BOARD OF WATER SUPPLY of the COUNTY OF KAUA'I

REGULAR MEETING

Second Floor, Microbiology Lab Bldg
Kaua'i County Department of Water
4398 Pua Loke Street, Līhu'e, Kaua'i, Hawai'i 96766

THURSDAY, September 22, 2011

10:10 a.m.

Or thereabouts

A. CALL TO ORDER

B. ROLL CALL

C. ACCEPTANCE OF AGENDA

D. MEETING MINUTES:
Review and approval of:
Special Board Meeting Minutes – August 15, 2011
Regular Meeting Minutes – August 18, 2011
Executive Session Minutes - August 18, 2011

E. CORRESPONDENCE/ANNOUNCEMENTS
1. Correspondence from KMH LLP concerning Auditing Standards

F. BOARD COMMITTEE REPORTS
1. Report of the Finance Committee of the Kauai County Board of Water Supply
   a. *Manager's Report No. 11-49* - R.W. Beck Report on Financial Planning Analysis and Water Rate Study.

2. Report of the Committee of the Whole of the Kauai County Board of Water Supply
   a. Annual Evaluation of the Manager and Chief Engineer

   b. FY 2012 Goals

3. Report of the Rules Committee of the Kauai County Board of Water Supply
   a. *Manager's Report No. 11-24* – Committee Discussion and Possible Action on Part III Rule Amendments – Establishing Standards for Subdivision Water Systems.

G. OLD BUSINESS
1. *Manager's Report No. 11-24* – Committee Discussion and Possible Action on Part III Rule Amendments – Establishing Standards for Subdivision Water Systems.

NOTE: Special Accommodations for persons with disabilities are available upon request five (5) days prior to the meeting date. Please call the Department of Water, County of Kaua'i, at 245-5408 or drop by at 4398 Pua Loke Street, Līhu'e, Kauai. Our mailing address is P. O. Box 1706, Līhu'e, HI 96766

BOARD OF WATER SUPPLY

REGULAR MEETING

September 22, 2011

G. OLD BUSINESS – contd.

2. *Manager's Report No. 11-28* – Request Board Approval of Facilities Reserve Charge Changes
   i. Rule changes to implement FRC in Part Four
   ii. Rule changes to implement Process Changes

3. *Manager's Report No. 11 -49 -* R.W. Beck Report on Financial Planning Analysis and Water Rate Study.

4. *Manager's Report No 12-1* – Response to Attorney Lorna Nishimitsu - Belles Graham Proudfoot Wilson & Chun, LLP correspondence in reference to Subdivision No. S-2009-12 the Koloa Early School and Honpa Hongwanji Mission of Hawaii. (THIS ITEM HAS BEEN RESOLVED)

5. *Manager's Report No. 12 – 17* – Second Change order for Job 05- 02, Drill and Test Hanalei Well #2 & Job 05 – 02, Drill and Test Wainiha Well #4. (THE MANAGER IS REQUESTING WITHDRAWAL OF THIS ITEM)

6. Board Discussion on the FY 2012 Goals for the Manager

7. Annual Evaluation of the Manager and Chief Engineer

H. NEW BUSINESS

1. Suggestions for Capital Improvement Projects (CIP) for 2012 Legislative Session

2. *Manager's Report No. 12 – 23* - Request Board Approval for contract amendment with R.W. Beck/SAIC for additional funds for FRC Study

3. *Manager's Report No. 12 – 24*- Emergency Reserve Fund Policy

4. *Manager's Report No. 12 –25 -* Request Board Approval of Wailua Houselots Main Replacement – Job No. 02-15, Wailua, Kauai, Hawaii, Contract No. 403 Time Extension Request for R.M. Towill

5. *Manager's Report No. 12 – 26* - Job No. 10-02 – Department of Transportation/Kiewit-Kaumualii Highway Widening, Vicinity of Anonui Road to Vicinity of Lihue Mill Bridge, F.A.P. No. NH-050-1(31)

6. *Manager's Report No. 12–27* – Request Board Approval of Change Order #5 with Goodfellow Brothers for Job No. 04-06, KW-05, Kekaha Well "B" Renovations, Kekaha Water System; Kekaha, Kauai

7. *Manager's Report No. 12-28 –* Request Acknowledgement and Signature of the Board Chair related to KMH LLP Audit Letter

NOTE: Special Accommodations for persons with disabilities are available upon request five (5) days prior to the meeting date. Please call the Department of Water, County of Kauaʻi, at 245-5408 or drop by at 4398 Pua Loke Street, Līhuʻe, Kauai. Our mailing address is P. O. Box 1706, Līhuʻe, HI 96766

BOARD OF WATER SUPPLY

REGULAR MEETING

September 22, 2011

I. STAFF REPORTS

MONTHLY

1. Statement of Kaua'i County Water Department's Revenues and Expenditures
2. Report by the Public Relations Specialist on Public Relations Activities
3. Chief of Operation's Summary Report on Monthly Operational Maintenance
4. Manager's Monthly Update Regarding Activities of Note of the Kaua`i County Water Department

J. EXECUTIVE SESSION

Pursuant to H.R.S. §92-7(a), the Board may, when deemed necessary, hold an executive session on any agenda item without written public notice if the executive session was not anticipated in advance. Any such executive session shall be held pursuant to H.R.S. §92-4 and shall be limited to those items described in H.R.S. §92-5(a).

1. ***Pursuant to Haw. Rev. Stat §§92-4 and 92-5(a)(2), the purpose of this executive session is to consider the Job Performance Evaluation of the Department of Water's Manager and Chief Engineer. This deliberation involves matters affecting the privacy of the Manager and Chief Engineer. If the individual concerned requests an open meeting, an open meeting shall be held.***

K. TOPICS FOR NEXT WATER BOARD MEETING

1. Annual Extension (11-18-11 to 11-17-12) of Volunteer Agreement with Mike Fernandes for Grounds Maintenance of our Nonou 0.2 MG Tank site located in Wailua Houselots
2. Quarterly Report on Manager's Goals
3. Quarterly Updates
4. Final Action on Half Percent Late Fee Private Fire Line

L. TOPICS FOR FUTURE WATER BOARD MEETINGS

1. Draft Annual Audit *(November 2011)*
2. Final Annual Audit *(November 2011)*
3. Board Meeting Dates for 2012 *(November 2011)*
4. Election of Officers *(December 2011)*

M. UPCOMING EVENTS

1. Make a Splash program September 29, 2011
2. HWWA Conference, Kona, Hawaii, October 12-14, 2011

N. NEXT WATER BOARD MEETING

1. Thursday, October 27, 2011, 10:00 a.m.
2. **Wednesday**, November 23, 2011, 10:00 a.m.
3. Thursday, December 22, 2011, 10:00 a.m.

O. ADJOURNMENT

NOTE: Special Accommodations for persons with disabilities are available upon request five (5) days prior to the meeting date. Please call the Department of Water, County of Kaua'i, at 245-5408 or drop by at 4398 Pua Loke Street, Līhu'e, Kauai. Our mailing address is P. O. Box 1706, Līhu'e, HI 96766

Draft Minutes

SPECIAL BOARD MEETING MINUTES
BOARD OF WATER SUPPLY
Monday, August 15, 2011

The Board of Water, County of Kaua'i, met in a special meeting at its office in Līhu'e on Monday, August 15, 2011. Chairperson Roy Oyama called the meeting to order at 3:14 p.m. On roll call, the following answered present:

BOARD: Mr. Roy Oyama, Chairperson
Mr. Clyde Nakaya
Mr. Randall Nishimura
Mr. Daryl Kaneshiro

Quorum was achieved with 4 members present at roll call.

ABSENT/EXCUSED: Mr. Michael Dahilig
Mr. Raymond McCormick
Mr. Larry Dill

STAFF: Mr. David Craddick
Mr. William Eddy
Ms. Marites Yano
Mr. Dustin Moises
Mr. Keith Aoki
Mr. Gregg Fujikawa
Ms. Faith Shiramizu
Mr. Val Reyna
Deputy County Attorney Andrea Suzuki

GUESTS: Mr. David Hinazumi, Grove Farm
Mr. Michael Tresler, Grove Farm

AGENDA:

Mr. Nishimura moved to accept the agenda as circulated, seconded by Mr. Nakaya; by a unanimous vote, motion was carried.

NEW BUSINESS

a. Appointment and confirmation of Rules Committee Members

Chair Oyama appointed Mr. Daryl Kaneshiro as the Vice Chair to the Rules Committee and Mr. Clyde Nakaya as a committee member of the Rules Committee. Mr. Nishimura moved this acceptance, seconded by Mr. Nakaya; by a unanimous vote, motion was carried.

SPECIAL BOARD MEETING MINUTES
BOARD OF WATER SUPPLY
Monday, August 15, 2011

ADJOURNMENT:

With no further business, Chair Oyama adjourned the Special Committee Meeting at 3:16 p.m.

Respectfully Submitted,

Mary-jane Garasi
Acting Commissions Support Clerk

Approved,

Randall Nishimura
Secretary – Board of Water Supply

REGULAR MEETING MINUTES
BOARD OF WATER SUPPLY
Thursday August 18, 2011

The Board of Water for the Department of Water, County of Kaua'i, met in regular meeting at the Board Conference Room in Līhu'e on Thursday, August 18, 2011. Chairperson Roy Oyama called the meeting to order at 10:01 a.m. On roll call, the following answered present:

BOARD: Mr. Roy Oyama, Chairperson
Mr. Randall Nishimura
Mr. Clyde Nakaya
Mr. Daryl Kaneshiro
Mr. Michael Dahilig *(arrived at 11:29 a.m.)*
Mr. Larry Dill *(arrived at 10:55 am)*
Mr. Raymond McCormick

Quorum was achieved with 5 members present at the time of roll call.

STAFF: Mr. David Craddick
Mr. Val Reyna
Ms. Marites Yano
Mr. Dustin Moises
Mr. Keith Aoki
Ms. Faith Shiramizu
Mr. Gregg Fujikawa
Mr. Aaron Zambo
Ms. Mary-jane Garasi
Deputy County Attorney Andrea Suzuki

GUESTS: Ms. Lorna Nishimitsu, Attorney for Honpa Hongwanji
Sarah Date, West Kauai Hongwanji
Alton Miyamoto, Honpa Hongwanji Mission of Hawaii
Greg Kamm, Koloa Early School
Ronalee Eckberg, Koloa Early School

AGENDA:

Chair Oyama noted to amend the agenda circulated and to move 12-1 to the first order of Old Business. As there were no objections, motion was carried.

MINUTES:
Regular Meeting Minutes – July 28, 2011
Mr. Kaneshiro request to amend the Regular Meeting Minutes dated July 28, 2011 due to Page 9 of 13 on the 5th paragraph; Mr. Dahilig stated he had reservations regarding the Master Plan Job No. PLH – 39. With no objections, Mr. Nishimura moved to approve the circulated minutes as amended, seconded by Mr. Kaneshiro; by a unanimous vote, motion was carried.

CORRESPONDENCE

Re: Mahalo letter from Na Kalai Wa'o Kauai

Mr. Kaneshiro moved to receive the Mahalo letter from Na Kalai Wa'o Kauai, seconded by Mr. Nishimura; by a unanimous vote, motion was carried.

BOARD COMMITTEE REPORTS

Report of the Rules Committee of the Kaua'i County Board of Water Supply

Re: *Manager's Report No. 11-24* – Committee Discussion and Possible Action on Part III Rule Amendments – Establishing Standards for Subdivision Water Systems

i. Attached Proposed Draft Bill No. 2380
ii. Attached Proposed Draft Bill No. 2401
iii. Attached Approved Bill No. 2401, Draft 2

Re: *Manager's Report No. 11-28* – Request Board Approval of Facilities Reserve Charge Changes

i. Rule changes to implement FRC in Part Three and added section of the rules for FRC

Re: *Manager's Report No. 12- 9* - Requesting approval of rule change to delete leak rebates

a. PowerPoint Presentation on how a Private Insurance Company would provide the services that are required.

Vice Chair Kaneshiro reported that the Rules Committee met on Monday, August 15, 2011. Chair Dahilig was not present at this meeting so meeting was called to order by Vice Chair Kaneshiro. The committee accepted the Manager's Report No. 11-24 and deferred this item to have the Manager come back with his new proposal and refer to counsel regarding some issues. Manager's Report No. 11-28 was also deferred and Manager's Report 12-9 was motioned to approve the manager's recommendation and to move this item to the full board for further discussion.

Report of the Committee of the Whole of the Kaua'i County Board of Water Supply

Re: Board Discussion on the 2011 Goals for the Manager

Chair Kaneshiro reported that the Committee of the Whole met right before this Regular Meeting at 9:30 a.m. with one item of discussion. There were different handouts that were passed out particularly the DOW Employees Section Survey, Performance indicators, and Worksheets on the Bond Flow.

Mr. Nishimura moved to accept both the Report of the Rules Committee of the Kaua'i County Board of Water Supply and the Report of the Committee of the Whole of the Kaua'i County Board of Water Supply, seconded by Mr. McCormick; by a unanimous vote, motion was carried.

OLD BUSINESS (agenda amended to take 12 – 1 out of order)

Re: *Manager's Report No 12-1* – Response to Attorney Lorna Nishimitsu-Belles Graham Proudfoot Wilson & Chun, LLP correspondence in reference to Subdivision No. S-2009-12 The Koloa Early School and Honpa Hongwanji Mission of Hawaii

DISCUSSION:
Manager Craddick explained to the Board that the DOW Staff went back out to the property to double check the line that may have been cut off was in fact cut off. Retesting of the hydrants was not done to see what the flow is, but there are some speculations to whether a tie in was made or not. When the DOW Staff went to kill the line, there was still water coming in it from the disconnected line. It may not be a 12" line; it may be a smaller line. We are still in the process of checking the hydrant not only the one nearest to Honwanji, because the flow test that was done showed the pressure dropped to 50 psi. Normally it would drop to 20 psi and by opening another hydrant there is a possibility of getting the 2000 gallons per minute fire flow standard. So this must be double checked before the DOW Staff can make a final report to the board.

Deputy Manager William Eddy confirmed to the Board that the testing will start on Monday August 22, 2011. By the next board meeting we will be able to make the necessary changes.

Ms. Nishimitsu representing Hongwanji expressed her concerns to the Board and Staff that what is disconcerting is that after meeting last Friday with engineers Kodani and Wada they have discovered that the line is disconnected, now we are told that this line is connected. Whether or not a connection exists, the DOW is stating that if this test presumes to have a capacity to have a fire flow of 2000 gallons per minute fire flow, then they will drop the condition that Hongwanji has been hit with all these years. If the test presumes otherwise, there is a development which is not a typical development but a simple line drawn to separate ownership. The uses and density is not changing. Why do they need to be taxed with bringing the fire flow up to the 2000 gallons per minute standard? Both sides understand that if they seek permits, they are willing to commit with the exaction of the fire flow standard. In the Manager's first proposal, there is indemnification if there is a casualty and secondly it is subjected to get the Fire Department's consent that the fire flow is sufficient. This is never going to happen because the Fire Department always say that they rely on the Department of Water's standards so this is just a circular condition which is not fair, but Hongwanji will patiently wait for a decision to be made. The out of pocket expense of $500 was used to test the hydrant and resulted in 1207 gallons per minute fireflow. What happens when this next test result come out the same? We will be back at square one with the DOW asking for the same thing.

Ms. Nishimitsu confirmed to Mr. Nishimura that the current condition stated that an extension from the 12" line fronting Sueoka Store will connect to an 8" line fronting the Hongwanji and the Koloa Early School. The 8" line will connect to the 12" line to connect to the 12" main is

what is currently understood. Manager Craddick explained there was a project done and this line may have been disconnected, but the department found out when the only source of water into that line was cut off, the line still had flow in it so there is some other connection there. When the flow test was done, it was done with a 50 psi there is still a calculation to be made to see what the flow will be if it came down to a 20 pound residual. This has not been done with their first test.

A simplified diagram was passed out to staff and the Board prepared by Clyde Kodani which shows chronologically of what happened since 2005. Based on water line construction drawings, in 2006, Greg Kamm had to replace this 4" line shown on Exhibit A with a 12" line. Exhibit B shows the construction drawings approved by the DOW which upgraded the 4" line in part to a 12" line with an 8" connection across WiliWili Road connected to an 8" line on Koloa Road and connected to an existing 8" line. Exhibit C shows that when Kodani and the DOW looked at the current water system map, there is a disconnection of the 8" line along WiliWili Road. This Exhibit C shows where the disconnection occurred. Deputy Manager William Eddy said this was based on the engineer's asbuilts that was submitted by the contractor. Exhibit D shows the DOW recommendation for the two lot subdivision showing a connection between the 12" line fronting Sueoka Store crossing Koloa Road connecting into the 8" line that seems to be disconnected. The main issue is a requirement that we procure insurance with an unspecified amount indemnifying the county and the Department if there is a casualty. A major point of contention is that we are going to be responsible for these damages if there is a fire or casualty, other than the church or school properties.

Alton Miyamoto, President of the 36 temples of the State of Hawaii, testified that the title is under Hongwanji. The waiver opens up a lot of perspectives regarding this issue. You can never write a rule that can perfectly cover every situation. The uniqueness in the situation dictates on how the Staff interprets it so that not everyone will come in to ask for the same waiver. Ms. Nishimitsu has mentioned that the facilities are already in use with no increase in usage, but simply drawing a line to divide the properties. If Hongwanji and the Koloa Early School plan to expand, then they will engage in the normal requirements needed to standardize to the DOW's requirements. In my perspective how can a small group of people be expected to indemnify the DOW and the County of Kauai? In terms this seems unreasonable when it is said to indemnity the County. If the liability was small, this would not be anything to worry about.

Mr. McCormick explained to the Board that this is just a matter of separating these two pieces of property and it is stated that the "act of separating the land areas does not increase the intensity of the use of the property, does not change the nature of the use of the property, does not create a greater risk of fire in the property, and does not result in any change of water consumption." Why would this want to be held back from being approved?

Mr. Nishimura asked Deputy County Attorney Andrea Suzuki that under the current circumstances where there is joint ownership of one property and we have a church and a preschool and there is a fire, is the Department of Water's liability immediately diminished?

Mr. Nishimura moved to recess the Regular Meeting of the Board of Water Supply, and to move into Executive Session at 10:36 a.m., seconded by Mr. Kaneshiro; by a unanimous vote, motioned was carried.

Pursuant to Hawaii Revised Statutes Sections 92-4 and 92-5(a)(4), the purpose of this executive session is to provide the Board with a briefing regarding a County Attorney opinion issued dealing with whether or not the Board is relieved of its liabilities under this current circumstance. This briefing and consultation involves the consideration of the powers, duties, privileges, immunities and/or liabilities of the Board and the Department as they relate to this agenda item

At 11:02 a.m. Mr. Nishimura moved out of Executive Session, seconded by Mr. Kaneshiro; by a unanimous vote, motion was carried.

Chair Oyama reconvened the Regular Meeting at 11:03 a.m.

Mr. Dill questioned to Ms. Nishimitsu if the sprinkler service option was brought up with their meeting with the Fire Department. Ms. Nishimitsu explained that the Fire Department and Hongwanji explored other alternative methodology. The quote on the process to look into an alternative methodology was $6,000 which would be paid in the expense of the Hongwanji so this route was not taken.

Mr. Nishimura asked if there were different fire standards for different sizes of schools. Does this school require the same fire flow as a school that has 2,000 students? Mr. Craddick confirmed that the standard is the same regardless of enrollment.

Manager Craddick stated that the minimum fire flow for the school would be the 2000 gallons per minute standard whereas the church would be okay. He also confirmed to Mr. McCormick that if two hydrants are opened, you will get a double feed. In this particular case, normalizing the flow to 20 psi was not done because if the velocity gets too high, it may damage the pipeline from both the drop in pressure and the velocity. If you get the velocity 10 or 20 feet per second, then other problems may occur. It may be possible to get the 2000 gallons per minute standard by going to this route. There would be no charge for this second test.

Mr. McCormick motioned to allow the Department to run the test on the two hydrants between now and the next board meeting, as soon as its run the applicant will get notification and results. This item will be brought back to the board regarding the liabilities that are tied to this, seconded by Mr. Kaneshiro; by a unanimous vote, motion was carried.

