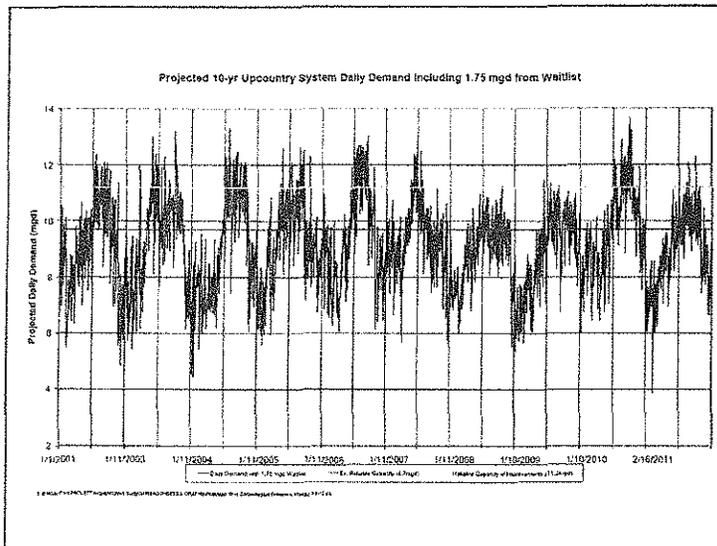
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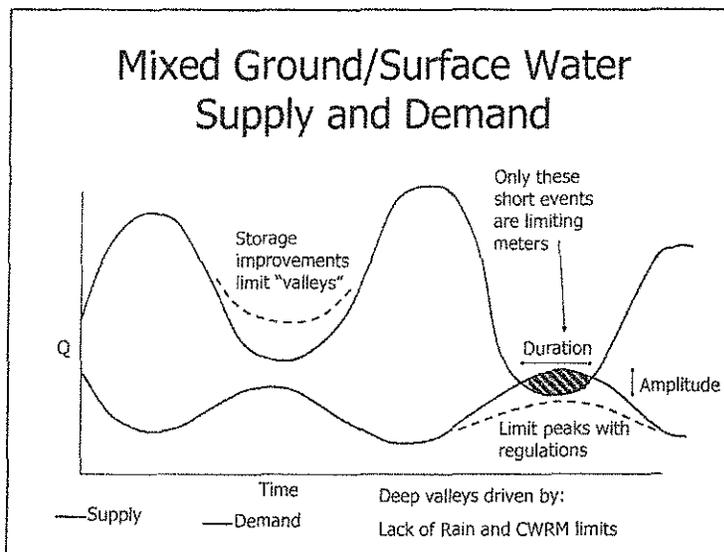
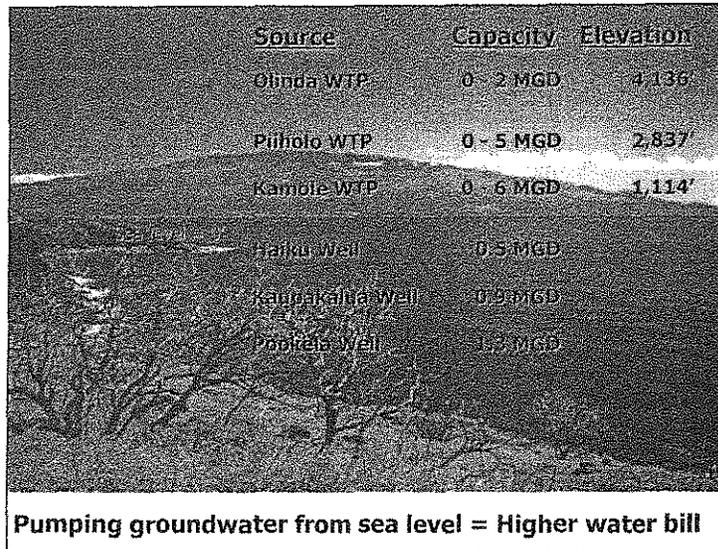
Video Presentation



Video Presentation



Video Presentation



Video Presentation

Draft Upcountry Action Plan

1. Continue Hamakuapoko Wells/Waikamoi Flume improvements/Olinda WTP disinfection projects to minimize "supply valleys"
2. Future budgets to include additional funding for Kamole WTP pumping to support more meters
3. Ordinance that allows DWS Director to immediately temporarily increase upper tiers to limit demand "peaks"

Draft Drought Rate Structure

| | Normal | Level 1 | Level 2 |
|-------------|--------|--------------|--------------|
| 5/8" | \$1.75 | \$1.75 | \$1.75 |
| | 3.20 | 3.20 | 3.20 |
| | 4.75 | 5.94 (25%) | 7.13 (50%) |
| | 5.25 | 10.50 (100%) | 21.00 (400%) |
| General | \$1.75 | \$1.75 | \$1.75 |
| | 3.20 | 3.20 | 3.20 |
| | 4.75 | 10.50 | 21.00 |
| Agriculture | \$1.75 | \$1.75 | \$1.75 |
| | 3.20 | 3.20 | 3.20 |
| | 1.10 | 1.50 | 2.00 |

Everybody shares load to prevent "outage"

Video Presentation

Draft Upcountry Action Plan

4. Modify Upcountry Meter Issuance Ordinance to establish "Last Day to Sign Up" and "ration" allocation of new meters after list is gone
5. DWS offers water meters as per list (3.5 MGD)
 - Assume 50% accept (due to improvement costs) 1.75 MGD
 - List GONE (assume 2-3 years to process)
 - Afterwards, others can "partner" and come in anytime in the future regardless of previous place on list (until water unavailable)
 - #5 contingent on #1, #2, #3 & #4 passing