Re: *Manager's Report No. 11-24* – Committee Discussion and Possible Action on Part III Rule Amendments – Establishing Standards for Subdivision Water Systems

iv. Attached Proposed Draft Bill No. 2380
v. Attached Proposed Draft Bill No. 2401
vi. Attached Approved Bill No. 2401, Draft 2

Re: *Manager's Report No. 11-28* – Request Board Approval of Facilities Reserve Charge Changes

ii. Rule changes to implement FRC in Part Three and added section of the rules for FRC

Re: *Manager's Report No. 11-49* – R.W. Beck Report on Financial Planning Analysis and Water Rate Study

Mr. Nishimura moved to defer *Manager's Report No. 11-24* – Committee Discussion and Possible Action on Part III Rule Amendments – Establishing Standards for Subdivision Water Systems, *Manager's Report No. 11-28* – Request Board Approval of Facilities Reserve Charge Changes, and *Manager's Report No. 11-49* – R.W. Beck Report on Financial Planning Analysis and Water Rate Study, seconded by Mr. Dill; by a unanimous vote, motion was carried.

Re: *Manager's Report No. 11 – 57* - Request Board Approval of Board Policy #24 - Delegation of Responsibility for Conveyance of Water Facilities and Grants of Easement

a. Cost Breakdown Report

DISCUSSION:

Manager Craddick explained that the Board approved to go until August 2011 with allowing the Manager to approve conveyances of water facilities and then come back with a report to the Board. With the cost breakdown report the total of $17.8 million from 2008, all were from Kukuiula. Deputy County Attorney Andrea Suzuki confirmed to Mr. Dill that Policy # 24 assigns indemnification liability issues to the board for board approval because essentially the board is managing the entire system.

The purpose this Cost Breakdown Report keeps the Board informed of our assets as we go forward through this year.

Mr. Dill moved to approve Board Policy #24, seconded by Mr. McCormick; by a unanimous vote, motion was carried.

Mr. Nishimura noted to the board that there was no Old Business Agenda Item G. 5.

Re: *Manager's Report No.12 – 3-* First Contract Amendment for Job No. PLH-39, Lihue Base yard Improvements (Water Plan 2020 Project No. PLH – 39) Lihue, Kauai

DISCUSSION:

Deputy County Attorney Andrea Suzuki confirmed to Mr. Nishimura that the contract with a two step process aerate as an amendment. In this item it would be the planning, and then the design would be negotiated.

Manager Craddick said we are currently working with Finance and we will jointly submit a subdivision application to planning and then once that is complete then we will go to council before the land is transferred.

Mr. Dahilig enters at 11:29 a.m.

Mr. Nishimura asked staff if we are able to move to the design phase forward prior to subdivision and council action. Manager Craddick said we can, and it seems like we have a road map of planning. Mr. Moises explained that the price is foreseen for a couple months and our current buffer is until October. The price may be adjusted with a change order, but nothing is sure until the land is acquired. There is a $29,000 contingency right now.

Mr. Dahilig moved to approve *Manager's Report No.12 – 3-* First Contract Amendment for Job No. PLH-39, Lihue Base yard Improvements (Water Plan 2020 Project No. PLH – 39) Lihue, Kauai, seconded by Mr. McCormick; by a unanimous vote, motion was carried.

Re: *Manager's Report No. 12- 9* - Requesting approval of rule change to delete leak rebates

a. PowerPoint Presentation on how a Private Insurance Company would provide the services that are required.

There was no PowerPoint presentation done.

DISCUSSION:
The Committee moved this item back to the Board for recommendations. Mr. Nishimura expressed concerns regarding this leak rebate request. There is a recommendation pending from the Finance Committee for the rate structure. The problem is that it has been built into the rate structure that these leak rebates be removed. If we remove leak rebates we are looking at $300K per year for potential expenses.

Manager Craddick explained that the only procurement issue the DOW would initially face is if we were getting some funds back from the insurance company. If we let the state insurance commissioner know that this is available to companies who want to provide this leak insurance and let the private insurance do what it does and we would keep out of it. If we do participate, cost would be less if we do not charge for whatever services we would provide. We would have to go through a procurement process in order to achieve the lowest cost to our consumers.

This process would still have to go through the small business association which will take about 2 months, then public hearing scheduled within 30 days so there will still be more chances to disagree with what is being recommended until November. The time line target for the month to month billing implementation is December of 2011.

Mr. Dill asked if there is a monitoring process to notify our customers of any high or low reading on their water bill. Ms. Yano confirmed to Mr. Dill that there is a five day wait period from when the meter is read to the time of their actual billing and the consumer wouldn't know if their usage is high until they receive their bill. Ms. Garasi corrected Ms. Yano and confirmed to Mr. Dill that there is a daily report run by the billing department that monitors the highs and lows of the

consumer's usage and when detected abnormality, the meter readers are sent out to do a profile on the meter to double check their usage. With the five day grace period this gives a chance to do any updates on the bill if necessary.

With our 20,000 clients, the average consumer leak rebate given is about $400 per consumer totaling $300,000.

Mr. Dill moved for the *Manager's Report No. 12- 9* - Requesting approval of rule change to delete leak rebates to forward this proposal to small business for recommendation, seconded by Mr. McCormick; by a unanimous vote, motion was carried.

Re: Board Discussion on the 2011 Goals for the Manager

Manager Craddick reported that the Committee of the Whole recommended the encumbrance of the BAB funds would be $39 Million in December and $45 Million in July of 2012.

On the performance indicators, we are limiting establishing and maintaining standards to numbers 1, 6, 7, 13, 19, and 23 listed on the Performance Indicators Kauai BWS . On the employee morale goal, the department's summary was returned and will be used as the starting bench mark for improvements for the year.

Mr. Dill requested for that these bench marks be properly summarized in a pamphlet and presented to the board.

Mr. Nishimura requested that with these 2 additions that the goals spreadsheet be amended to take effect for fiscal year 2011-2012 and Mr. Nishimura moved that we set these goals for the Manager, seconded by Mr. Nakaya; by a unanimous vote, motion was carried.

NEW BUSINESS

Re: *Manager's Report No. 12 – 11* - Third change order for Job No. 04-06, KW-20, Waimea Well "A" Renovations, Request approval for additional funding

Manager Craddick explained this change order is requesting for an additional $60,000 to come from the BAB account to replace the existing pump for this well which is not in great shape.

Mr. Moises confirmed to Mr. Nishimura that we need to fund this change order even if BAB was not available. During the AC restoration was minimal and when construction started, the existing AC lining was so thin that this running machine started to fall apart.

Mr. McCormick moved to approve *Manager's Report No. 12 – 11* - Third change order for Job No. 04-06, KW-20, Waimea Well "A" Renovations, Request approval for additional funding, seconded by Mr. Nishimura; by a unanimous vote, motion was carried.

Re: *Manager's Report No.12 – 12* - Eight change order for Job No. 02-03, KW-14, 12-Inch waterline along Kaumuali'i Highway and Waimea Canyon Drive. Request approval request for additional funding

Mr. Dahilig moved to approve *Manager's Report No.12 – 12* - Eight change order for Job No. 02-03, KW-14, 12-Inch waterline along Kaumuali'i Highway and Waimea Canyon Drive. Request approval request for additional funding, seconded by Mr. Nakaya; by a unanimous vote, motion was carried.

Re: *Manager's Report No. 12 – 13* - PLH 03 EIS for Kahili Horizontal Directional Drilling. Request Approval for funding

Ms. Shiramizu passed out email handout from Kevin S. Yoshioka regarding the PLH 03 High Level Water Development stating to inform Manager Craddick that the Drinking Water Treatment Revolving Loan Fund program has conditionally authorized the loan funds for this PLH 03 project.

DISCUSSION:
Manager Craddick explained that this proposal is asking for approval of funding for Phase I of this project in the amount of $1.9 Million plus contingency for $2 Million from the BAB account. The purpose is to reduce the electric pumping costs from the basil water sources from sea level. The drilling portion of the project is proposed to drill no more than 12,000 feet in length or 8,000 gallons per day when the flow is reached. This is a high risk, high reward project and is premised on finding a reliable source that does not measurably affect the existing stream flow. There is no reliable answer to what the reward would be for drilling an exploratory hole, but at the same token the community and the Board will never get to the discussion of drilling the well if the environmental process has not clearly gone through without considerable investigation and review of cost alternatives. The proposed cost is approximately $32 Million which exceeds our budget by $20 Million. Two proposals were received and the other lacked clear approach to the project that was substantially higher in cost which we expected due to the uncertainty. We believe Mears Group Inc. has the capability to complete a project of this nature.

The map shows the distance of where the pipeline would be and the spreadsheet shows figures highlighted in blue and yellow indicates what it would take to pay off the well and the amount of flow and power we can generate from the well. The last spreadsheet shows our existing pumping, our current cost, power cost, and we currently use 5.6 million gallons per day.

The terms of the loan would be 4.5%; our loan percent is 1½% and the loan origination fee is 3½%. Mr. Moises explained that the initial intent was to get someone to design build the project and as we got into the details we realized that we could not afford our original scope which was an excess of $30 Million at that time. The thought was to get this estimate for construction and write a contract to the Phase I provided we get through the environmental stage. If we cannot get past the EIS we will not get to the design stage.

Mr. Dahilig expressed concern that $2 Million is a hefty amount and questioned to Mr. Moises if it makes sense of having the 10% of the prime consultant doing the minimal work. Mr. Moises explained the EIS is $550,000 and to take permitting and geological investigation into consideration. The EIS is bundled along with the state, county, and federal permitting. Mr. Dahilig explained that even with this scenario, it does not make sense to have the prime consultant handle 10% overall and this seems to still be a bit on the high side.

Manager Craddick explained to Mr. Dill that that Waihee System produces about 3 million gallons per day; the Kahana System produces about 6 million gallons per day. The Waiahole System which is in a rainfall area produces 33 million gallons per day and has not only one Tunnel but many collectors that produce off of this system. This job would not prevent other offshoot jobs similar to Waihee. If we find an area that we found that was good, we can go sideways in the hole to get additional flow. The 8 million is a high number, but once we pass 5 or 6, we are looking at a much larger pipe line in order to tie in the Kalaheo System. We can cut the cost and time if we can find a way to buy equipment so they can operate it, and when the project is done either sell it or keep it for future projects. If kept, we would not have to pay the day rate just the fuel and the operating staff. It would cost $30,000 per day just to have the equipment sitting here and when the task is being done and just one person is here you are still paying the whole $30,000 which could take up to six months. There are still ways to reduce cost. Manager Craddick suspects it would be on the border magnitude of $20 Million to get the pilot hole done.

Mr. Nishimura moved to approve this portion only and that the amount available is limited to $1 Million from BAB, seconded by Mr. McCormick; by a unanimous vote, motion was carried.

Manager Craddick explained to the board that there is another SRF project lined up also. Mr. Moises confirmed that the next one on the queue is Wailua Houselots. The Wailua Houselots project would be estimated at $2-$3 Million.

Mr. Nishimura's rational to the limited $1 Million from BAB is to be cautious in the measures that are taken for this high level water project and because this is a huge undertake as Mr. Moises letter stated also this project is a high risk.

Mr. Nishimura and Mr. McCormick moved to amend their first motion to approve this portion only and that the amount available is limited to $1 Million from BAB and instead moved to approve $2 Million request from the Water Utility Fund and to be refunded through the SRF loan program for the PLH 03 EIS for Kahili Horizontal Well Project, seconded by Mr. McCormick; by a unanimous vote, motion was carried.

Mr. Dahilig amended this motion to add, if in the event of Nupa or 343 documents' are challenged by the public, it is requested for the Boards approval of all applications in permitting. It would be the Board's evaluation if the EIS document gets challenged by the public, seconded by Mr. Kaneshiro; by a unanimous vote, motion was carried.

Mr. Nishimura requested for the DOW to check with the Department of Health if at any case we get to $1.3 and we find out it is no longer our goal, what will happen then? This is to make sure there are no misunderstandings between the departments. Manager Craddick suspected it will come down 50/50, but will check with the Department of Health.

Chair Oyama called the Regular Meeting to recess at 12:40 p.m.

Chair Oyama reconvened the Regular Meeting back to order at 1:00 p.m.

Re: *Manager's Report No. 12 – 14* - Request Approval for Resolution No. 12-1 Budget for next fiscal year

Ms. Yano passed out 2 handouts to the Board and the DOW Staff. A recap explanation to the revisions for the Budget FYE 2012 and revisions to pages 1, 7, 8, 10, 18, and 19.

DISCUSSION:

Ms. Yano explained that Page 7, line item 36 has been revised to reflect the 2 contracts that were encumbered last year. It is because of the contracts encumbrances that were not spent in 2011 which is rolled into the 2012 Operating Expenditures Budget.

Another change item is the debt service on the Department Summary Page 1. The last two columns on the right show proposed and approved. The Normal Expenditures changed from $12.9 Million to $13.6 Million due to the contracts encumbered and the unpaid balances which have been rolled in this 2012 fiscal year. Another change item is our Debt Service. It increased $130,862; we have received our updated SRF loan statement in July and the principal went up because we did some reimbursement requests in 2011 and we received additional monies. Instead of waiting for an amendment, Ms. Yano included this in the Debt Service payments. Also, the ending balance of $12.1 Million for 2011 which was shown as $16.9 Million proposed. We had more savings anticipated in 2011 and that is the reason why the Capital Improvement line item went up from $6.1 Million to $9.9 Million. There were more contract payments in 2011 than what was estimated.

Mr. Dahilig moved to approve *Manager's Report No. 12 – 14* - Request Approval for Resolution No. 12-1 Budget for next fiscal year, seconded by Mr. Kaneshiro; by a unanimous vote, motion was carried.

Re: *Manager's Report No. 12 – 15* - Review and Request Approval for the Agreement for Individual Voluntary Services, Mr. James L. Cassel, Jr., Waimea Shaft Site, TMK 1-5-003: 030 Waimea, Kauai

DISCUSSION:

Deputy Manager William Eddy explained that Mr. Cassel approached the DOW and asked to help clean and maintain the Waimea Valley Site, otherwise known as the Waimea Shaft. This is not the first time we have done this. This established program was adopted for the county and was in operation for years. Deputy Manager Andrea Suzuki confirmed to Mr. Nakaya that the liability issue if the volunteer gets hurt is addressed in his statues prior to the agreement.

Mr. Kaneshiro moved to approve *Manager's Report No. 12 – 15* - Review and Request Approval for the Agreement for Individual Voluntary Services, Mr. James L. Cassel, Jr., Waimea Shaft Site, TMK 1-5-003: 030 Waimea, Kauai

Re: *Manager's Report No. 12 – 16* - Request Approval for USGU joint funding effort for well monitoring

a. **Board approval to accept and expend grant monies from the DOH for source/well head monitoring *(WITHDRAWN)***

Manager Craddick requested for this item to be withdrawn. There was no discussion on this item.

Re: *Manager's Report No. 12 – 17* – Second Change order for Job 05- 02, Drill and Test Hanalei Well #2 & Job 05 – 02, Drill and Test Wainiha Well #4

a. Request approval for contract amendment for Contract No. 457 with Kodani and Associate, Inc.
b. Request approval to allocate from the FRC Fund Balance to contract amendment #2

Manager Craddick explained the agenda; *request b. Request approval to allocate from the FRC Fund Balance to contract amendment #2* should be allocated from the BAB Fund Balance.

Deputy County Attorney Andrea Suzuki confirmed to Mr. Nishimura that action can be taken on this item and an amendment can be made.

DISCUSSION:
This particular project is to be funded by the BAB and was changed as presented in the Manager's Report 12 – 17. Mr. Moises explained that this project is not time limited and may be presented at the next board meeting due to any changes that may occur.

Mr. Dahilig moved to defer *Manager's Report No. 12 – 17* – Second Change order for Job 05-02, Drill and Test Hanalei Well #2 & Job 05 – 02, Drill and Test Wainiha Well #4, seconded by Mr. Dill; by a unanimous vote, motion was carried.

Manager Craddick requested to withdraw this *Manager's Report No. 12 – 17* – Second Change order for Job 05- 02, Drill and Test Hanalei Well #2 & Job 05 – 02, Drill and Test Wainiha Well #4 and will properly agenda this item with revisions.

Mr. Nishimura moved to defer *Manager's Report No. 12 – 17* – Second Change order for Job 05- 02, Drill and Test Hanalei Well #2 & Job 05 – 02, Drill and Test Wainiha Well #4 and reagenda as properly addressed in the Manager's Report 12 - 17, seconded by Mr. McCormick; by a unanimous vote, motion was carried.

Re: *Manager's Report No. 12 – 18* - Award Contract to Kodani and Associates, Inc. for Job No. 11- 12, Project No. HE-11, Lele Road to Salt Pond, 6" Main Replacement, Hapapepe, Kauai

Due to procurement issues brought to Manager Craddick's attention it was requested to withdraw *Manager's Report No. 12 – 18* - Award Contract to Kodani and Associates, Inc. for Job No. 11-12, Project No. HE-11, Lele Road to Salt Pond, 6" Main Replacement, Hapapepe, Kauai.

Re: *Manager's Report No. 12 – 19* - Request approval for Grant of Easement "A" and "B" from Kaha Kai LLC for the Water Meter Service Connection and Backflow

Prevention Assemblies Kaha Kai Property, TMK: (4) 2-8-17:016, Poipu, Koloa District, Kauai, Hawaii

Mr. Dahilig moved to approve *Manager's Report No. 12 – 19* - Request approval for Grant of Easement "A" and "B" from Kaha Kai LLC for the Water Meter Service Connection and Backflow Prevention Assemblies Kaha Kai Property, TMK: (4) 2-8-17:016, Poipu, Koloa District, Kauai, Hawaii, seconded by Mr. Nishimura; by a unanimous vote, motion was carried.

Re: *Manager's Report No. 12 – 20* - Grant of Easement "W-1" from Elesther Calipjo and Milagros Calipjo for the Construction Plan For 8" Reduced Pressure Detector Assembly For Elesther Calipjo, TMK: (4) 3-3-12:007, Puhi, Lihue District, Kauai, Hawaii

Mr. Nishimura moved to approve *Manager's Report No. 12 – 20* - Grant of Easement "W-1" from Elesther Calipjo and Milagros Calipjo for the Construction Plan For 8" Reduced Pressure Detector Assembly For Elesther Calipjo, TMK: (4) 3-3-12:007, Puhi, Lihue District, Kauai, Hawaii, seconded by Mr. Nakaya; by a unanimous vote, motion was carried.

Re: *Manager's Report No. 12 – 21* - AWWA WUC participation by- the Manager

DISCUSSION:

Manager Craddick recommended for the Board to allow him to participate in the AWWA during 12 days of company time as required. The Board previously allowed the Manager to participate on the Hawaii Rural Water Association Board, subsequent to that approval the HRWA board elected the Manger to be its representative to the National Rural Water Association Board. Deputy Manager William Eddy, Jeff Mendez, Dustin Moises, and Faith Shiramizu submitted memorandums to Manager Craddick in response to their opinion on the participation to the AWWA WUC, HRWA, and NRWA.

Mr. Nishimura's concern is that with this year's budget, FRC, and rate study placed an extremely large burden on the Board Members. It will be very difficult to commit to what is needed from the Manager. We came down to one week to finalize the budget. It is appreciated that the Manager is participating in these organizations, but the juggling of these issues needs to be more structured.

Ms. Shiramizu commented to the board on her memorandum to Manager Craddick. She explained that the DOW staff has been attending weekly staff meetings to help the overall communication. This is a head start for more "unity provided for staff" regarding any action to be taken in the event Manager Craddick is not here.

Mr. Nishimura questioned to Manager Craddick if he will be available to be reached if not present and a decision is needed to be made by the DOW Staff. As requested by the DOW Staff, Manager Craddick agreed to be available by phone or e-mail when needed.

Chair Oyama expressed to the DOW Staff that everyone must work like a clock. They should not be afraid to speak bluntly or to say what is on their mind, and Manager Craddick has to know how to manage it because he has the top responsibility. The DOW Staff must also do their part and face every day in the work environment as if it affects everyone around them.

Mr. Dahilig stated that the Board does not need to give approval to Manager Craddick on what events he can and cannot attend, but the message is that this has a cumulative effect on the performance. As a manager, we need to be able to trust Manager Craddick in making that decision.

Mr. McCormick moved to approve *Manager's Report No. 12 – 21* - AWWA WUC participation by- the Manager, seconded by Mr. Dill; by a unanimous vote, motion was carried.

Re: *Manager's Report No. 12 – 22* – Request Board Approval to Receive and Expend Funds from the American Resort Development Association (ARDA) for the 2011 Make a Splash, with Project WET, Water Festival

a. Request Board Approval of Resolution No. 12-2 (11/12), Approving the Receipt and Expenditure of $1,500 in Grant Monies for the 2011 Make a Splash, with Project WET Water Festival from the American Resort Development Association (ARDA)

Project Wet is Water Education for Teachers and every year we have 5th graders from most of the schools here on Kaua'i.The DOW Staff along with community volunteers provide instruction and hands on activities for the fifth graders to learn about water. This marks our 8th year with this event and is scheduled for Thursday, September 29th.