Draft Plan Features

- This plan requires minimal capital, has high "big bang for buck" and manages cost/risk.
- Plan will limit/control/manage short duration events and allow meter issuance
- Future projects can add more storage and/or groundwater to further minimize short duration events (at substantially higher costs)
- Proposed plan maximizes use of high level water and existing infrastructure
- Additional efforts would be "in addition" to plan, not "instead of" plan

Video Presentation

Additional factors to consider

- Requires H-Poko wells and Waikamoi flume replacement
- This plan will only work if the ag line does NOT increase water usage
- Only possible now that Kamole WTP has 3 MG storage
- Only possible now that Kamole WTP has new high-lift pumps

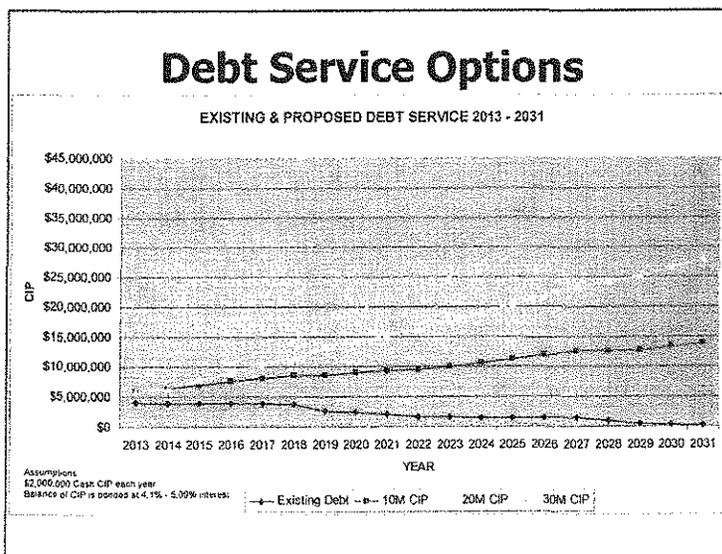
Additional factors to consider

- System will operate with less "buffer"
- Operation and maintenance expenditures more critical
- Storage of major spare equipment mandatory (future budget items)

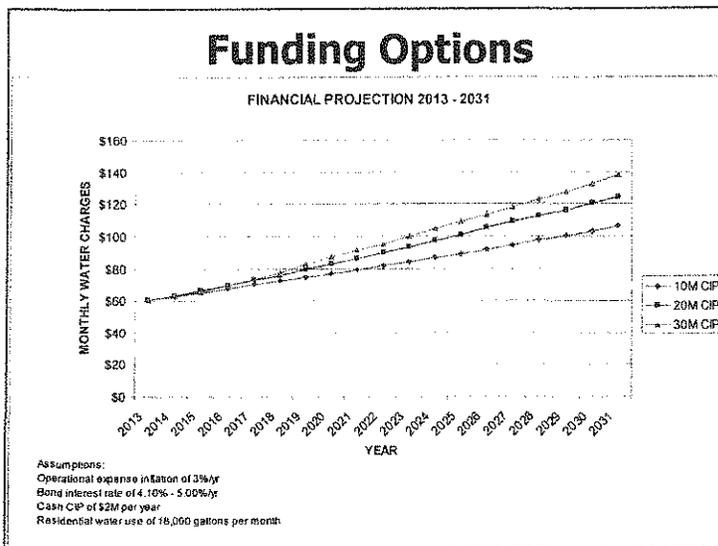
Video Presentation

Draft Upcountry Action Plan

1. Continue Hamakuapoko, Waikamoi Flume, Olinda disinfection projects
2. Future budgets include funding for additional pumping
3. Implement drought rate structure
4. Modify Upcountry Meter Issuance Rule to establish "last day to sign up"
5. DWS offers water meters as per list



Video Presentation



Possible Funding Options for Additional Reliable Capacity
(these are very rough "ballpark" estimates ... actual costs to be determined as analysis proceeds)

| | Rates | 5/8" meter fee | Comments |
|----|--------------|-----------------------|--|
| 1. | 5 – 6% | \$20,000 – 30,000 | "Growth pays for growth" |
| 2. | 10 – 12% | Remain at \$6,030 | Current customers help pay for new |
| 3. | 8 – 10% | \$10,000 - \$15,000 | Costs spread between new and current customers |
| 4. | 5 – 6% | Remain at \$6,030 | No improvements or subsidize with GF |

Video Presentation

Priority Policy Issues

- Rates, fees and debt
 - Maximum annual debt allocation for DWS?
 - Maximum annual rate increase?
 - Maximum meter fees?
- Should meter fees vary by location to reflect actual cost of service? Or should low-cost areas subsidize high-cost areas? How much?
- Should current customers subsidize new users? How much?
- Subsidized rates for competing user groups? How much?

Additional Priority Policy Issues

- Desired growth rates for various areas? (Maui Island Plan?)
- Prioritize water infrastructure in given area versus others? (Maui Island Plan?)
- Drought tolerance vs. new users?
- How much "reliable capacity" is enough to sunset the "Show Me the Water" ordinance?

Video Presentation

Final thoughts

- Consistency with draft WUDP
- Similar analyses for other areas
- Proposed plan maximizes use of high level water and existing infrastructure
- Additional efforts would be "in addition" to plan, not "instead of" plan

Today's Presentation

- History of Upcountry meter situation
- Detailed Upcountry system operational description
- Plan to resolve meter list over next 2-3 years
- Comparison of plan to major policy issues