Chair Oyama announced that he is leaving at 1:46 p.m. and motioned for Vice Chair Kaneshiro to reconvene the Regular Meeting, seconded by Mr. Nakaya; motion was carried.

Mr. Nishimura moved to approve *Manager's Report No. 12 – 22* – Request Board Approval to Receive and Expend Funds from the American Resort Development Association (ARDA) for the 2011 Make a Splash, with Project WET, Water Festival, seconded by Mr. Nakaya; by a unanimous vote, motion was carried.

Re: Annual Evaluation of the Manager – The Board will go into executive session on this matter

Pursuant to Haw. Rev. Stat §§92-4 and 92-5(a)(2), the purpose of this executive session is to consider the Job Performance Evaluation of the Department of Water's Manager and Chief Engineer. This deliberation involves matters affecting the privacy of the Manager and Chief Engineer. If the individual concerned requests an open meeting, an open meeting shall be held

There was no executive session needed for this agenda item.

Mr. Nishimura moved to have the evaluation forms be provided to all the Division and Section Heads and also be sent to the County Attorney, the Administrative Assistant, Finance, Personnel, Managing Director, and Housing, seconded by Mr. Dahilig; by a unanimous vote, motion was carried.

DISCUSSSION:

Mr. Nishimura questioned to when the Board will be doing an evaluation on the Manager. In the past the Department, peers, and the Board was given the opportunity to do the evaluation, then the results were given to Personnel as well. There was a notice from Personnel to complete this evaluation form by September 2011, but we have not received the actual form.

Mr. Nishimura motioned for this form to be distributed and discussed to the Board by the next Committee of the Whole meeting, seconded by Mr. Dill; by a unanimous vote, motion was carried.

Mr. Dill leaves at 1:51 p.m.

STAFF REPORTS

Re: Statement of Kaua'i County Water Department's Revenues and Expenditures

Ms. Yano stated that on the Budget Status Summary total funds at May 31, 2011 was $63,934,126.86. The Water Utility balance at the end of June 30, 2011 was $16,914,045.74. Manager Craddick stated there is a correction for the Summary of Warrant Vouchers Paid reported as of June 30, 2011. During the last board meeting, there was an error in showing the allocation of this $4,311,263.00. This revised report shows the Bond-BAB allocated the funds of $4,311,263.00 to the Department of Transportation.

Mr. Nishimura moved to approve the Statement of Kaua'i County Water Department's Revenues and Expenditures, seconded by Mr. McCormick; by a unanimous vote, motion was carried.

Re: Report by the Public Relations Specialist on Public Relations Activities

Ms. Shiramizu added that on August 27, 2011 a blessing for the Waimea Canyon Project and a "Thank You" to the governor for releasing the funds will be taking place. Also, Dustin Moises is organizing a golf event and the Board will have a chance to sign up if they want to attend.

Mr. Dahilig moved to receive the Report by the Public Relations Specialist on Public Relations Activities, seconded by Mr. McCormick; by a unanimous vote, motion was carried.

Re: Chief of Operation's Summary Report on Monthly Operational Maintenance

Mr. Reyna reported that the Operations Division Report is broken down into four categories, Personnel, Source and Storage, Distribution, and Fleet, Inventory, Warehouse and Baseyard Area.

Personnel - There was some employees that attending an Excavation/Trenching Training with the Contractors Association of Kauai. There is a current vacancy for Plant Electrician, but in line with that our current Electrician Helper applied for certification for the test and we are awaiting the evaluation credentials on that.

Source and Storage - The completion of the removal of galvanized metal roof from the abandoned Kukuiolono Tank has been achieved.

Distribution - The staff is performing numerous overnight works in coordination with contractors for our Water 20/20 Projects. In line with these numerous overnight work, the staff also tends to a lot of sewer line and service lateral breaks due to construction.

Fleet, Inventory, Warehouse and Baseyard Area - A pickup truck was also bought for our Operations Department this past month.

Mr. Reyna explained to Mr. Nishimura that currently he is working with Deputy Manager William Eddy in preparing bid documents, specifications and the scope of work for the Hanamaulu Well. He believes that the bid documents should be going out before the next board meeting.

In addition to this report, there was a fire that transpired in the Koloa area yesterday. Our system worked well and the Mahaulepu tanks had ample water source and the leak wells barely registered any pumping activity to put out the fire. Our SCADA alarms did not register any alarm during the duration of the fire and the newly installed fire hydrant by the church was used as one of the main sources and was successful.

Mr. Nishimura moved to receive the Chief of Operation's Summary Report on Monthly Operational Maintenance, seconded by Mr. Dahilig; by a unanimous vote, motion was carried.

Re: Manager's Monthly Update Regarding Activities of Note of the Kaua'i County Water Department

Manager Craddick explained that the report back from Personnel Services regarding the Engineering Division reorganization was that they were not in favor of it so we are currently revising the organizational chart. We are amending the position description duties for the EM5 and leave the EM7. Personnel stated that you cannot have an EM reporting to an EM.

SUMMARY OF WARRANT VOUCHERS PAID

Warrant vouchers were paid in the amount of $3,980,387 and the total capital expenditures were $979,278.

The BAB Spend Down is attached for the Board's review.

There is a Bird Training for the Board Members to attend with Deputy County Attorney Andrea Suzuki after the Regular Meeting is adjourned.

Mr. Nishimura moved to receive Manager's Monthly Update Regarding Activities of Note of the Kaua'i County Water Department, seconded by Mr. McCormick; by a unanimous vote, motion was carried.

EXECUTIVE SESSION

1. Review and Approval Executive Session Minutes: June 21, 2011
2. Review and Approval of Executive Session Minutes: July 28, 2011

Mr. Dahilig moved to approve Executive Session Minutes dated for June 21, 2011 and July 28, 2011, seconded by Mr. Nishimura; by a unanimous vote, motion was carried.

TOPICS FOR NEXT WATER BOARD MEETING

1. Board Policy on Reserve Fund

TOPICS FOR FUTURE WATER BOARD MEETINGS

UPCOMING EVENTS

1. Project WET, Make a Splash, September 29, 2011
2. National Rural Water Annual Convention, October 4-6, 2011
3. HWWA Conference, Kona, Hawaii, October 12-14, 2011
   Mr. Nishimura suggested that if some of the Board Members are not able to attend this conference, the funds to can be used for the DOW Staff to attend.

NEXT WATER BOARD MEETING

1. Thursday, September 22, 2011, 10:00 a.m.
   Mr. McComick, Mr. Dill, and Mr. Dahilig will not be able to attend this meeting.
2. Thursday, October 27, 2011, 10:00 a.m.
3. Wednesday, November 23, 2011, 10:00 a.m.

ADJOURNMENT

There being no further business, Vice Chair Kaneshiro adjourned the meeting at 2:24 p.m.

Respectfully Submitted,

Mary-jane Garasi
Acting Commissions Support Clerk

Approved,

Randall Nishimura
Secretary – Board of Water Supply

Recessed Finance Committee Meeting

August 26, 2011
2:00 p.m.

Committee Members Present: Larry Dill, *Chair*, Raymond McCormick, Randall Nishimura

Staff Present: David Craddick, Marites Yano, William Eddy, Gregg Fujikawa, Faith Shiramizu, Deputy County Attorney Andrea Suzuki

Recessed from Tuesday, August 23, 2011, Chair Dill reconvened the Finance Committee Meeting to order at 2:04 p.m., Quorum was achieved with one item of business for discussion.

OLD BUSINESS

a. ***Manager's Report No. 11 – 49*** – R.W. Beck Report on Financial Planning Analysis and Water Rate Study

DISCUSSION:
The Finance Committee members were given in advance an enlargement of Page 005 and 006 dated 8/24/11. Manager Craddick passed out two graphs to the committee members. A line graph showing the Cumulative Percent Rate Increase/Year and a pie graph showing the AWWA U.S. Water Rate Structure.

Manager Craddick explained that in 2010, this Water and Wastewater Rate Survey has 380 water facilities that participated in this survey nationwide. Their yearly cumulative percent rate increase shows in red, Kauai Department of Water is shown in blue, and the green is the CP Index. After 2010, it is projected based on the proposed rate increase which clearly shows that we have not kept up with our peers, but definitely moving in the right direction. The pie chart shows a comparison of the type of rates we are utilizing, but we are not out of the norm here.

The differences in the percentage of revenues that are generated and comparing that with the previous year. Chair Dill stated that the problem we had the last time is tying the break down to Scenario 10B. The predicted requirements for 10B versus what Page 005 would show.

Ms. Yano explained that we were trying to interpret the difference between Line 8 on Page 89 against the worksheet Page 005. The revenues required for fiscal year 2012 on Page 006, Line 119 compared to Scenario10B. The $19Million is the Water Sales, the $24 Million on Page 89, Line 33 on 10B shows the other income added in which justifies lines 10 through19. Only line 8 is being factored into the new worksheet. So the additional $1 Million is the additional rate increase from the new rates. It is a revenue test is using the 11.2% rate increase; we would get to the $20 Million revenue required. The $19 Million on Line 8 plus Line 31 Total Revenue Required of $1.08 Million, we get a total of $20.4 Million revenue required shown on Page 006, Line 119.

Ms. Yano explained to the committee that R.W. Beck revised Page 005 and 006 to show a dollar amount in the zero block. Chair Dill questioned what the meaning of Line 118; Page 006 the adjustment factor. The explanation to this was that the 3% adjustment factor was used in addition to the leak rebates based on historical and not actual. The 5.5% is accounted for the adjustment factor and the leak rebate. The revenue test is to show that if we use these rates, are we coming up with the requirement that we need. This is where the new table comes in and it shows that the rates are rounded up instead of decimal numbers; they come up with a difference on Line 16so the rates they came up with is okay.

Mr. Nishimura stated that he was under the impression that the leak adjustments was taken out and Footnote 1-Revenues from the public fire protection system. Also, that the total cost was compared to what is required for the additional revenue needed.

The fixed amount per hydrants is shown as an offset on our side one Line 43 Page 90 under County Service Charge Operating expenditures. Mr. Nishimura stated that it shouldn't be shown as a revenue request; it should be on Line 47. If we are taking out of the revenue are we including in our cost? Chair Dill confirmed that Line 13, Page 89 shows that it washes out.

Ms. Yano explained to the Board that while deliberating with Manager Craddick about the rate increase, we may find out that we have more money than what is anticipated at the end of the year. Instead of implementing these new rates now, we can delay one half of the increase until January 2012. Ms. Yano passed out a worksheet to the Board and the DOW Staff showing the effects on delaying one half of the rate increase for 2012 to 2013. This proposal in comparison to Beck was nothing in 2016. We are now moving half of the rate increase forward 2014, 2015 and so on for any individual year to 2016. It ends up reducing the amount of cash and reduces the amount of coverage we anticipated to make, but we will certainly be okay cash wise. In delaying this will probably not hurt us.

For the sake of our customers, Chair Dill favors the idea of deferring the rate increase even though the amount is higher. There is still concern to the indemnification this will have on our debt service ratio. Manager Craddick explained that we would be in good shape and there will be enough money to cover our debt for a couple of years. This would jump straight in the third year when we will have to start paying principle plus interest for our BAB Bonds.

Mr. Nishimura also expressed his concern with the numbers. Having a 25% discrepancy .Mr. McCormick also expressed concerns regarding the need of new scenarios. Ms. Yano added that with the beginning balance that was forwarded in 2012, you have to take in consideration of all the encumbered CIP projects of $1.6 Million that was forwarded from 2011; the Capital Rehab CRP Projects was $672,000 plus $800,000 Water Utilities that was encumbered. Approximately $3 Million was not paid in 2011. The ending balance for 2011 is estimated.

Mr. Nishimura explained to Chair Dill that the encumbered amount carries from year to year and if the accounting system is consistent, it is a matter of where the money is "in the system." If that beginning balance is incorrect by $4 Million and "committed," and it is unexpended the fact is there is a discrepancy between that, which is almost 20% of the whole rate increase. It would be easier to approve a 30% increase and go forward than approving a 49% increase, then hold back. In fairness to the rate holders, that gives too much slop for the Department.

Recessed Finance Committee Meeting
August 26, 2011

Chair Dill suggested we bump the beginning balance on Line 2 Page 89 to $16 Million and the 2011 column on Line 62 and 63 accordingly. Ms. Yano explained that Line 62 and Line 63 shows an estimated payment of $3.84 Million and $1.58 Million, but the actual payment made in 2011 was $2.78 total. The difference will show up in 2012 and will offset the beginning balance that is forwarded. To understand Ms. Yano's worksheet the column under the date is Beck's proposal and the DOW proposal is in yellow. Page 89, Option 10B, Line 26-31 shows additional revenues with these rates, the total would still be $1.08 Million.

With the Ag Rates, comparing the right hand column on Page 003 is less than 9% and Page 004 is increasing at an average of 10%. Manager Craddick said that we really need to find out how many houses are in each tax map key that gets the Ag rates which would give us more information. When we do that, we can make a sensible recommendation to the Board because right now the reason for having it half of the other rates is not reasonable. Chair Dill mentioned that previous conversations referred to a hybrid rate that could be dealt separately by Rule Changes. Chair Dill expressed that he is comfortable with moving forward on the same amount of subsidies happening today, as long as the Manager or Ann from R.W. Beck can justify to why the customers are still subsidizing the same Ag rates prior to the proposal. Manager Craddick explained that the total amount for Ag is $338,000 so we are subsidizing the rate by 50% so it is consistent.

Manager Craddick suggested to Chair Dill to use the worksheet handed out as the Department's recommendation to the Board. The numbers on Line 77, on Page 90 will drop a little bit, but if we defer half of the increase, the debt ratio would be 1.2 instead of 1.4.

Mr. McCormick motioned to accept Scenario 10B and move Rate Table 4, Page 001 and Page 002 to the full Board dated August 5, 2011 Page 7 of 31, seconded by Mr. Nishimura; by a unanimous vote, motion was carried.

Chair Dill adjourned the Finance Committee Meeting at 3:20 p.m.

mjg

Finance Committee Meeting

August 23, 2011
10:30 a.m.

Committee Members Present: Larry Dill, *Chair*, Raymond McCormick, Randall Nishimura

Board Member: Roy Oyama

Staff Present: David Craddick, Marites Yano, William Eddy, Val Reyna, Dustin Moises, Gregg Fujikawa, Keith Aoki, Faith Shiramizu

Chair Dill called the meeting to order at 11:00 a.m, Quorum was achieved.

Chair Dill along with Committee Members Mr. McCormick and Mr. Nishimura accepted the Agenda by acclamation, motion carried.

MINUTES
Finance Committee Meeting – June 23, 2011
Recessed Finance Committee Meeting – June 23, 2011
Recessed Finance Committee Meeting – June 27, 2011
Recessed Finance Committee Meeting – June 30, 2011
Mr. McCormick moved to approve all the Finance Minutes as circulated with this agenda, seconded by Mr. Dill; by a unanimous vote; motion was carried.

OLD BUSINESS

a. ***Manager's Report No. 11 – 49*** – R.W. Beck Report on Financial Planning Analysis and Water Rate Study

Ms. Shiramizu passed out a bi-monthly total chart with the DOW current rates in comparison with the different countries.

Mr. Craddick stated that there were four new inserts provided for this meeting. An updated Manager's Report 11-49 dated August 23, 2011, the SAIC cover letter from Beck followed by 16 pages of the Water Rate Study blocks, and the new comparison chart Ms. Shiramizu passed out.

DISCUSSION:
Manager Craddick confirmed to Mr. Dill that these blocks correspond to the AWWA standards and the base cost and the peaking factor of 1.5 has an extra capacity charge. If everyone would keep their service flat every month then it would end up having a $3.48 cost of service.

The approach on the hydrant and private service fire charges were changed. The results are equal to the fire protection revenues as a result, this change cost for public fire increased while private fire protection decreased.

Another issue we have to consider is the timing of the rate increase. Currently we have rates going up in Jan and then again in July. We can change to the implementation date to January, like in 2006-2010. We will have to do our budget calculations for the year; we end up having this rate increase half way through the year and it makes the budget calculations somewhat tricky. Manager Craddick suggested the rates to implement in January of 2012 and 2013 implements July. This change would make it easier to calculate the budget especially with the 2%-3% difference in calculating when the consumption for the first half and second half of the year is different.

Manager Craddick passed around the article in the August issue of the AWWA Journal. Our current discussions on the rate study correspond to what is actually occurring with AWWA. The 1.5 coverage ratios that we are doing will only get Double A Bond Rating. To get the Triple A Bond Rate, we have to go up to 260 days rate coverage. If we plan to issue bonds, we might want to get the coverage to that level so the rates would base on what they were. The coverage ratio would be an excess of 2.

Referring to page 001 for 2012, the zero block is staying the same then it goes up to $3.50. Manager Craddick explained to Mr. Nishimura that we cannot get an average residential bill because we do not track residential use, but instead track by meter size which includes commercial and condos.

Manager Craddick explained to Chair Dill that from the 0-2, everyone gets a minimum bill and that minimum is not changing. When the blocks were shifted, we made a zero block and if you had a meter showing no usage, you would still get a bill. For example Coco Palms 3" or 4" meter is still active with no usage and their average bill is $1900. The reason being is that they are tying up all the water that is set aside for this property.

Mr. Fujikawa stated to Chair Dill that our Rules state that we cannot double charge the FRC. The FRC stays with the property and in many cases paid at a lower rate and the meter is installed, there are no changes. If you pay an FRC for $220.00 twenty years ago and you wanted to put the 5/8" meter and the same service connection today, we would have charged you the difference between $4600.00 and the $220.00 paid twenty years ago. We lock in the FRC with the parcel. In a situation where the meter service is terminated or abandoned for a certain amount of time, the FRC goes away. Manager Craddick confirmed that this length of time would be two years.

Looking at Page 002, Manager Craddick explained these were the Ag Rates which shows a $0.15 increase for 2012, 2013, 2014, and again a $0.15 increase in 2015. Even with the rate increase, it is not proportional to everyone else in 2016 and there is still a $300,000 per year subsidy of the Ag rates. The next two pages showed sample bills with different consumption rates for the first increase in 2012.

Chair Dill questioned in the 2011 column blocks, there is an $0.80 jump in the first block to the second block. The second block to the third block has a $2.00 jump and the third block to the fourth block has a $0.25 jump. Manager Craddick explained that with the logic, there was no apparent reason other than there was 2% of the services that were way out there. In the first block, we are trying to capture a majority of the cost of service and the extra blocks we are trying to get the extra base capacity for the peeking factor. We are covering the cost of service before tending to the third block. The fourth block

are mostly used by CPRs. The majority of the complaints came from when the block shifted and consumers had CPR units with one meter. One 5/8" meter was used for 5 houses instead of installing more meters this pushed them into the fourth block threshold. If the meter produces the water and there isn't any grumbling, we let it go at the minimum meter size. The problem is that we have meters that do not register correctly after a month or two so we are constantly changing the meters out. With the FRC we have a way of determining the meter size by the fixture unit during the application time. That's why we have the FRC as a down payment when you subdivide and the balance when the building permit is received.

Mr. Fujikawa explained that we do not have the capability to attest and proceed on the creation of CPR units correctly. We assist them when they actually try and get a water meter or a building permit to build on that particular CPR.

You pay FRC three ways:

1. When you create a lot by subdivision.
2. When you ask for a water meter for water service.
3. When you apply for a building permit for a unit via single or multifamily unit.

Manager Craddick stated that the service charge covers all of the meter expenses and customer service expenses.

On Page 004, Chair Dill questioned to why the Agricultural Rates are not keeping up with the regular consumer rates as far as the percent increases? Manager Craddick explained that R.W. Beck used the same methodology the Board used since the rate increase in 2006 kept with the same tracking. The logic is not certain on the discussion back then. Chair Dill emphasized that we need to make sure we understand why and how much we are subsidizing for AG. 1/10 out of 4 is Ag customers. We have seen a lot of time shares that are getting AG rates and what we did was we went through everyone that had AG rates and compared the acreage to the amount of water they use and the ones that were not using that much water we tried to go out and get a visual inspection. Our GIS system allows us to see like google earth. The AG rates consumers get a higher service charge rate of $15.

Chair Dill encourages the DOW philosophically to justify the agriculture that is being applied. Mr. Nishimura stated that the rate holder should be the one responsible to explain what or how they are doing agriculture. Manager Craddick explained if the subsidy is $300,000 with the increase, the income is still less than 2%. It is following the volume and not the cost. Ms. Yano added that Line 35, Page 002 the meter service charge goes up in 2014 to make it uniform with the standard consumer's service charge.

Deputy Manager William Eddy explained that the Ag theory is based on the spacing versus the consumer's meters. The Ag meters in rural areas with the meters spaced out farther as opposed to residential meters are close together. It requires an increased effort for meter readers to catch the AG meters since the spacing is farther.

Mr. Nishimura said that if we had a percentage based upon the cost of service, which would be more appropriate. The first block should register the rate and the second and third block would show the true AG.

Manager Craddick recommended a wording change in the rule to implement the first block to apply to everybody unless they show that they have no house. It would be a lot easier to justify this to the general public as to the reason why they are paying the same as everybody with the first block.

Cost wise, Chair Dill suggested to check with planning on dwelling and to check on hybrid rating.

Manager Craddick explained that Page 005 shows revenue tests to see if the rates that is being proposed is actually going to generate the revenue that they expected to generate. The difference on the bottom is about 1%. The difference measurement is the calculation of what you will get versus the proposed rate increase. On page 005, Line 34 shows Annual Revenue of $3,249,000. Mr. Moises explained that it shows the percentage increase from the previous year.

On Page 006, Line 116, Mr. Nishimura asked Manager Craddick what is the Adjustment Factor. Going back to Page 89 to Scenario 10B, Line 31, we needed $1.82 Million in 2012 we need an additional of $1.082 Million in addition of the $22.9 Million from the total revenue that this is based on the current rate we have right now. It is the difference between the revenue required and the current collections we are collecting with the current rates. Line 33 shows our Total Revenue Required which we needed the additional $1.082 Million to come up with the $24 Million. That is the number they used to calculated this particular year in 2012. Chair Dill still explained that Page 006 Line 119 shows $20.4 M.

At 12:18 p.m., Chair Dill the Finance Committee Meeting to a recess.

Chair Dill called the Finance Committee Meeting back to order at 12:22 p.m.

Since the balances did not match, Manager Craddick suggested providing the Board with the 10B sheet that R.W. Beck used to tie into the Block Rates. This will be provided in the next Finance Committee Meeting.

In addition, Chair Dill requested for the DOW to come back with findings as to the correlation between Page 6 and 10B Scheduled and a way to how we arrived to AG Rates and what the arbitrary basis was.

At 9:22 a.m., Chair Dill moved to recess the Finance Committee meeting to 2:00 p.m. Friday, August 26, 2011, with no objections, motion was carried.

mjg

Committee of the Whole Meeting

August 18, 2011
9:00 a.m.

Committee Members Present: Daryl Kaneshiro, *Chair*, Raymond McCormick, Randall Nishimura, Clyde Nakaya, Roy Oyama

Absent and/or Excused: Michael Dahilig, Larry Dill

Staff Present: David Craddick, William Eddy, Marites Yano, Deputy County Attorney Andrea Suzuki, Faith Shiramizu, Gregg Fujikawa, Val Reyna, Keith Aoki, Aaron Zambo

Chair Kaneshiro called the meeting to order at 9:40 a.m. Quorum was confirmed.

ACCEPTANCE OF AGENDA
Mr. Nishimura moved to accept the agenda as presented, seconded by Mr. Oyama; by a unanimous vote, motion was carried.

MEETING MINUTES
Committee of the Whole Meeting - June 21, 2011
Recessed Committee of the Whole Meeting – June 23, 2011
Recessed Committee of the Whole Meeting – June 27, 2011

Mr. Oyama moved to accept the minutes as circulated, seconded by Mr. McCormick; by a unanimous vote, motion was carried.

OLD BUSINESS

a. **Goals for the Manager**

The latest update to the Goals for the Manager was a morale indication satisfaction survey with the Department's employees. The 5 questions pertained to the Kauai Department of Water's leadership and 6 questions referring to job satisfaction and a comments section. We have surveyed the whole department and the people who report to the Manager.

Manager Craddick passed out the results of this tally sheet survey to the Board Members.

DISCUSSION

Mr. Nishimura asked if this survey seems to be a fair representation, if so this is a good starting point whether you agree with the actual numbers or not. It gives the Manager a base point to move forward.

Manager Craddick expressed that these results were shared with the staff during the monthly meeting and is already taking action on these issues. We started by separating three groups, Operations and two groups from the office and with the results, each group gave 10 suggestions of how leadership can be improved.

Mr. Nishimura said that with this starting point, a small movement would be good for the first fiscal year. Mr. Nishimura moved to use tally sheet titled KDOW Employee Satisfaction Survey dated June 2011 as a measurement tool for improving employee morale for fiscal year 2011-2012, seconded by Mr. Oyama; by a unanimous vote, motion was carried.

Manager Craddick had the Board Members and Staff refer to the BAB Spend Down in the Reports section. The spreadsheet and graph shows the funds being spent before encumbering it. The numbers on the left of the 2010 Bond Encumbrance and Spend Down Status are all actual amounts and the other side are projected amounts. The encumbered to date column is shown with change orders, etc. By December, Manager Craddick stated that our funds encumbered would be at $39 Million and Maka Ridge is out for bid on September 1st.

Mr. Nishimura stated that in June, we would be at about $50 Million according to this chart. Mr. Moises said it is all depended on finishing the designs so realistically it would be about $45 Million by next June.

Mr. Nishimura proposed $39 Million by December 2011 for the bond float and a target of $45M by June 2012.

Out of the 25 Performance indicators, Mr. Nishimura suggested it would be more appropriate to take 1, 6, 7, 13, 19, and 23 to work on from the handout (Performance Indicators Kauai BWS). Since these indices are delegated to staff, would it be more appropriate to have the staff provide the manager the raw data? Manager Craddick said the staff already has the graph all they need to do is put the data in. With the switch over in our accounting system, we will not get the correct reliable figures until February or March of next year. We will be able to get data on the highest unaccounted water; we will probably be able to track water loss for each individual system. Mr. Nishimura expressed that if we can focus on these 6 indicators, but to make sure the staff focuses on their primary job duties first.

Police Dispatch does not give proper reporting and we are looking at a call center. On average we get about 10 calls per week. With the set up charge for the call center there may be a set up charge of $1,000 or $2,000.

Mr. Nishimura moved to move the Goals for the Manager to the full board, seconded by Mr. Oyama; by a unanimous vote, motion was carried.

At 10:05 am, Chair Kaneshiro adjourned the Committee of the Whole meeting.

mjg

Rules Committee Meeting

August 15, 2011
3:00 p.m.

Committee Members Present: Daryl Kaneshiro, *Vice Chair*, Clyde Nakaya

Absent/Excused: Mr. Dahilig, *Chair*

Board Members Present: Roy Oyama, Randall Nishimura

Staff Present: David Craddick, Marites Yano, Gregg Fujikawa, William Eddy, Val Reyna, Faith Shiramizu, Keith Aoki, Dustin Moises, Deputy County Attorney Andrea Suzuki

Guests Present: David Hinazumi (Grove Farm), Michael Tresler (Grove Farm)

Vice Chair Kaneshiro called the meeting to order at 3:16 p.m, Quorum was achieved.

AGENDA
Mr. Nakaya moved to accept the agenda as circulated, with no objections, motion was carried.

OLD BUSINESS

Re: *Manager's Report No. 11-24* – Committee Discussion and Possible Action on Part III Rule Amendments – Establishing Standards for Subdivision Water Systems

i. Attached Proposed Draft Bill No. 2380
ii. Attached Proposed Draft Bill No. 2401
iii. Attached Approved Bill No. 2401, Draft

DISCUSSION:
Manager Craddick explained that Part 3 Section 1 of the rule and Section XII stated that modification of the rule can be made by the department. On page 4 of Part 3 Section 1 Definition of Department means, Department of Water, County of Kauai, consisting of a Board of Water Supply, a Manager and Chief Engineer and the necessary staff. The way this was being changed in the past was that the Manager was making changes to the rules. Manager Craddick explained he did not want to be making changes in the subdivision rule except the governmental subdivision, the utility, and large lot subdivision. Since the original intent was for the Manager to be the one to be able to change the rules and instead of taking these intended changes, it is requested to include the manager in there. The question is what criteria would the Manager use to review these things? Does the board still want to be involved in these exemptions of these subdivisions? If so, does this belong in Section 1?

It is recommended to throw these recommendations out and we can come back with a new Manager's proposal. Vice Chair Kaneshiro asked committee member Clyde Nakaya and the rest of the Board that

the two questions here are if we want to focus on moving this part on or to work on all the rule changes?

Mr. Nishimura questioned at what point it would be addressed regarding Grove Farm's request regarding Part 3 standards as well as Ordinance 2381. Is there a policy that is set up to some kind of traceable means if we are faced with similar requested provided that we are following the standards?

Section E Page 27 states to exempt the Board for these opposed rules. The same standards apply to the Manager under this proposed rule. The Board was not provided the proposed rule to cross check these standards.

Deputy County Attorney Andrea Suzuki stated the decision to make is if the board would want to have standards apply to everything that came up to the Manager as far as correspondence received or mainly with specific deviations. The Manager would have to have these three findings before you would meet its deviation and it would also apply to the Board to meet these findings in addition to whether the public interest is applied or what not.

Mr. Nishimura expressed that structurally this could work, especially with the two thirds requirement assuming there may be cases that the Board, Manager, and Chief Engineer would not agree.

Deputy County Attorney Andrea Suzuki explained that the discussion would come to the Board if the applicant does not agree with the Manager. Using the same standards, the Board would make the appropriate decision. For the County Attorney's opinion on this matter, more time is needed to think of all the possible scenarios that may arise on whether to treat this issue on Part 1 or specifically in the other parts of the rules.

Mr. Tressler representing Grove Farm requested to withhold any comments until a final product is given from the Board. Mr. Tressler expressed his appreciation from the Board and the Manager with the flexibility to improve the process and recognizing the challenges for large scale developers.

Mr. Nakaya moved to defer *Manager's Report No. 11-24* – Committee Discussion and Possible Action on Part III Rule Amendments – Establishing Standards for Subdivision Water Systems until new proposals are received from the Manager and refer to Deputy County Attorney Andrea Suzuki whether the Board's standards should be in Part 1 or Part 3, seconded by Mr. Kaneshiro; by a unanimous vote, motion was carried.

Re: *Manager's Report No. 11-28* – Request Board Approval of Facilities Reserve Charge Changes

i. Rule changes to implement FRC in Part Three and added section of the rules for FRC

DISCUSSION:
This issue was from October of 2010, we were looking at changing the FRC charge and the recommendation at the time was 2 ½ times more than it was.

Issues that occur:

1. When the FRC is paid and the facilities are put in, the FRC payment is given back.

2. When the FRC is paid at subdivision time and the meter is not put in for a long time, the fee goes up and there is no depreciation payment being made.

The proposal is a whole new Section 5 of the Rules and the question is if you want everything dealing with the development fee in that section or if you want some of it sprinkled into subdivision? Right now it is sprinkled into both of them because we want to collect payments during the subdivision time but we do not like the fact that people can sit and wait and never put their meter in. This would force them to put the meter in. Manager Craddick's recommendation for this item is to defer this item to give the Rules Committee a chance to read up on it and open it for discussion on the next meeting.

Mr. Nishimura commented that one of the things to look at is to see if we are looking to revise a whole new Section 5 or complete a hybrid with Part 3 and Part 5. If we are doing a hybrid we have to make sure the two parts are in concert with each other. This direction should be made by the next Rules Committee meeting.

Mr. Nakaya moved to defer *Manager's Report No. 11-28* – Request Board Approval of Facilities Reserve Charge Changes, seconded by Mr. Kaneshiro; by a unanimous vote, motion was carried.

Re: *Manager's Report No. 12- 9* - Requesting approval of rule change to delete leak rebates

a. PowerPoint Presentation on how a Private Insurance Company would provide the services that are required.

A PowerPoint Presentation was not made.

DISCUSSION:
During the last meeting the Board Members wanted to know more about the other islands implementing the leak rebates. Oahu and Kauai has the similar leak rebates. Maui does not have leak rebates at this current time. If the Board wants to move forward with this, we would have to still go to the small business and have a public hearing. $300,000 is given away each year due to these leak rebates and it is the other rate payers that are affected due to consumers who do not maintain their system after the meter when the DOW's responsibility is only at the meter.

Mr. Nakaya asked Manager Craddick if his bill goes up to $10,000 due to a leak, is the consumer responsible for the whole bill? Manager Craddick says that if the consumer is enrolled with the Leak insurance, the insurance would cover that bill. The consumer would file a claim, the insurance company would then pay the consumer, and then the consumer would be responsible for making their water payment. The current leak rebate is 50% if the consumer's bill and is based on the previous six months' average.

Vice Chair Kaneshiro expressed concerns regarding the monthly billing being implemented in December. With monthly billing, the number of leaks that are detected would come down due to closer monitoring instead of billing the consumer every two months. It is suggested that the DOW perform some kind of Public Relation action to make the consumer aware and to educate them to check their meters if there is a possibility of a leak on their property.

Mr. Nakaya moved to approve the Manager's recommendation as stated in *Manager's Report No. 12- 9* - Requesting approval of rule change to delete leak rebates and move this item to the full board for further discussion, seconded by Vice Chair Kaneshiro; by a unanimous vote, motion was carried.

At 4:00 p.m., Vice Chair Kaneshiro adjourned the Rules Committee Meeting.

mjg

FINANCE COMMITTEE REPORT

September 22, 2011

Subject: Finance committee report on Managers Report 11-49 Beck Rate study.

1. Report of the Finance Committee of the Kaua'i County Board of Water Supply

   Manager's Report No. 11 -49 - R.W. Beck Report on Financial Planning Analysis and Water Rate Study

It is the Finance committee's recommendation to move forward with the rate scenario 10B as proposed by our consultant, R.W. Beck and send the rate proposal to the small business review group.

The rates were determined by allocating Cost of Service using industry standard methods among the general user category with the exception of the agricultural category, which the committee recommends be subsidized at about half the general rates consistent with current practice. This subsidy will remain at about $300,000 per year for the current year and the total dollar amount increasing as the agricultural rates increase going forward. We further recommend that the basis for this subsidy be in a Board policy statement form to memorialize what is being done for future use.

The Finance Committee has deliberated over many months on the proposed water rates. While this was going on the Manager, with the assistance of our public relations consultant and Public Relations staff, has held numerous rate proposal meetings with the public as well as informing Council members and the Administration. Other members of the Board have attended some of those meetings.

We have reviewed ten different rate proposals that keep the Boards finances in sufficient standing to qualify for AA or better bond rating should continued borrowing be needed to finance projects going forward. It does not appear that operating costs spiraling upwards are driving the rates. We have also considered rate coverage that would allow interfund borrowing should the FRC not initially raise sufficient funds to pay the debt service expected from expansion related projects. The primary reason for the rate increase is to allow a move toward cash financing recurring replacement projects instead of using borrowed funds which carries related interest expense. There was also discussion of the current state of the economy and from comparisons with other utilities it can be shown that had the Department been raising the rates on a continuous basis ten years ago the Department may not be facing the increases being proposed today. Comparing the Department with other utilities there appears to be a national trend of water rates increasing at a cumulative percentage more than two times the cumulative percentage increase of the consumer price index since 1998. The department percent increase in water rate, in 2010, just equaled the cumulative percent consumer price index since 1998.

The committee was not unanimous in its recommendation.

The fundamental opinion difference appears to be whether the basis on which the rates are determined should be based on the latest financial information. The financial information does change month to month as the latest financials becomes available. Those financials do not appear to be changing in a negative direction. Using the latest financials there appears to be sufficient cash on hand to delay half the rates for one year. However your committee is satisfied that there are a number of additional projects which could be funded if additional funds were available. We are also of the understanding that the Board can delay at any time any of the proposed increases without jeopardizing the whole rate proposal if staff should be unable to get the projects bid and going according to the proposed project cost schedule upon which the rates are based.

Respectfully submitted,

Larry Dill

Larry Dill
Chair – Finance Committee

DRC/LD/cab
Mgrrp/Board- Finance Committee Report (9-22-11):cab

BOARD REPORT

September 22, 2011

Subject: Board's Committee Reports

The following Board Committee Chair will report at the Regular Meeting what transpired at their respective Committee Meeting:

1. Report of the Committee of the Whole of the Kaua'i County Board of Water Supply

    a. Annual Evaluation of the Manager and Chief Engineer

    b. FY 2012 Goals for the Manager

Daryl Kaneshiro
Chair – Committee of the Whole

cab
Mgrrp/Board- Committee of the Whole Report (9-22-11):cab

BOARD REPORT

September 22, 2011

Subject: Board's Committee Reports

The following Board Committee Chair will report at the Regular Meeting what transpired at their respective Committee Meeting:

1. Report of the Rules Committee of the Kaua'i County Board of Water Supply

    a. *Manager's Report No. 11-24* – Committee Discussion and Possible Action on Part III Rule Amendments – Establishing Standards for Subdivision Water Systems.

Michael Dahilig
Chair – Rules Committee

cab
Mgrrp/Board- Rules Committee Report (9-22-11):cab

Correspondence

KMH LLP

A Hawaii Limited Liability Partnership

September 16, 2011

Mr. Roy Oyama
Board Chair
Board of Water Supply
Department of Water, County of Kauai
Post Office Box 1706
Lihue, HI 96766

Dear Mr. Oyama:

Please find enclosed two copies of our revised planning letter to the Board of Water Supply for the Department of Water, County of Kauai required under Statement on Auditing Standards No. 114, the Auditor's Communication with those Charged with Governance.

Please sign the enclosed receipt indicating that you have received the above and return it at your earliest convenience.

If you have any questions or need additional copies, please call me at (808) 527-2263.

Very truly yours,

James Y. Nakayama
Senior Manager

Enclosure(s)

Copy to: Mr. Larry Dill, Finance Committee Chair w/enclosure

****

I hereby acknowledge receipt of the above items.

_____
Name

_____
Title

_____
Date

KMH LLP

A Hawaii Limited Liability Partnership

September 9, 2011

Board of Water Supply
Department of Water, County of Kauai
Post Office Box 1706
Lihue, HI 96766

This letter is intended to communicate certain matters related to the planned scope and timing of our audit of Department of Water, County of Kauai, State of Hawaii (the Department) financial statements and compliance as of and for the year then ended June 30, 2011.

Communication

Effective two-way communication between our Firm and the Board of Water Supply is important to understanding matters related to the audit and in developing a constructive working relationship.

Your insights may assist us in understanding the Department and its environment, in identifying appropriate sources of audit evidence, and in providing information about specific transactions or events. We will discuss with you your oversight of the effectiveness of internal control and any areas where you request additional procedures to be undertaken. We expect that you will timely communicate with us any matters you consider relevant to the audit. Such matters might include strategic decisions that may significantly affect the nature, timing and extent of audit procedures, your suspicion or detection of fraud, or any concerns you may have about the integrity or competence of senior management.

We will timely communicate to you any fraud involving senior management and other fraud that causes a material misstatement of the financial statements, illegal acts that come to our attention (unless they are clearly inconsequential), and disagreements with management and other serious difficulties encountered in performing the audit. We also will communicate to you and to management any significant deficiencies or material weaknesses in internal control that become known to us during the course of the audit. Other matters arising from the audit that are, in our professional judgment, significant and relevant to you in your oversight of the financial reporting process will be communicated to you in writing after the audit.

Independence

Our independence policies and procedures are designed to provide reasonable assurance that our Firm and its personnel comply with applicable professional independence standards. Our policies address financial interests, business and family relationships, and non-audit services that may be thought to bear on

independence. For example, without our permission, no partner or professional employee of KMH LLP (KMH) is permitted to own any direct financial interest or a material indirect financial interest in a client or any affiliates of a client. Also, if an immediate family member or close relative of a partner or professional employee is employed by a client in a key position, the incident must be reported and resolved in accordance with firm policy. In addition, our policies restrict certain non-audit services that may be provided by KMH and require audit clients to accept certain responsibilities in connection with the provision of permitted non-attest services.

Audit Planning Process

Our audit approach places a strong emphasis on obtaining an understanding of how your entity functions. This enables us to identify key audit components and tailor our procedures to the unique aspects of your entity. The development of a specific audit plan will begin by meeting with you and with management to obtain an understanding of business objectives, strategies, risks and performance.

We will obtain an understanding of internal control to assess the impact of internal control on determining the nature, timing and extent of audit procedures, and we will establish an overall materiality limit for audit purposes. We will conduct formal discussions among engagement team members to consider how and where your financial statements might be susceptible to material misstatement due to fraud or error.

We will use this knowledge and understanding, together with other factors, to first assess the risk that errors or fraud may cause a material misstatement at the financial statement level. The assessment of the risks of material misstatement at the financial statement level provides us with parameters within which to design the audit procedures for specific account balances and classes of transactions. Our risk assessment process at the account-balance or class-of-transactions level consists of:

- An assessment of inherent risk (the susceptibility of an assertion relating to an account balance or class of transactions to a material misstatement, assuming there are no related controls); and

- An evaluation of the design effectiveness of internal control over financial reporting and our assessment of control risk (the risk that a material misstatement could occur in an assertion and not be prevented or detected on a timely basis by the Department's internal control).

Similar assessments will also be made relative to compliance with laws, regulations, and provisions of contracts and grant agreements.

We will then determine the nature, timing and extent of tests of controls and substantive procedures necessary given the risks identified and the controls as we understand them.

The Concept of Materiality in Planning and Executing the Audit

In planning the audit, the materiality limit is viewed as the maximum aggregate amount of misstatements, which if detected and not corrected, would cause us to modify our opinion on the financial statements. The materiality limit is an allowance not only for misstatements that will be detected and not corrected but also for misstatements that may not be detected by the audit. Our assessment of materiality throughout the audit will be based on both quantitative and qualitative considerations. Because of the interaction of quantitative and qualitative considerations, misstatements of a relatively small amount could have a material effect on the current financial statements as well as financial statements of future periods. At the end of the audit, we will inform you of all individual unrecorded misstatements aggregated by us in connection with our evaluation of our audit test results.

Our Approach to Internal Control and Compliance Relevant to the Audit

Our audit of the financial statements will include obtaining an understanding of internal control sufficient to plan the audit and to determine the nature, timing and extent of audit procedures to be performed. An audit is not designed to provide assurance on internal control or to identify significant deficiencies or material weaknesses. Our review and understanding of the Department's internal control is not undertaken for the purpose of expressing an opinion on the effectiveness of internal control.

We will issue report(s) on internal control related to the financial statements and major programs. These report(s) describe the scope of testing of internal control and the results of our tests of internal controls. Our reports on internal control will include any significant deficiencies and material weaknesses in the system, of which we become aware as a result of obtaining an understanding of internal control and performing tests of internal control consistent with the requirements of the Government Auditing Standards issued by the Comptroller General of the United States, the Single Audit Act, and the U.S. Office of Management and Budget, (OMB) Circular No. A-133.

We will issue report(s) on compliance with laws, regulations, and the provisions of contracts or grant agreements. We will report on any noncompliance which could have a material effect on the financial statements and any noncompliance which could have a direct and material effect on each major program. Our report(s) on compliance will address material errors, fraud, abuse, violations of compliance requirements, and other responsibilities imposed by state and Federal statutes and regulations and assumed contracts; and any state or Federal grant, entitlement or loan program questioned costs of which we become aware, consistent with the requirements of the standards and circular identified above.

Timing of the Audit

We have scheduled the final fieldwork for the week of September 19, 2011. Management's adherence to its closing schedule and timely completion of information used by us in performance of the audit is essential to meeting this schedule and completing our audit on a timely basis.

Closing

This letter is intended solely for the information and use of the Board of Water Supply and is not intended to be and should not be used by anyone other than the specified parties.

We will be pleased to respond to any questions you have about the foregoing. We appreciate the opportunity to be of service to the Department.

KMH LLP

KMH LLP

Old Business

Contents Record for Managers Report 11-24

1. Managers' Report 11-24 August 2010 government and large lot deferral Page 1
2. Minutes from first meeting asking for rule to be written up including other rules pending. Oct. 2010 Page 2-3
3. Suggested rules prepared. Oct 21 Page 4-15
4. Communication from Max Gram regarding rule change Page 16-18
5. Communication from Grove Farm regarding rule change Page 19-20
6. Proposed council Ordinance 2381 not directly related to proposed rule. Page21-24
7. Revision to Ordinance 2381 since new council elected Ordinance 2401. Page25-27
8. Final Ordinance 2401 draft 2 approved. (deals with 4 lots) Page28-30

DEPARTMENT OF WATER
County of Kaua'i

"Water has no Substitute – Conserve It!"

MANAGER'S REPORT NO. 11-24:

September 9, 2010

Re: Committee Discussion and Possible Action on Part III Rule Amendments – Establishing Standards for Subdivision Water Systems

RECOMMENDATION

It is recommended that the Board amend the Part III Standards for Subdivision Water Systems noted in the attached rule change.

BACKGROUND

The rule currently allows the Manager to make changes and various Managers have exempted various subdivisions. I would prefer to have regulation established by rule rather than by the current thought or even changing thoughts of the Manager.

The goal of these changes is twofold:

1. To allow subdivisions for governmental purposes to move forward provided water is not needed for the lot. There is always the portion of land that will stay in the hands of the current owner or some other owner. This non-government piece will have whatever rights it had prior to the subdivision. The action may result in a higher cost per sq foot to meet DOW water requirements. In the end it is a decision of the land owner to require or not the government to put in infrastructure improvements before a particular piece of land is subdivided for either purchase or through donation to the government.

2. Allow subdividers with existing land locked lots or boundary changes that do not affect water demand to relocate them to more convenient locations. In this case we limit the changes to lots that are buildable. In other words if they are in a gulch or in a stream or other such non-buildable site we would not allow the change.

Respectfully submitted,

David R. Craddick, P.E.
Manager and Chief Engineer

cab
Attachments

Mgrrp/Rule Amendmem-Part III-Establishing Standards for Subdivision Water Systems (9-16-10):cab

4398 Pua Loke Street, Lihu'e, Kaua'i, Hawai'i or P. O. Box 1706, Lihu'e, HI 96766-5706
Phone No. (808) 245-5400 – Administration FAX No. (808) 246-8628 – Engineering/Fiscal/Shop FAX No. (808) 245-5813

Board Policy 22 – Budget and Contract Award process. (This Policy is added for completeness and is not relevant to the request being made and nothing will be changed with this policy.)

Procedural processes that are suggested to be affected by Policy 15A, if approved by the Board, are enclosed for your review.

Approval of this request will allow the finance committee and Board to focus on financial issues that that are not ministerial in duty. The Board could require a personal Bond for the Manager which would be paid by the Board which could protect the Board from fraudulent acts.

The recommended Board of Water Supply Policy 15A was provided.

Mr. Oyama moved to receive and refer Manager's Report No. 11-23 to the Rules Committee, seconded by Mr. Costa.

Manager Craddick noted that the existing Board Policy No. 15 will be replaced by Board Policy 15 A. There was no modification of Board Policy No. 3 unless the Board wanted to modify it.

The motion was amended to receive and refer Manager's Report No. 11-23 to the Rules Committee for consideration, and to look at Board Policy No. 3 to see if any changes are necessary.

With no further discussion; by a unanimous vote; motion was carried.

Re: *Manager's Report No. 11-24* – Committee Discussion and Possible Action on Part III Rule Amendments – Establishing Standards for Subdivision Water Systems

RECOMMENDATION

It was recommended that the Board amend the Part III Standards for Subdivision Water Systems noted in the attached rule change.

BACKGROUND

The rule currently allows the Manager to make changes and various Managers have exempted various subdivisions. I would prefer to have regulation established by rule rather than by the current thought or even changing thoughts of the Manager.

The goal of these changes is twofold:

1. To allow subdivisions for governmental purposes to move forward provided water is not needed for the lot. There is always the portion of land that will stay in the hands of the current owner or some other owner. This non-government piece will have whatever rights it had prior to the subdivision. The action may result in a higher cost per square foot to meet DOW water requirements. In the end it is a decision of the land owner to require or not require the government to put in infrastructure improvements before a particular piece of land is subdivided for either purchase or through donation to the government.

2. Allow subdividers with existing land locked lots or boundary changes that do not affect water demand to relocate them to more convenient locations. In this case we limit the changes to lots that are buildable. In other words if they are in a gulch or in a stream or other such non-buildable site we would not allow the change.

Manager Craddick noted that we have additional material as a handout on what the Council is doing on the same matter, and we should see how it fits in with what we are proposing.

Mr. Oyama moved to receive Manager's Report No. 11-24 and refer the draft Rule Amendments to the Rules Committee for the October meeting, with the staff providing the proposed language, seconded by Mr. Costa; by a unanimous vote; motion was carried.

Re: *Manager's Report No. 11-25* – Memorandum of Agreement, Job No. 05-05, PLH-30, Nawiliwili, Niumalu and Kupolo Pipeline Replacement, Līhu'e Water System

RECOMMENDATION:
It was recommended that the Board approve the Memorandum of Agreement (MOA) document; whereby, the Board of Water Supply, County of Kauai, agrees to abandon existing waterline facilities within certain County roads located as specified above in the Nawiliwili and Lihue Districts, Kauai, Hawaii. The MOA binds the Board to remove the abandoned waterlines should the Department of Public Works require its removal in the future.

BACKGROUND:
Construction plans call for the abandoning of all existing water facilities as required during the Nawiliwili-Kupolo Mainline Replacement installation. The Department of Public Works, County of Kauai, has asked the Department of Water to enter into the Memorandum of Agreement in order to leave existing water facilities abandoned in place. The MOA binds the Board to remove the abandoned waterline in the County Right-of-Ways should the Department of Public Works require its removal in the future.

Mr. K. Fujimoto noted that the MOA has been signed by the County but we are still waiting for the State to reply on our request for the same.

Mr. Costa moved to approve the Memorandum of Agreement for Job No. 05-05, seconded by Mr. Oyama; by a unanimous vote; motion was carried.

Re: *Manager's Report No. 11-26* – Dedication Deed for Water Tank Site and Water Well Sites from Alexander & Baldwin, Inc., and McBryde Sugar Company Limited, TMK: 2-5-001:002(por) and 001(por), Omao, Koloa District, Kaua'i, Hawaii

It was recommended that the Dedication Deed for TMK: 2-5-001:002(por) and 011(por), Omao, Koloa District, Kauai, Hawaii be approved; whereby Alexander & Baldwin, Inc. and McBryde Sugar Company, Limited, both Hawaii Corporations, hereby dedicate, grant and convey unto the Board of Water Supply, the real property described as Lot C-1-B, Lot C-1-C and Lot C-1-D, and further described in exhibit "A".

Manager Craddick indicated that Kukuiula wants an agreement for water allocation. That agreement will be forthcoming once we get it.

PART 3
ESTABLISHING STANDARDS FOR SUBDIVISION WATER SYSTEMS
within the County of Kauai
and Providing Penalties for the Violations Thereof

SECTION I – DEFINITIONS

For the purpose of these rules and regulations, unless it is plainly evident from the context that a different meaning is intended, certain words and phrases used herein are defined as follows.

1. The word **"DEPARTMENT"** shall mean the Department of Water, County of Kauai, consisting of a board of water supply, a manager and chief engineer and the necessary staff.

2. The word **"BOARD"** shall mean the Board of Water Supply of the Department.

3. The term **"MANAGER [~~AND CHIEF ENGINEER~~]"** shall mean the person holding the office of Manager and Chief Engineer of the Department.

4. The word **"SUBDIVIDER"** shall mean a person, firm, corporation, partnership, association, trust or other legal entity, or a combination of any thereof who or which causes land to be divided into a subdivision for himself, itself or for others.

5. The word **"SUBDIVISION"** shall mean improved or unimproved land or lands divided or proposed to be divided into two or more lots, parcels, sites, or other divisions of land for the purpose, whether immediate or future, of sale, lease, rental, transfer of title to or interest in, any or all of such parcels, and shall include re-subdivision, and when appropriate to the context shall related to the process of subdividing of the land or territory subdivided and shall include horizontal or vertical condominium regimes.

6. The word **"COMMISSION"** shall mean the Planning Commission of the Planning Department, County of Kauai.

7. The words **"PUBLIC WATER SYSTEM"** shall mean the water system owned and operated by the Board.

8. The words **"SUBDIVISION WATER SYSTEM"** shall mean the water system, to and within any subdivision, including mains, valves, hydrants, laterals, pumps, tanks, reservoirs and all appurtenances necessary to provide water and fire protection for such subdivision and, where necessary, sources of supply.

9. The word **"DIRECTOR"** shall mean the person holding the office of the Planning Director of the Planning Department, County of Kauai.

10. The term **"FACILITIES RESERVE CHARGE"** shall mean the fee to be paid by subdividers or, when applicable, new consumers as their proportionate share in improvements to the ~~Department's~~ Public Water System.

11. The word **"MAIN"** or **"MAIN PIPE"** shall mean the Public Water System ~~Department's~~ supply or distribution pipe to which service and hydrant connections are made.

12. The term "PRESSURE ZONE" shall mean the elevation served from forty pounds per square inch below a storage tank to a pressure regulation valve, pressure regulator valve to pressure regulator valve or from pressure regulator to storage tank.

13. The term "**SERVICE CONNECTION**" shall mean the main tap, pipe fittings, meter and valve from the water main to and including the shut-off valve on the consumer's side of the meter.

14. The term "SERVICE AREA" shall mean the area served by the continuous connection from source to service.

SECTION II - AVAILABILITY OF WATER AND APPROVAL OF SUBDIVISION MAP

1. Extensions from and connections to the public water system for subdivisions will be approved by the ~~Department~~ Manager where pressure conditions permit, provided the following have been met:

   a. The ~~Department~~ Public Water System has ~~a~~ sufficient source, storage, transmission and distribution pipelines ~~water system~~ developed for ~~domestic~~ potable use and, ~~if required by the Department, a sufficient water system~~ for fire protection. The determination of sufficiency will be based on application of the Water System Standards applied at the proposed connection location and pressure zone where the additional water service demand is proposed and established engineering practices.

   b. The additional water service demand on the existing Public Water System ~~system~~ will not be detrimental to people already being served in ~~that~~ the service areaareas determined by the Manger. In order for the Manger to determine if the additional service will be detrimental to people already being served in the service area ~~present consumers~~, ~~the department may require~~ the subdivider ~~to~~ will estimate the amount of water demand needed to ~~be consumed by~~serve the proposed subdivision water system. The subdivider may use the subdivision water demand calculator found in the Departments web site www.kauaiwater.org .

   c. The subdivision water system complies with these rules and regulations, and is designed and constructed in compliance with (1) all applicable statutes, ordinances, rules, and regulations of the State of Hawai'i and the County of Kaua'i, and (2) the 2002 Water System Standards ("Standards") developed by Hawai'i's four county departments of water, as amended by the Department's 2005 Amendments ("2005 Amendments") to the Standards. The Standards and the ~~2005~~ Amendments are hereby incorporated by reference into the Department's rules. The Manager ~~and Chief Engineer~~ may, for good cause shown and based on established engineering practices, permit departure from the Standards or ~~2005~~ Amendments, or both.

   d. The facilities reserve charge down payment for the subdivision has been paid, or a bond posted in lieu thereof, as provided under Section XIII of this Part.

2. In areas where there is no Ppublic Wwater Ssystem available or where large quantities of water are required or a large investment is necessary to provide service the subdivider will be informed as to the conditions under which the subdivision may be approved and, where appropriate, refunds made.

3. After the Director submits the subdivision map to the Department, the ~~Department~~ Manger will inform the Director in writing of ~~its~~ approval, requirements for approval, or ~~its~~ disapproval of a subdivision map after taking the above into consideration.

SECTION III - FACILITIES RESERVE CHARGE

1. The subdivider shall pay to the Department the facilities reserve charge down payment established in Part 4 of the Rules and Regulations of the Department, for each ~~(additional)~~ parcel created by the subdivision, including the first lot, ~~except (as provided below) when facilities reserve charges have already been paid by the developer or subdivider.~~

Formatted: Indent: Left: 0", Hanging: 0.5"

Formatted: Justified

Formatted: Justified

2. ~~No f~~Facilities reserve charge will be ~~made~~ zero for lots created by the subdivision which, by representation of the subdivider, will not be served by the ~~Department's Public W~~water S~~s~~ystem. In the event that the ~~Department determines~~subdivider represented ~~that~~ the subdivision will not be serviced by the ~~Department's~~ Public Wwater Ssystem, but later water service is requested, full payment of the then applicable facilities reserve charge must be paid. A statement to this effect shall be clearly lettered on the subdivision map.

3. ~~No f~~Facilities reserve charge will be zero ~~made~~ for any parcel which is ~~already~~ serviced from the Public Water System by an existing meter.

4. Facilities reserve charge will be zero for any parcel which was serviced from the Public Water System ~~or which was serviced~~ by a meter within 365 days prior to formal submittal of the subdivision request to the Planning Department.

45. The subdivider shall pay the facilities reserve charge to the Department prior to subdivision approval by the ~~Department~~ Manager except that subdivision approval may be given prior to construction of required improvements or the payment of the facilities reserve charge by the posting of a bond for the down payment, as described in Section XIII of this Part.

56. In the event the facilities reserve ~~charge~~ down payment has been paid for a subdivision and subsequently the subdivision is consolidated or otherwise reduced in initially approved size, the facilities reserve charge will be returned provided the consolidation is completed ~~within 365 days following the prior subdivision approval~~ before the facilities reserve charge payment made has been encumbered for a project to serve the development or else the subdivider must wait until water requests are approved that use the portion of the facilities reserve charge that was to have covered the additional lots or density less an administrative fee of two percent.

SECTION IV - EXTENSIONS TO SUBDIVISION

1. **General Requirement**. The subdivider shall install and pay for the subdivision water system required from the public water system to the subdivision. All such subdivision water systems shall be designed and located in accordance with the Water System Sstandards ~~of the Department~~. The subdivider may be required to improve the public water system if the public water system is inadequate to serve the subdivision.

2. **Increase in Size of Water Main or Transmission Line Extensions Within 100' of Proposed Subdivision for Service to Other Areas**. Whenever the ~~Department~~ Manger finds ~~it necessary~~ that ~~the~~ existing water mains or transmission lines ~~proposed~~ are within 100 feet of the proposed subdivision and are to be used to deliver water to a proposed subdivision and are ~~should be~~ of a greater capacity than is required to provide adequate service and fire protection for such subdivision, in order to supply water and fire protection to other ~~property~~ property not ~~in the subdivision~~ currently served by the public water system, the Department shall require the subdivider to install mains of such greater capacity to the proposed subdivision property boundary along the road fronting the proposed subdivision to allow other connections or extensions to the lines located past the proposed subdivision.

3. **Increase in Size of Water Main or Transmission Line Extensions Beyond 100' of Proposed Subdivision for Service to Other Areas**. Whenever the Manger finds that existing water mains or transmission lines are beyond 100 feet of the proposed subdivision and are needed to deliver water to a proposed subdivision and are of a greater or lesser capacity than is required to provide adequate service and fire protection for such subdivision, in order to supply water and fire protection to other property currently or not served by the public water system, the Department shall require the subdivider to install mains of such greater capacity to the proposed subdivision property boundary along the road fronting the proposed subdivision to allow other connections or extensions to the lines located past the proposed subdivision.

34. **Reimbursement to Subdivider for Additional Costs of Water Mains or Transmission Lines beyond 100' of the proposed subdivision ~~to Subdivisions~~**. When the subdivider is required ~~to~~ install a larger sized water main or transmission line for the reasons set forth in the preceding paragraph, the ~~Department~~

Formatted: Justified

Formatted: Justified

Formatted: Justified

6

Board will reimburse the subdivider for improvement work that was done according to State procurement laws and approved by the Board, as soon as practicable after the acceptance by the ~~Department~~ Manager of the completed work improvements, the additional cost of the installation over and above the cost of the mains that would have been required; provided, that reimbursement will not be made to the subdivider where such larger main or mains will serve only areas under the same ownership as the subdivision under consideration.

Before the subdivider enters into a contract where a reimbursement to the subdivider for additional costs of mains to the subdivision will be made, the ~~Department~~ Board shall review and either approve or disapprove the contract for amounts over five hundred thousand dollars ($500,000). The Manger shall review and either approve or disapprove the contract for amounts less than five hundred thousand dollars ($500,000). If the contract is disapproved, the subdivider shall revise the contract until its form and content is acceptable to the ~~Department~~Board for cases over $500,000 or Manger in cases less than $500,000.

~~After~~ Once the installation has been completed, easements or land transfer provided and accepted by the ~~Department~~Manager, the subdivider shall furnish the ~~Department~~ Manager with an affidavit itemizing the costs incurred ~~by him~~ in the installation of the said larger mains or transmission lines before final reimbursement is made. The said additional costs shall be determined by the ~~Department~~Manger.

SECTION V - INSTALLATIONS WITHIN SUBDIVISION

1. **General Requirement**. The subdivider shall install in accordance with these rules and regulations and the standards of the Department and pay for the subdivision water system required within a subdivision.

2. **Increase in Size of Water Mains or Transmission Lines with Subdivisions for Benefit of Other Areas**. Whenever, in order to provide for existing or future services beyond the boundaries of a subdivision, the ~~Department~~ Manager finds that the mains to be installed within the subdivision should be of greater capacity than would be required to provide adequate service within such subdivision, the ~~Department~~ Manager ~~will~~ may require the subdivider to make installations of such greater capacity.

3. **Reimbursement to Subdivider for Additional Costs of Water Mains or Transmission Lines within Subdivisions**. When the subdivider is required to install a larger sized water main or transmission line for the reasons set forth in the preceding paragraph, the Board will reimburse the subdivider for improvement work that was done according to State procurement laws and approved by the Board, as soon as practicable after the acceptance by the Manager of the completed work improvements, the additional cost of the installation over and above the cost of the mains that would have been required; provided, that reimbursement will not be made to the subdivider where such larger main or mains will serve only areas under the same ownership as the subdivision under consideration.

   Before the subdivider enters into a contract where a reimbursement to the subdivider for additional costs of mains to the subdivision will be made, the Board shall review and either approve or disapprove the contract for amounts over five hundred thousand dollars ($500,000). The Manger shall review and either approve or disapprove the contract for amounts less than five hundred thousand dollars ($500,000). If the contract is disapproved, the subdivider shall revise the contract until its form and content is acceptable to the Board for cases over $500,000 or Manger in cases less than $500,000.

~~When the subdivider is required to install a larger-sized main for the reasons set forth in the preceding paragraph, the Department will reimburse the subdivider, as soon as practicable after acceptance by the Department of the completed work, the additional cost of the installation over and above the cost of the mains that would have been required; provided, however, that in no case will reimbursement be made of any portion of the cost of a main of less than 6 inch in diameter; provided, further, that reimbursement will not be made to the subdivider where such larger main or mains will serve only areas under the same ownership as the subdivision under consideration.~~

Formatted: Justified

Formatted: Justified, Indent: Left: 0", Hanging: 0.5"

~~After the installation has been completed and accepted by the Department, the subdivider shall furnish the Department with an affidavit itemizing the costs incurred by him in the installation of the said larger mains. The said additional costs shall be determined by the Department.~~

Formatted: Justified, Indent: Hanging: 0.5"

SECTION VI - SIZES OF MAINS, HYDRANT SPACING, FIRE PROTECTION

Formatted: Justified

1. **Sizes of Mains**. Any subdivision, except where fire protection facilities are not required by the Department, hereafter to be laid out within the County shall provide 6-inch minimum water mains or larger in residential districts and 812-inch water mains or larger in business, industrial and hotel and apartment districts. Sizing of mains within ~~agricultural subdivisions and~~ subdivisions where fire protection facilities are not required shall be determined by the Department.

2. **Hydrant Spacing**. Fire hydrants shall be spaced not more than 350 feet in business, industrial, hotel and apartment districts, 500 feet in urban residential districts and 600 feet in rural residential district (Urban and rural refer to boundaries established by the State Land Use Commission). ~~Fire hydrants may not be required in agricultural subdivision as determined by the Department~~. The ~~Department~~ Manger will determine the location of all hydrants. All fire hydrants required for adequate fire protection of a subdivision will normally be located within the subdivision.

   If, in the interest of better fire protection, it is determined that one or more of the required hydrants will serve the subdivision to better advantage if located outside the subdivision, they may be so located and the cost shall still be borne by the subdivider~~, subject to the limitation that the cost to the subdivider shall not exceed the cost to him which would have resulted had all the hydrants been located inside the limits of the subdivision.~~

Formatted: Justified, Indent: Left: 0.5"

3. **Fire Protection**. In fixing the standards for fire protection insofar as water supply is concerned, the Department will be guided by the standards of the National Board of Fire Underwriters in "Grading Cities and Towns of the United States with Reference to Their Fire Defenses and Physical Conditions" and by any specific recommendations made by the said National Board with respect to the County.

Formatted: Justified

SECTION VIII - SERVICE CONNECTIONS, DEAD-ENDS, ALTERATIONS TO PUBLIC WATER SYSTEMS, CONTOURS

Formatted: Justified

1. **Service Connections**. Where water main construction is necessary, the subdivider shall provide each lot in a subdivision with a service connection from the water main to the property line adjacent to the lot or as directed by the ~~Department's~~ Managerengineer. As an alternate, ~~one~~ multiple service connection may be installed for ~~each~~ two or more lots served from a single location provided the lateral is properly sized.

   Where the lots to be created front along an existing water main, ~~a~~ service connections as required above shall be paid for by the subdivider and installed by the ~~Board~~Department staff or subdivider when inspected by the Department staff, except that the service connection installation may be deferred and paid for by the consumer at the time the request for water service is made for ~~agricultural lots and other~~ subdivisions for which the Department determines that it is impractical to require such installations prior to the request for water service.

2. **Dead-Ends**. Where water mains proposed by a subdivider would result in dead-ends, the subdivider shall correct the condition by the installation of such interconnections as may be required by the Board.

3. **Alterations to Public Water System**. All work and materials in connection with the change in location or grade of any part of the existing public water system made necessary by the subdivision shall be at the expense of the subdivider.

4. **Contours.** When required by the ~~Board~~Manger, contours or elevations shall be furnished by the subdivider, based upon mean sea level.

SECTION IX - PREPARATION OF PLANS, INFORMATION ON PLANS, ELEVATION AGREEMENT, APPROVAL OF PLANS, DELAYS IN CONSTRUCTION

1. **Preparation of Plans.** All construction plans shall be prepared by a registered engineer to the extent of ~~his~~ their professional qualifications under the laws of the State. Preliminary maps and final maps of subdivisions to be reviewed by the Department staff shall fully conform to the definitions and requirements of the Rules and Regulations of the Commission.

2. **Information to the be shown on Construction Plans.** The construction plans, insofar as the water system is concerned, shall show the following on County of Kauai standard size sheet or sheets:

   a. Name of subdivision, name of subdivider, name of engineer and location of subdivision.

   b. Date, north arrow, scale, tax key.

   c. The proposed subdivision water system complete, in both plan and profile, and its inter-relationship with street lines, lot lines, curb grades, sewers and drains, both existing and proposed, as well as any other features natural or artificial necessary for a complete understanding of the water system design.

   d. Plan and profile views drawn to a scale of one inch equals 40 feet and one inch equals 5 feet, respectively, or as approved by the ~~Department~~Manger. Manhole, fire hydrant, lateral and other details drawn to a scale of one-half inch equals one foot or larger.

   e. The designation, including alignment and width, of all easements for parts of the water system which will not be in street areas to be dedicated to the ~~public~~Board.

   f. A general layout map showing the locations of lots and streets within the subdivision and its near vicinity together with existing and proposed water system.

   g. A small key location inset or vicinity map showing the proposed subdivision in relationship to streets and water mains in the area.

   h. Review submittals should show all utilities and easements lines in plan and profile with different colors for ease of review. Colors to be set by standard drawing convention or as directed by Department staff. Drawing not submitted in this manner will remain on the bottom of the review priority list until all other reviews are complete.

   h. In cases in which the owner or subdivider also owns areas contiguous to the proposed subdivision, or separated therefrom by a street, a sketch of the future street and lot pattern and the water system proposed to serve such contiguous areas shall be furnished for study with the construction plans.

3. **Elevation Agreement.** Whenever a lot or lots within a subdivision are at such an elevation that they cannot be assured of a dependable forty pounds per square inch during normal flows water supply, the approval of the construction drawings will be subject to each owner of such lot or lots signing an "elevation agreement" whereby such lot owner agrees to accept such water service as the Department is able to render, and such owner agrees to construct, if necessary, and maintain at ~~his~~ their expense, a tank or a pump with a tank, all in accordance with the standards and requirements of the Department, of sufficient capacity to furnish a supply of water at such times as the pressure in the water mains may be insufficient to supply such lot or lots with water.

When required, a statement as to this conditional approval will be clearly lettered on the subdivision map and as a deed restriction on the lot deed.

4. **Approval of Plans**. No construction of a subdivision water system, or any portions thereof, shall be undertaken prior to approval of the final construction plans by the Manager ~~and Chief Engineer~~, the Director, the County Engineer of the Department of Public Works, and the State Department of Health. After said approval, the subdivider shall transmit four sets of all final construction plans to the Manager ~~and Chief Engineer~~. Color may be eliminated from these drawings.

   In areas where there is no public water supply available to serve the subdivision, plans and specifications for the development of water sources, including wells, tunnels, shafts, pumps, buildings, mains and other appurtenances structures and devices, shall be in conformance with the standards of the Department and shall be approved by the ~~Department~~ Manger in their entirety prior to the construction.

5. **Delays in Construction**. If any period exceeding one year or such extension as may be granted passes without substantial progress in the construction of the water facilities, after approval of plans by the Department, the plans thereof shall be resubmitted to the Department for review and for making such changes as it deems proper because of changed conditions or revision of standards or rejection because of system adequacy.

SECTION X - MATERIALS AND CONSTRUCTION STANDARDS, INSTALLATION OF WATER SERVICE, INSPECTION OF WORK

1. **Materials and Construction Standards**. All materials, design and construction procedures, and workmanship, with respect to any subdivision water system, or any portion thereof shall be in accordance with the requirements of the "Standard Specifications for Waterworks Construction" of the Board of Water Supply, County of Kauai, dated 10/1/63 or as later amended and with the requirements of the State Department of Health and all applicable laws. The Manager ~~and Chief Engineer~~ shall determine the capacity and location of any of the component parts of the subdivision water system.

2. **Installation of Water Service**. No water service will be approved until the subdivision water system has been completed and accepted by the ~~Department~~ Board and the FRC has been paid to the Department. Temporary Sservice for subdivision construction purposes such as site work and roadways (~~excluding~~ including construction work for individual lots) not to exceed one year may be approved when not detrimental to the service of existing customers.

3. **Inspection of Work**. The Manager ~~and Chief Engineer~~ or any Department staff~~employee~~ delegated ~~representing~~ authority ~~him~~ shall have free access at all times to all installations made for the subdivision and shall be given any assistance required and every facility, information and means of thoroughly inspecting the work to be done and the materials used or to be used.

SECTION XI - OWNERSHIP OF INSTALLED WATER SYSTEM

Before the ~~Department~~ Manger will provide water service within the subdivision, the subdivider shall convey the subdivision water system to the ~~Department~~ Board and said subdivision water system thereafter will be maintained and operated as a part of the public water system; provided, however, that the ~~Department~~ Board may refuse to operate and maintain facilities installed without the ~~Department's~~ Managers prior approval. Prior to the commencement of water service, and as a prerequisite to such service, the subdivider shall also deliver to the Department perpetual easements for all portions of the subdivision water system installed in other than publicly owned property. The subdivider shall also convey to the ~~Department~~ Board fee simple title to all sites on which are located tanks, reservoirs, sources of supply, and pumps constructed by the subdivider and connected to the public water system together with easements for ingress and egress and along the influent and effluent lines. The

subdivider shall also convey to the ~~Department~~ Manger an affidavit with a breakdown of costs of the subdivision water system on forms provided by the ~~Department~~Manger.

SECTION XII – MODIFICATION OF REQUIREMENTS AND EXCEPTIONS

1. Modification of Requirements. When conditions pertaining to any subdivision are such that the public may be properly served with potable water and with fire protection without full and strict compliance with these rules and regulations, or where the subdivision site or layout is such that the public interest will be adequately protected, such modification thereof as is reasonably necessary or expedient, and not contrary to law or the intent and purposes of these rules and regulations, may be made by the ~~Department~~Board.

2. Exempt Subdivisions. The following described subdivisions ("Exempt Subdivisions") shall be exempt from the provisions of this Part 3 when they are not in need of water now or in the next ten years, or are part of a master planned development:

a. Subdivisions requested by any governmental agency;

b. Subdivisions resulting from the construction of public improvements by governmental action;

c. Subdivisions requested for public utility purposes;

d. Consolidations and resubdivisions of properties where no additional lots or parcels are created, provided that the resulting properties would not permit greater density and they are buildable in the current location.

Formatted: Justified

SECTION XIII - CONSTRUCTION AGREEMENT AND BOND

To secure final approval prior to construction of the required improvements in a subdivision, the subdivider shall enter into a written agreement with the County and the Department to make, install and complete all of the required improvements within a specified time. In addition thereto, a Surety Bond or other security as hereinafter specified shall be filed with and attached to the agreement by the subdivider.

A. **Construction Agreement**:

(1) The Agreement shall specify that the subdivider will complete the subdivision to the satisfaction of the Manager ~~and Chief Engineer~~.

(2) The Agreement shall further specify that the Department may complete the work at the expense of the subdivider where the subdivider fails to complete the work to the satisfaction of the Manager ~~and Chief Engineer~~, or fails to complete the work within the time specified.

B. **Surety Bond**:

(1) The Surety Bond shall be filed with the agreement and shall be for the following purposes:

(a) The Surety Bond shall assure to the County and the Department that the actual construction and installation of the improvements and utilities specified will be carried out.

(b) The Surety Bond shall further assure to the Department that the facilities reserve charge down payment will be paid, if said charge is not already paid.

(2) The Surety Bond shall be executed by the subdivider as principal and the surety shall be a company authorized to transact a surety business in the State of Hawaii.

(3) The bond or other security shall be one of the following:

(a) A Surety Bond in a sum equal to the cost of the work required to be done as estimated by the Manager ~~and Chief Engineer~~, payable to ~~the County and~~ the Department, and shall be conditioned upon the faithful performance of all water improvement work required to be done by the subdivider, and shall be further conditioned to the effect that should the subdivider fail to complete all work required to be done within a specified reasonable time, the ~~Department~~ Manger may cause all required work which is not finished to be completed, and the parties executing the bond shall be firmly bound for the payment of all necessary costs, therefore; or

(b) Where the subdivider has entered into a contract with a reputable contractor, and has filed with the Director all three of the following: 1) a certified copy of his said contract and specifications; 2) a certified copy of the performance bond of his said contractor; and 3) a surety bond in a sum equal to at least 50 per cent of the cost of all work required to be done by the subdivider as estimated by the Manager ~~and Chief Engineer~~, and shall be payable and conditioned as above set forth; or

(c) The subdivider shall make a deposit of money with the Director as agent of the County and the Department, in an amount equal to the cost of the construction of said improvements as estimated by the Manager ~~and Chief Engineer.~~ Under this arrangement, the agreement may provide for progress payments to be made to the contractor for materials used and services and labor performed, out of said deposit as the work progresses; provided that said progress payments shall at no time exceed the value of the completed portion of said improvements as determined by the Manager ~~and Chief Engineer~~ and the County Engineer of the County; or

(d) In lieu of said surety bond or deposit in escrow mentioned in Paragraphs 3 (a) (b) (c) above, the subdivider may deposit with the Director bonds or other negotiable securities in the amount as provided by Paragraphs 3 (a) (b) (c) respectively of this Section and acceptable to the Manager ~~and Chief Engineer~~.

(4) Facilities Reserve Charge. All bonds or other securities as provided in Paragraphs 3 (a) (b) (c) (d) above shall include the assurance of payment of the facilities reserve charge down payment except for the following:

(a) This paragraph shall not be applied where the facilities reserve charge has already been paid.

(b) A separate bond primarily for the purpose of paying the facilities reserve charge down payment may be filed by the subdivider.

(5) All bonds or securities posted under this Section shall not be canceled except with approval of the County and the ~~Department~~Manager

SECTION XIV – NON-DEVELOPMENT AGREEMENTS

1. **Purpose.** The purpose of this section is to assist families who wish to transfer interests in real property between themselves without immediately complying with Departmental rules and construction standards and specifications imposed when family members request subdivision approval.

2. **Definitions.** As used within this section:
"Development" includes, but is not limited to:

(1) the construction, reconstruction, alteration, remodeling, renovation, or repairing of single-family residences, additional dwelling units, or any other dwelling, building, or structure of any kind on or within the property being subdivided, or

(2) the construction of additions or extensions to any dwelling, structure, or building existing as of the date of this agreement, or

(3) the construction, reconstruction, installation, alteration, or repair of piping, waste-water systems, landscaping or irrigation systems.

which result in increased fire protection requirements arising because of the property's development, increased consumption of water upon the property being subdivided, calculated from the date of the agreement described in this section, or which may, in the Department's judgment, possibly contaminate existing potable water-well sources located in the vicinity of the property being subdivided.

"Hanai child" means a person for whom an adult once provided food, nourishment, and support for a minimum period of at least one year prior to the time that the applicant applied for subdivision approval and who is generally acknowledged as the adult's child among friends, relatives, and the community.

"H.R.S" means Hawaii Revised Statutes, as amended.

"Non-development agreement" means the agreement required to be executed under this section.

"Rule" or **"Rules"** mean the Rules and Regulations of the County of Kauai Department of Water.

"Water System Facilities" means all water infrastructure of the Department determines to be necessary to provide adequate residential water service and fire protection for the property being subdivided and shall include, but not be limited to, any and all necessary wells, pumps, storage tanks, water transmission and distribution lines and related meters, valves, and other water system improvements and equipment.

3. **Authorization to defer subdivision improvements under certain terms and conditions.** The Manager ~~and Chief Engineer~~ may approve requests for subdivision approval and temporarily defer subdivision requirements imposed by the Department's rules and construction standards and specifications for the sole and limited purpose of allowing a subdivision applicant to transfer interests in real property from the applicant to others, provided the applicant satisfies or complies with the following conditions:

a. Property interests may be transferred only between: natural persons who are related to the applicant by birth, blood, adoption, marriage, or prior marriage. Eligible transferees are limited to:

Spouse,
Ex-spouse,
Parents,
Grandparents,
Children,
Hanai children,
Grandchildren,
Brothers, and
Sisters.

The preceding list of terms shall be understood according to their most widely-known and usual significance, without attending so much to the literal and strictly grammatical construction as to their general, ordinary, or popular use or meaning.

b. The Manager ~~and Chief Engineer~~ shall not approve subdivision requests under this section if development will occur as a result of the subdivision.

c. With respect to the property being subdivided, the ~~Department~~ Manger shall not approve further subdivision requests, requests for water service when apartments within the property have been created pursuant to Chapter 514A, H.R.S., or development of any kind, unless and until adequate water system facilities, as may be determined by the ~~Department~~ Manger when development occurs, are constructed, in place and complete, to provide adequate residential water service and fire protection for the property being subdivided.

d. The ~~Department~~ Manger shall not approve residential building permits for any property which is subject to a non-development agreement unless adequate water-system facilities are constructed pursuant to subparagraph 3.c. of this section or is combined with a lot with meter and development rights.

If the ~~Department~~ Manger erroneously or inadvertently approves a building permit before necessary water-system facilities are constructed, the ~~Department~~ Manger ~~shall~~may, upon learning of ~~its~~ the action, immediately rescind ~~its~~ approval.

e. If, before necessary water-system facilities are constructed to service the property being subdivided, the ~~Department~~ Manger erroneously or inadvertently approves the issuance of a building permit for any development within the subdivision and development occurs, the developer shall either construct the necessary water-system facilities or remove the development at the developer's own cost and expense.

Should the ~~Department~~ Board be required to enforce the provisions of this subparagraph through civil court action, the developer shall pay to the ~~Department~~ Board and be jointly and severally liable for any and all attorneys' fees, court costs, and other related fees, costs, and expenses necessary to prosecute and defend such an action.

f. The subdivision applicant and all persons to whom an interest in the property may be transferred shall release the Department of any and all liability arising from the Department's decision to recommend subdivision approval under this section.

The applicant and all persons to whom an interest in the property may be transferred shall also forever indemnify, defend, save, and hold harmless the Department from and against any and all injury to persons and damage to property, deaths, claims, fines, suits, actions, economic and non-economic damages, costs, losses, and liabilities of every nature and kind arising or growing out of the Department's decision to recommend subdivision approval of the applicant's property under this section.

g. The provisions of this section shall be implemented through an agreement executed between 1) the Manager ~~and Chief Engineer~~, and 2) the subdivision applicant and all persons to whom an interest in the property may be transferred. The agreement shall contain terms and conditions determined to be necessary by the Manager ~~and Chief Engineer and~~ as advised by the County Attorney. The covenants and servitudes created by the agreement shall constitute covenants which shall run with the land and constitute notice to all who may claim an interest in the property being subdivided.

Any subdivision approval granted under this section shall be null, void, and of no legal effect unless 1) the Department receives a non-development agreement containing original signatures executed by all of the parties to the agreement, and 2) the agreement has been recorded in the State of Hawaii Land Court or Bureau of Conveyances.

h. The documents conveying title or an interest in real property shall specifically incorporate by reference the non-development agreement. Further, the agreement shall be attached to the conveyance documents as an exhibit.

i. The final subdivision map shall contain a brief and concise statement stating that the lots created by the subdivision are subject to a non-development agreement. The statement shall further summarize the major terms and conditions of the agreement.

4. **Applicability.** This section shall apply only to subdivisions served by ~~County~~ Public W~~w~~ater Ssystems, and not to private water systems not served by the ~~County~~Public Water System.

5. **Fees, Charges, and costs under this section**. Notwithstanding any other section or provision in the Rules to the contrary including, but not limited to, Paragraph 1, Section III, Part 3 of the Rules, any and all applicable Departmental fees, charges, and costs, including facilities reserve charges, shall be paid at such future time that development occurs at the amount in effect at the time that development occurs, and not at the time that the non-development agreement is entered into by the County.

6. **Changed development conditions**. The applicant or subsequent transferees of the applicant shall be responsible for ~~checking~~ confirming in writing with the Manger~~Department~~ and determining whether water infrastructure development requirements have so changed such that necessary water-system facilities no longer need to be constructed. The ~~Department~~ Manager shall not be responsible for informing the applicant or subsequent transferees of the applicant of such changed development conditions."

SECTION XV - SEVERABILITY

If any rule, section, sentence, clause, or phrase of these rules and regulations or its application to any person or circumstance or property is held to be unconstitutional or invalid, the remaining portions of these rules and regulations or the application of these rules and regulations to other persons or circumstances or property shall not be affected. The Department hereby declares that it would have adopted these rules and regulations and each and every rule, section, sentence, clause or phrase thereof, irrespective of the fact that any one or more other rules, sections, sentences, clauses, or phrases be declared unconstitutional or invalid.

SECTION XVI - PENALTIES

Any person, firm or corporation which violates any rule or regulation herein shall be fined not more than $5000.00, except that in cases where the offense shall be of a continuing nature, each day's continuance of the same, shall constitute a separate offense.

Beardmore, Carol

From: Julie Mararagan [JGM@Kauai-law.com]
Sent: Tuesday, August 17, 2010 12:00 PM
To: Beardmore, Carol
Subject: RE: Max's Draft DOW Rule

Thank you.

Aloha,

Julieta Ganotisi Mararagan
Secretary to Max W. J. Graham, Jr.
Belles Graham Proudfoot Wilson & Chun, LLP
4334 Rice Street, Suite 202
Lihue, Kauai, Hawaii 96766
Phone: (808) 246-6962
Fax: (808) 245-3277
Email: jgm@kauai-law.com

16

AMENDMENTS TO THE RULES AND REGULATIONS, AS AMENDED,
OF THE BOARD OF WATER SUPPLY, COUNTY OF KAUAI, STATE OF HAWAII

BE IT RESOLVED BY THE BOARD OF WATER SUPPLY OF THE COUNTY OF KAUAI, STATE OF HAWAII:

SECTION 1. This amendment to the Rules and Regulations of the County of Kauai Department of Water (hereafter "Rules") is made pursuant to Section 17.03C and D of the Kauai County Charter 1984, as amended, Part 1, Section II of the Rules, as amended, and Chapter 91, Haw. Rev. Stat. as amended.

SECTION 2. This amendment to the Rules amends Part 3, Section XII.

SECTION 3. Now, therefore, Part 3, Section XII of the Rules is hereby amended as follows:

SECTION XII – MODIFICATION OF REQUIREMENTS AND EXCEPTIONS

1. Modification of Requirements. When conditions pertaining to any subdivision are such that the public may be properly served with water and with fire protection without full and strict compliance with these rules and regulations, or where the subdivision site or layout is such that the public interest will be adequately protected, such modification thereof as is reasonably necessary or expedient, and not contrary to law or the intent and purposes of these rules and regulations, may be made by the Department.

2. Exempt Subdivisions. The following described subdivisions ("Exempt Subdivisions") shall be exempt from the provisions of this Part 3:

a. Subdivisions requested by any governmental agency;

b. Subdivisions resulting from the construction of public improvements by governmental action;

c. Subdivisions requested for public utility purposes;

d. Consolidations and resubdivisions of properties where no additional lots or parcels are created, provided that the resulting properties would not permit greater density.

SECTION 4. Administrative rule material to be repealed is bracketed. New material is underscored. In printing this rule amendment, the brackets, bracketed material, underscoring need not be included.

SECTION 5. If any provision of this rule amendment or the application thereof to any person or circumstances is held invalid, the invalidity does not affect other provisions or applications of the rule amendment, which can be given effect without the invalid provision, or application, and to this end the provisions of this rule amendment are severable.

SECTION 6. This rule amendment shall be effective ten (10) days after it is filed with the County Clerk of the County of Kauai.

BOARD OF WATER SUPPLY
COUNTY OF KAUAI

_____
Its Chairperson

APPROVED AS TO FORM
AND LEGALITY:

_____
County Attorney

Received this ____ day of

_____, 2010

Approved this ____ day of

_____, 2010

_____
Peter Nakamura
County Clerk, County of Kauai

_____
Bernard P. Carvalho, Jr.
Mayor, County of Kauai

{\\SHOYU\CAROL\BOARD MEETINGS\MANAGER'S REPORTS FOR BOARD\SEPTEMBER 2010\FROM MAX GRAHAM - AMENDMENT TO THE RULES AND REGULATIONS OF THE DOW (W0111404) (2).DOC

10 OCT 21 P12:25

DEPT. OF WATER
COUNTY OF KAUAI

October 21, 2010

Mr. Randy Nishimura, Chairman
Board of Water Supply, County of Kauai
P.O. Box 1706
Lihue, HI 96766

Dear Chairman Nishimura:

Subject: Part III Rule Amendments – Establishing Standards for Subdivision Water Systems

For the October 21, 2010 Board of Water Supply meeting, we wish to submit the enclosed testimony for Agenda Item F.2.b. We received an electronic word document version of the Department of Water, County of Kauai Rules and Regulations Part 3 Establishing Standards for Subdivision Water Systems. The document included proposed changes by Manager, David Craddick. His proposed changes are in blue. Using the Track Changes function, we made our proposed changes in red.

We support the proposed changes and are hopeful that our proposed changes will also be incorporated. If you have any questions or concerns please contact me at 632-2528.

Sincerely,

Michael H. Tresler
Senior Vice President.

3-1850 Kaumualii Highway Lihue, HI 96766-8609
P 808.245.3678 F 808.246.9470
www.grovefarm.com

may refuse to operate and maintain facilities installed without the Department's prior approval. Prior to the commencement of water service, and as a prerequisite to such service, the subdivider shall also deliver to the Department perpetual easements for all portions of the subdivision water system installed in other than publicly owned property. The subdivider shall also convey to the Department fee simple title to all sites on which are located tanks, reservoirs, sources of supply, and pumps constructed by the subdivider and connected to the public water system together with easements for ingress and egress. The subdivider shall also convey to the Department a breakdown of costs of the subdivision water system on forms provided by the Department.

SECTION XII - MODIFICATION OF REQUIREMENTS

1. Modification of Requirements. When conditions pertaining to any subdivision are such that the public may be properly served with water and with fire protection without full and strict compliance with these rules and regulations, or where the subdivision site or layout is such that the public interest will be adequately protected, such modification thereof as is reasonably necessary or expedient, and not contrary to law or the intent and purposes of these rules and regulations, may be made by the Department.

2. Exempt Subdivisions. The following described subdivisions ("Exempt Subdivisions") shall be exempt from the provisions of this Part 3: ~~when there is a reasonable expectation of no additional water demand on the water system and the;~~

   a. Subdivision is requested by any governmental agency;

   b. Subdivision is requested for the construction of public improvements by governmental action or to be turned over to the government;

   c. Subdivision is requested for public utility purposes;

   d. Consolidations and resubdivision of properties, that can be built on in their current location, where no additional lots or parcels are created provided that the resulting properties would not permit greater density.

   e. ~~The s~~Subdivisions into ~~of large~~ lots of such a size that it is reasonable to expect further development ("Large Lots"), including but not limited to, subdivision, use permit, or zoning permit applications. ~~with full and strict compliance with these rules.~~ In the case where a subdivision includes both Large Lots and lots that do not require further development ("Small Lots"), the subdivision shall be exempt provided the Large Lots account for at least 50% of the land area, not including roadways and utilities, and the Subdivider executes a Waiver and Release Agreement for the Small Lots. In all cases, the Subdivider shall execute an agreement with the Manager and Chief Engineer to determine when full and strict compliance with these rules and regulations shall occur, if not already agreed to or set forth in a master plan. The Manger and Chief Engineer shall require a Waiver and Release agreement to run with the land until there is full and strict compliance with these rules and regulations if the lot is less than ten acres in size.

ORDINANCE NO. _____ BILL NO. _____

A BILL FOR AN ORDINANCE TO
AMEND CHAPTER 9, KAUA'I COUNTY CODE 1987, AS AMENDED,
RELATING TO THE SUBDIVISION ORDINANCE

BE IT ORDAINED BY THE COUNCIL OF THE COUNTY OF KAUA'I, STATE OF HAWAI'I:

SECTION 1. Findings and Purpose:

(a) The Council finds that county agencies, at times impose infrastructure requirements not in rough proportionality to the impact of a proposed subdivision application.

(b) The "rough proportionality" takings argument has been successfully argued at the U.S. Supreme Court to overturn local government exactions (Dolan vs. City of Tigard) where the degree of the exactions required by the local agency does not bear the required relationship to the projected impact of the proposed development.

(c) For the County of Kaua'i, this is especially true with smaller applications where the applicant is required to upgrade substantial portions of offsite county infrastructure.

(d) There has been instances where an applicant, in order to provide for their children a buildable lot and an affordable home, applies for a subdivision that proposes no additional lots or additional residential density than what is already allowed, are stopped because of off-site infrastructure requirements imposed.

(e) The purpose of this amendment is to clarify the extent to which County agencies impose off-site infrastructure requirements and to allow subdivisions that create no additional lots or additional residential density to proceed without unwarranted conditions or requirements.

(f) Thresholds already exist in the CZO that allow exemptions to development standards:

(1) CZO Sec. 8-7.4(c)(4) allows an exemption from one time subdivision provision in the Agriculture District where: *Consolidation and resubdivision of properties where no additional lots or parcels are created provided that the resulting properties would not permit greater density."*

Proposed Draft Bill (Rev. 2380)

21

(2) Sec. 8-3.7 of the CZO allows up to four houses to be served by a driveway, without the requirement of a County standard road.

(g) Conditions requiring infrastructure improvements that are normally applied to subdivisions resulting in an increase in density and places additional demands on the existing public infrastructure, should not apply to consolidations and re-subdivisions where no additional density or demands on the public infrastructure are created.

SECTION 2. Section 9-2.13 of the Kaua'i County Code 1987, as amended, is hereby amended to read as follows:

"Sec.9-2.13 Consolidation of Lots

All consolidation of lots, shall be processed through the Planning Commission and shall require its approval before recordation of any maps or documents pertinent to the consolidation. Consolidation involving not more than four (4) existing lots or parcels of record and re-subdivision where no additional lots or density are created by the resultant properties, shall not be required to provide any off-site county infrastructure improvements, except as needed to connect to an adjacent roadway or utility line. If the resulting lots or parcels do not place an increased demand on public infrastructure, then the Planning Commission shall not impose additional conditions pursuant to Section 9-3.4(b). The Planning Commission shall establish rules and fee for consolidation of lots."

SECTION 3. Section 9-3.4 of the Kaua'i County Code 1987, as amended, is hereby amended to read as follows:

"Sec. 9-3.4 Approval Of Preliminary Subdivision Map.

(a) Compliance and Distribution.

(1) The Planning Department within ten (10) calendar days shall check for compliance of form and contents of the map. If the form and contents are found not to be in compliance, it shall be rejected and returned to the applicant in writing.

(2) After the maps have been preliminarily accepted, the Planning Department shall forward copies to the Department of Public Works, the Department of Water, the State Department of Health, and other affected agencies, departments and utility companies, as the Planning Director determines for comment or approval[.], except for consolidation and re-subdivision of lots exempted by Sec. 9-2.13.

Accompanying application, if any, for required zoning permits, shall also be referred.

(b) Review. After the preliminary subdivision maps have been preliminarily accepted as to form and contents, the following review schedule shall apply:

	Column 1	Column 2
Various governmental agency review to Planning Director.	30 Calendar Days*	45 Calendar Days*
After receipt of the agency reviews, the Planning Director shall prepare a report to the Planning Commission. The Planning Commission shall approve, approve with condition or disapprove preliminary subdivision map.**	45 Calendar Days*	45 Calendar Days*

Column 1: For subdivisions not including streets and improvements where the number of lots to be created is twenty (20) or less.

Column 2: For subdivisions requiring new streets and improvements.

* Or within a longer period as may be agreed to by the applicant.

** If the Planning Commission fails to take action within the time limit prescribed in this Section, unless the applicant assents to a delay, the preliminary subdivision map shall be deemed approved."

SECTION 4. Severability. If any provision of this ordinance or application thereof to any person or circumstance is held invalid, such invalidity shall not affect other provisions or applications of this ordinance which can be given effect without the invalid provision or application, and to this end, the provisions of this ordinance are declared to be severable.

SECTION 5. This Ordinance shall take effect upon its approval.

Introduced By:

DEREK S. K. KAWAKAMI

Date of Introduction:

Līhu'e, Kaua'i, Hawai'i

Proposed Draft Bill (No. 2380)

23

Department of Water
County of Kaua'i

Water has no substitute.....Conserve it!

4398 PUA LOKE STREET, PO BOX 1706
LIHU'E, KAUA'I, HAWAI'I 96766
PHONE: 808-245-5400 FAX: 808-245-5813

MAILED
DEC 07 2010

DATE: November 24, 2010

FAXED
12-7-10

TO: Planning Department
Ian K. Costa, Director (Dale)

SUBJECT: Zoning Amendment Permit Application ZA-2011-2, Proposed Draft Bill (No. 2380) – A Bill for an Ordinance to Amend Chapter 9, Kauai County Code 1987, as amended, relating to the Subdivision Ordinance = County of Kauai

DOW COMMENTS:

The Department of Water offers the following comments to Proposed Bill (No. 2380) as follows:

1. The bill does not set a limit on the total number of residential units that is based on the existing density of the consolidation/re-subdivision. Proposed Bill "Section. 9-2.13 Consolidation of Lots" states that "Consolidation involving not more than four (4) lots or parcels of record and re-subdivision where no additional lots or density are created by the resulting properties shall not be required to provide any off-site county infrastructure improvements..."
   a) If the intent of the Bill is to limit the number of resulting lots and corresponding residential density to a total of not more than 4 lots and/or 4 dwelling units, then the density of the resulting properties should be restricted or limited such that the total resulting number of dwelling units does not exceed the four (4) lot/dwelling unit intended limit. Based on higher CZO zoning designations and resulting lot size, despite the bill's provision for "no additional density", there is a potential that the actual residential development may result in a larger number of single family or multi-family units that will be exempted from providing necessary off-site infrastructure improvements under this proposed bill.
   b) How will the proposed bill apply to subdivisions of resulting properties that include non-residential zoning designations such as public, commercial, or industrial?
   c) If off-site county improvements are not required for the resulting consolidation and re-subdivision under the proposed bill, then can off-site infrastructure improvements be required as a condition for actual development of the resulting properties that may require zoning/use permit, building permit, or water meter service connection application approval? What happens in the case where there are no County water lines or the system is inadequate? Current rules of the Water Department do not allow service when the system is inadequate. Just as a matter of fact if there are no offsite improvements they may not be able to get service.
   d) Is there a definition for "off-site infrastructure improvements"?
   e) Our suggestion is that the system before lot changes must be able to service the lot. This does not mean they can't do the subdivision it just means they may not be able to get water service if none is available.

David R. Craddick, P. E.
Manager & Chief Engineer

12/3/10
Date

ED/GF/DC:loo
ZA-2011-2, Proposed Draft Bill (No. 2380)

ORDINANCE NO. _____ BILL NO. 2401

A BILL FOR AN ORDINANCE TO
AMEND CHAPTER 9, KAUA'I COUNTY CODE 1987, AS AMENDED,
RELATING TO THE SUBDIVISION ORDINANCE

BE IT ORDAINED BY THE COUNCIL OF THE COUNTY OF KAUA'I, STATE OF HAWAI'I:

SECTION 1. Findings and Purpose:

(a) The Council finds that county agencies, at times impose infrastructure requirements not in rough proportionality to the impact of a proposed subdivision application.

(b) The "rough proportionality" takings argument has been successfully argued at the U.S. Supreme Court to overturn local government exactions (Dolan vs. City of Tigard) where the degree of the exactions required by the local agency does not bear the required relationship to the projected impact of the proposed development.

(c) For the County of Kaua'i, this is especially true with smaller applications where the applicant is required to upgrade substantial portions of offsite county infrastructure.

(d) There has been instances where an applicant, in order to provide for their children a buildable lot and an affordable home, applies for a subdivision that proposes no additional lots or additional residential density than what is already allowed, are stopped because of off-site infrastructure requirements imposed.

(e) The purpose of this amendment is to clarify the extent to which County agencies impose off-site infrastructure requirements and to allow subdivisions that create no additional lots or additional residential density to proceed without unwarranted conditions or requirements.

(f) Thresholds already exist in the CZO that allow exemptions to development standards:

(1) CZO Sec. 8-7.4(c)(4) allows an exemption from one time subdivision provision in the Agriculture District where: *Consolidation and resubdivision of properties where no additional lots or parcels are created provided that the resulting properties would not permit greater density."*

(2) Sec. 8-3.7 of the CZO allows up to four houses to be served by a driveway, without the requirement of a County standard road.

(g) Conditions requiring infrastructure improvements that are normally applied to subdivisions resulting in an increase in density and places additional demands on the existing public infrastructure, should not apply to consolidations and re-subdivisions where no additional density or demands on the public infrastructure are created.

SECTION 2. Section 9-2.13 of the Kaua'i County Code 1987, as amended, is hereby amended to read as follows:

"Sec.9-2.13 Consolidation of Lots

All consolidation of lots, shall be processed through the Planning Commission and shall require its approval before recordation of any maps or documents pertinent to the consolidation. Consolidation involving not more than four (4) existing lots or parcels of record and re-subdivision where no additional lots or density are created by the resultant properties, shall not be required to provide any off-site county infrastructure improvements, except as needed to connect to an adjacent roadway or utility line. If the resulting lots or parcels do not result in an increase in density, then the Planning Commission shall not impose additional conditions pursuant to Section 9-3.4(b). The Planning Commission shall establish rules and fee for consolidation of lots."

SECTION 3. Severability. If any provision of this ordinance or application thereof to any person or circumstance is held invalid, such invalidity shall not affect other provisions or applications of this ordinance which can be given effect without the invalid provision or application, and to this end, the provisions of this ordinance are declared to be severable.

SECTION 4. Ordinance material to be repealed is bracketed. New ordinance material is underscored. When revising, compiling or printing this ordinance for inclusion in the Kaua'i County Code 1987, the brackets, bracketed material, and underscoring need not be included.

SECTION 5. This Ordinance shall take effect upon its approval.

INTRODUCED BY:

Nadine K. Nakamura
(By Request)

Date of Introduction:
March 23, 2011
Līhu'e, Kaua'i, Hawai'i

CERTIFICATE OF THE COUNTY CLERK

I hereby certify that heretofore attached is a true and correct copy of Bill No. 2401, Draft 2, which was adopted on second and final reading by the Council of the County of Kaua'i at its meeting held on May 4, 2011, by the following vote:

FOR ADOPTION:	Bynum, Chang, Kuali'i, Nakamura, Rapozo, Furfaro	TOTAL - 6,
AGAINST ADOPTION:	Yukimura	TOTAL - 1,
EXCUSED & NOT VOTING:	None	TOTAL - 0,
RECUSED & NOT VOTING:	None	TOTAL - 0.

Lihu'e, Hawai'i
May 4, 2011

Peter A. Nakamura
County Clerk, County of Kaua'i

ATTEST:

Jay Furfaro
Chairman & Presiding Officer

DATE OF TRANSMITTAL TO MAYOR:

May 5, 2011

Approved this day of

, 2011.

Bernard P. Carvalho Jr.
Mayor
County of Kaua'i

ORDINANCE NO. _____ BILL NO. 2401, Draft 2

A BILL FOR AN ORDINANCE TO
AMEND CHAPTER 9, KAUA'I COUNTY CODE 1987, AS AMENDED,
RELATING TO THE SUBDIVISION ORDINANCE

BE IT ORDAINED BY THE COUNCIL OF THE COUNTY OF KAUA'I, STATE OF HAWAI'I:

SECTION 1. Findings and Purpose:

(a) The Council finds that county agencies, at times impose infrastructure requirements not in rough proportionality to the impact of a proposed subdivision application.

(b) The "rough proportionality" takings argument has been successfully argued at the U.S. Supreme Court to overturn local government exactions (Dolan vs. City of Tigard) where the degree of the exactions required by the local agency does not bear the required relationship to the projected impact of the proposed development.

(c) For the County of Kaua'i, this is especially true with smaller applications where the applicant is required to upgrade substantial portions of offsite county infrastructure.

(d) There has been instances where an applicant, in order to provide for their children a buildable lot and an affordable home, applies for a subdivision that proposes no additional lots or additional residential density than what is already allowed, are stopped because of off-site infrastructure requirements imposed.

(e) The purpose of this amendment is to remove unwarranted off-site infrastructure requirements where proposed subdivisions create no additional lots or additional residential density.

(f) Thresholds already exist in the CZO that allow exemptions to development standards:

(1) CZO Sec. 8-7.4(c)(4) allows an exemption from one time subdivision provision in the Agriculture District where: *Consolidation and resubdivision of properties where no additional lots or parcels are created provided that the resulting properties would not permit greater density."*

(2) Sec. 8-3.7 of the CZO allows up to four houses to be served by a driveway, without the requirement of a County standard road.

(g) Conditions requiring infrastructure improvements that are normally applied to subdivisions resulting in an increase in density and places additional demands on the existing public infrastructure, should not apply to consolidations and re-subdivisions where no additional density or demands on the public infrastructure are created.

SECTION 2. Section 9-2.13 of the Kaua'i County Code 1987, as amended, is hereby amended to read as follows:

"Sec.9-2.13 Consolidation of Lots

[All] The consolidation of lots, including Kuleana lots, shall be processed through the Planning Commission and shall require its approval before recordation of any maps or documents pertinent to the consolidation. Consolidation involving not more than four (4) existing lots of record and re-subdivision where no additional lots or density are created by the resultant properties, shall not be required to provide any off-site infrastructure improvements, except as needed to connect to an adjacent roadway or utility line. If the resulting lots do not result in an increase in density, the Planning Commission shall not impose additional conditions pursuant to Section 9-3.4(b). The Planning Commission shall establish rules and [fee] fees for consolidation of lots."

SECTION 3. Severability. If any provision of this ordinance or application thereof to any person or circumstance is held invalid, such invalidity shall not affect other provisions or applications of this ordinance which can be given effect without the invalid provision or application, and to this end, the provisions of this ordinance are declared to be severable.

SECTION 4. Ordinance material to be repealed is bracketed. New ordinance material is underscored. When revising, compiling or printing this ordinance for inclusion in the Kaua'i County Code 1987, the brackets, bracketed material, and underscoring need not be included.

SECTION 5. This Ordinance shall take effect upon its approval.

INTRODUCED BY: /s/ Nadine K. Nakamura

Date of Introduction:
March 23, 2011
Līhu'e, Kaua'i, Hawai'i

CERTIFICATE OF THE COUNTY CLERK

I hereby certify that heretofore attached is a true and correct copy of Bill No. 2401, which was passed on first reading and ordered to print by the Council of the County of Kaua'i at its meeting held on March 23, 2011, by the following vote:

FOR PASSAGE:	Bynum, Chang, Kawakami, Nakamura, Rapozo, Furfaro	TOTAL – 6,
AGAINST PASSAGE:	None	TOTAL – 0,
EXCUSED & NOT VOTING:	Yukimura	TOTAL – 1,
RECUSED & NOT VOTING:	None	TOTAL – 0.

Līhu'e, Hawai'i
March 23, 2011

Peter A. Nakamura
County Clerk, County of Kaua'i

DEPARTMENT OF WATER
County of Kaua'i

"Water has no Substitute – Conserve It!"

MANAGER'S REPORT 11-28

October 12, 2010
Re: Request Approval of FRC Changes

RECOMMENDATION:
Board approval is requested for addition of Part V Rules for the application of Facilities Reserve Charges and approval of FRC proposal from R.W. Beck.

FUNDING: N/A

BACKGROUND:
The FRC are currently paid to the DOW prior to the DOW granting final subdivision approval and from that time there is a guarantee of water whether a meter is installed in a timely fashion or not. This should not be allowed to continue as there is no way to orderly keep track of who is ready for water or not and the cost of providing the water continues to rise.

The current credit system only allows credit for facilities provided for specific projects related to the improvements. From time to time we receive state appropriations and no credit is given for the improvements.

At the same time there are certain state beneficiaries such as agricultural pursuits in places where the state does not have state operated agricultural systems, facilities operated by the State (i.e. schools, maintenance facilities, DHHL projects, etcetera, that could be subsidized by dollar value from some of the legislative granted improvements if they are source, transmission or storage related.

The proposed rules deal with these issues. They do not deal with changes to current rules other than Part IV FRC schedule.

There is another observed inequity in the current and proposed rules in that there are wide ranges of water use when utilizing the current meter size determination of FRC charges which maybe more equitably addressed by fixture unit based FRC charge. We currently use system averages by meter size or water demand calculations to identify appropriate meter size and that by definition means the low uses are subsidizing the high uses. With the fees needing to rise if we are to get out of the subsidy mode, I do not feel fees based on meter size are a sustainable impact fee methodology. An alternate method would be going to a FRC based on gallons which can be increased as consumption demand range goes up. Although the R. W. Beck report develops by the gallon unit costs per gallon the rules do not reflect this and some rules changes to those proposed would need to be made to effectively utilize these unit costs.

Respectfully submitted,

David R. Craddick, P.E.
Manager and Chief Engineer
DRC/cab
Mgrrp/FRC Changes (10-21-10):cab

001

4398 Pua Loke Street, Lihu'e, Kaua'i, Hawai'i or P. O. Box 1706, Lihu'e, HI 96766-5706
Phone No. (808) 245-5400 – Administration FAX No. (808) 246-8628 – Engineering/Fiscal/Shop FAX No. (808) 245-5813

PART 3
ESTABLISHING STANDARDS FOR SUBDIVISION WATER SYSTEMS
within the County of Kauai
and Providing Penalties for the Violations Thereof

SECTION I – DEFINITIONS

For the purpose of these rules and regulations, unless it is plainly evident from the context that a different meaning is intended, certain words and phrases used herein are defined as follows.

1. The word "**DEPARTMENT**" shall mean the Department of Water, County of Kauai, consisting of a board of water supply, a manager and chief engineer and the necessary staff.

2. The word "**BOARD**" shall mean the Board of Water Supply of the Department.

3. The term "**MANAGER AND CHIEF ENGINEER**" shall mean the person holding the office of Manager and Chief Engineer of the Department.

4. The word "**SUBDIVIDER**" shall mean a person, firm, corporation, partnership, association, trust or other legal entity, or a combination of any thereof who or which causes land to be divided into a subdivision for himself, itself or for others.

5. The word "**SUBDIVISION**" shall mean improved or unimproved land or lands divided or proposed to be divided into two or more lots, parcels, sites, or other divisions of land for the purpose, whether immediate or future, of sale, lease, rental, transfer of title to or interest in, any or all of such parcels, and shall include re-subdivision, and when appropriate to the context shall related to the process of subdividing of the land or territory subdivided.

6. The word "**COMMISSION**" shall mean the Planning Commission of the Planning Department, County of Kauai.

7. The words "**PUBLIC WATER SYSTEM**" shall mean the water system owned and operated by the Board.

8. The words "**SUBDIVISION WATER SYSTEM**" shall mean the water system, to and within any subdivision, including mains, valves, hydrants, laterals, pumps, tanks, reservoirs and all appurtenances necessary to provide water and fire protection for such subdivision and, where necessary, sources of supply.

9. The word "**DIRECTOR**" shall mean the person holding the office of the Planning Director of the Planning Department, County of Kauai.

10. The term "**FACILITIES RESERVE CHARGE**" shall mean the fee to be paid by subdividers or, when applicable, new consumers as their proportionate share in improvements to the Department's Water System.

11. The word "**MAIN**" or "**MAIN PIPE**" shall mean the Department's supply or distribution pipe to which service connections are made.

12. The term "**SERVICE CONNECTION**" shall mean the main tap, pipe fittings, meter and valve from the water main to and including the shut-off valve on the consumer's side of the meter.

SECTION II - AVAILABILITY OF WATER AND APPROVAL OF SUBDIVISION MAP

1. Extensions from and connections to the public water system will be approved by the Department where pressure conditions permit, provided the following have been met:

   a. The Department has a sufficient water system developed for domestic use and, if required by the Department, a sufficient water system for fire protection.

   b. The additional service on the existing system will not be detrimental to people already being served in that area. In order to determine if the additional service will be detrimental to present consumers, the department may require the subdivider to estimate the amount of water to be consumed by the subdivision water system.

   c. The subdivision water system complies with these rules and regulations, and is designed and constructed in compliance with (1) all applicable statutes, ordinances, rules, and regulations of the State of Hawai'i and the County of Kaua'i, and (2) the 2002 Water System Standards ("Standards") developed by Hawai'i's four county departments of water, as amended by the Department's 2005 Amendments ("2005 Amendments") to the Standards. The Standards and the 2005 Amendments are hereby incorporated by reference into the Department's rules. The Manager and Chief Engineer may, for good cause shown, permit departure from the Standards or 2005 Amendments, or both.

   d. The facilities reserve charge for the subdivision has been paid, or a bond posted in lieu thereof, as provided under Section XIII of this Part.

2. In areas where there is no public water supply available, or where large quantities of water are required or a large investment is necessary to provide service, the subdivider will be informed as to the conditions under which the subdivision may be approved and, where appropriate, refunds made.

3. After the Director submits the subdivision map to the Department, the Department will inform the Director in writing of its approval, requirements for approval, or its disapproval of a subdivision map after taking the above into consideration.

SECTION III - FACILITIES RESERVE CHARGE

1. The subdivider shall pay to the Department the facilities reserve charge established in Part 4 of the Rules and Regulations of the Department, for each (additional) parcel created by the subdivision, including the first lot, except (as provided below) when facilities reserve charges have already been paid by the developer or subdivider.

2. No facilities reserve charge will be made for lots created by the subdivision which will not be served by the Department's water system. In the event that the Department determines that the subdivision will not be serviced by the Department's water system, but later water service is requested, full payment of the then applicable facilities reserve charge must be paid. A statement to this effect shall be clearly lettered on the subdivision map.

3. No facilities reserve charge will be made for any parcel which is already serviced by an existing meter or which was serviced by a meter within 365 days prior to formal submittal of the subdivision request to the Planning Department.

4. The subdivider shall pay the facilities reserve charge to the Department prior to subdivision approval by the Department except that subdivision approval may be given prior to construction

[redacted] 003

of required improvements and the payment of the facilities reserve charge by the posting of a bond, as described in Section XIII of this Part.

5. In the event the facilities reserve charge has been paid for a subdivision and subsequently the subdivision is consolidated, the facilities reserve charge will be returned provided the consolidation is completed within 365 days following the prior subdivision approval.

SECTION IV - EXTENSIONS TO SUBDIVISION

1. **General Requirement**. The subdivider shall install and pay for the subdivision water system required from the public water system to the subdivision. All such subdivision water systems shall be designed and located in accordance with the standards of the Department. The subdivider may be required to improve the public water system if the public water system is inadequate to serve the subdivision.

2. **Increase in Size of Water Main Extensions for Service to Other Areas**. Whenever the Department finds it necessary that the water mains proposed to deliver water to a subdivision should be of a greater capacity than is required to provide adequate service and fire protection for such subdivision, in order to supply water and fire protection to property not in the subdivision, the Department shall require the subdivider to install mains of such greater capacity.

3. **Reimbursement to Subdivider for Additional Costs of Mains to Subdivisions**. When the subdivider is required to install a larger sized main for the reasons set forth in the preceding paragraph, the Department will reimburse the subdivider, as soon as practicable after the acceptance by the Department of the completed work, the additional cost of the installation over and above the cost of the mains that would have been required; provided, that reimbursement will not be made to the subdivider where such larger main or mains will serve only areas under the same ownership as the subdivision under consideration.

   Before the subdivider enters into a contract where a reimbursement to the subdivider for additional costs of mains to the subdivision will be made, the Department shall review and either approve or disapprove the contract. If the contract is disapproved, the subdivider shall revise the contract until its form and content is acceptable to the Department.

   After the installation has been completed and accepted by the Department, the subdivider shall furnish the Department with an affidavit itemizing the costs incurred by him in the installation of the said larger mains. The said additional costs shall be determined by the Department.

SECTION V - INSTALLATIONS WITHIN SUBDIVISION

1. **General Requirement**. The subdivider shall install in accordance with these rules and regulations and the standards of the Department and pay for the subdivision water system required within a subdivision.

2. **Increase in Size of Water Mains with Subdivisions for Benefit of Other Areas**. Whenever, in order to provide for existing or future services beyond the boundaries of a subdivision, the Department finds that the mains to be installed within the subdivision should be of greater capacity than would be required to provide adequate service within such subdivision, the Department will require the subdivider to make installations of such greater capacity.

3. **Reimbursement to Subdivider for Additional Costs of Water Mains within Subdivisions**. When the subdivider is required to install a larger-sized main for the reasons set forth in the preceding paragraph, the Department will reimburse the subdivider, as soon as

practicable after acceptance by the Department of the completed work, the additional cost of the installation over and above the cost of the mains that would have been required; provided, however, that in no case will reimbursement be made of any portion of the cost of a main of less than 6-inch in diameter; provided, further, that reimbursement will not be made to the subdivider where such larger main or mains will serve only areas under the same ownership as the subdivision under consideration.

After the installation has been completed and accepted by the Department, the subdivider shall furnish the Department with an affidavit itemizing the costs incurred by him in the installation of the said larger mains. The said additional costs shall be determined by the Department.

SECTION VI - SIZES OF MAINS, HYDRANT SPACING, FIRE PROTECTION

1. **Sizes of Mains**. Any subdivision, except where fire protection facilities are not required by the Department, hereafter to be laid out within the County shall provide 6-inch water mains or larger in residential districts and 8-inch water mains or larger in business, industrial and hotel and apartment districts. Sizing of mains within agricultural subdivisions and subdivisions where fire protection facilities are not required shall be determined by the Department.

2. **Hydrant Spacing**. Fire hydrants shall be spaced not more than 350 feet in business, industrial, hotel and apartment districts, 500 feet in urban residential districts and 600 feet in rural residential district (Urban and rural refer to boundaries established by the State Land Use Commission). Fire hydrants may not be required in agricultural subdivision as determined by the Department. The Department will determine the location of all hydrants. All fire hydrants required for adequate fire protection of a subdivision will normally be located within the subdivision.

   If, in the interest of better fire protection, it is determined that one or more of the required hydrants will serve the subdivision to better advantage if located outside the subdivision, they may be so located and the cost shall still be borne by the subdivider, subject to the limitation that the cost to the subdivider shall not exceed the cost to him which would have resulted had all the hydrants been located inside the limits of the subdivision.

3. **Fire Protection**. In fixing the standards for fire protection insofar as water supply is concerned, the Department will be guided by the standards of the National Board of Fire Underwriters in "Grading Cities and Towns of the United States with Reference to Their Fire Defenses and Physical Conditions" and by any specific recommendations made by the said National Board with respect to the County.

SECTION VIII - SERVICE CONNECTIONS, DEAD-ENDS, ALTERATIONS TO PUBLIC WATER SYSTEMS, CONTOURS

1. **Service Connections**. Where water main construction is necessary, the subdivider shall provide each lot in a subdivision with a service connection from the water main to the property line adjacent to the lot or as directed by the Department's engineer. As an alternate, one service connection may be installed for each two lots.

   Where the lots to be created front along an existing water main, a service connections as required above shall be paid for by the subdivider and installed by the Board, except that the service connection installation may be deferred and paid for by the consumer at the time the request for water service is made for agricultural lots and other subdivisions for which the Department determines that it is impractical to require such installations prior to the request for water service.

2. **Dead-Ends**. Where water mains proposed by a subdivider would result in dead-ends, the subdivider shall correct the condition by the installation of such interconnections as may be required by the Board.

3. **Alterations to Public Water System**. All work and materials in connection with the change in location or grade of any part of the existing public water system made necessary by the subdivision shall be at the expense of the subdivider.

4. **Contours.** When required by the Board, contours or elevations shall be furnished by the subdivider, based upon mean sea level.

SECTION IX - PREPARATION OF PLANS, INFORMATION ON PLANS, ELEVATION AGREEMENT, APPROVAL OF PLANS, DELAYS IN CONSTRUCTION

1. **Preparation of Plans**. All construction plans shall be prepared by a registered engineer to the extent of his professional qualifications under the laws of the State. Preliminary maps and final maps of subdivisions to be reviewed by the Department shall fully conform to the definitions and requirements of the Rules and Regulations of the Commission.

2. **Information to the be shown on Construction Plans**. The construction plans, insofar as the water system is concerned, shall show the following on County of Kauai standard size sheet or sheets:

   a. Name of subdivision, name of subdivider, name of engineer and location of subdivision.

   b. Date, north arrow, scale, tax key.

   c. The proposed subdivision water system complete, in both plan and profile, and its inter-relationship with street lines, lot lines, curb grades, sewers and drains, both existing and proposed, as well as any other features natural or artificial necessary for a complete understanding of the water system design.

   d. Plan and profile views drawn to a scale of one inch equals 40 feet and one inch equals 5 feet, respectively, or as approved by the Department. Manhole, fire hydrant, lateral and other details drawn to a scale of one-half equals one foot or larger.

   e. The designation, including alignment and width, of all easements for parts of the water system which will not be in street areas to be dedicated to the public.

   f. A general layout map showing the locations of lots and streets within the subdivision and its near vicinity together with existing and proposed water system.

   g. A small key location inset or vicinity map showing the proposed subdivision in relationship to streets and water mains in the area.

   h. In cases in which the owner or subdivider also owns areas contiguous to the proposed subdivision, or separated therefrom by a street, a sketch of the future street and lot pattern and the water system proposed to serve such contiguous areas shall be furnished for study with the construction plans.

3. **Elevation Agreement**. Whenever a lot or lots within a subdivision are at such an elevation that they cannot be assured of a dependable water supply, the approval of the construction drawings will be subject to each owner of such lot or lots signing an "elevation agreement" whereby such lot owner agrees to accept such water service as the Department is able to render, and such owner agrees to construct, if necessary, and maintain at his expense, a tank or a pump with a tank, all in accordance with the standards and requirements of the Department, of sufficient capacity to furnish a supply of water at such times as the pressure in the water mains may be insufficient to supply such lot or lots with water. When required, a statement as to this conditional approval will be clearly lettered on the subdivision map.

4. **Approval of Plans**. No construction of a subdivision water system, or any portions thereof, shall be undertaken prior to approval of the final construction plans by the Manager and Chief Engineer, the Director, the County Engineer of the Department of Public Works, and the State Department of Health. After said approval, the subdivider shall transmit four sets of all final construction plans to the Manager and Chief Engineer.

   In areas where there is no public water supply available to serve the subdivision, plans and specifications for the development of water sources, including wells, tunnels, shafts, pumps, buildings, mains and other appurtenances structures and devices, shall be in conformance with the standards of the Department and shall be approved by the Department in their entirety prior to the construction.

5. **Delays in Construction**. If any period exceeding one year or such extension as may be granted passes without substantial progress in the construction of the water facilities, after approval of plans by the Department, the plans thereof shall be resubmitted to the Department for review and for making such changes as it deems proper because of changed conditions or revision of standards.

SECTION X - MATERIALS AND CONSTRUCTION STANDARDS, INSTALLATION OF WATER SERVICE, INSPECTION OF WORK

1. **Materials and Construction Standards**. All materials, design and construction procedures, and workmanship, with respect to any subdivision water system, or any portion thereof shall be in accordance with the requirements of the "Standard Specifications for Waterworks Construction" of the Board of Water Supply, County of Kauai, dated 10/1/63 or as later amended and with the requirements of the State Department of Health and all applicable laws. The Manager and Chief Engineer shall determine the capacity and location of any of the component parts of the subdivision water system.

2. **Installation of Water Service**. No water service will be approved until the subdivision water system has been completed and accepted by the Department and the FRC has been paid to the Department. Service for subdivision construction purposes such as site work and roadways (excluding construction work for individual lots) may be approved.

3. **Inspection of Work**. The Manager and Chief Engineer or any employee representing him shall have free access at all times to all installations made for the subdivision and shall be given any assistance required and every facility, information and means of thoroughly inspecting the work to be done and the materials used or to be used.

SECTION XI - OWNERSHIP OF INSTALLED WATER SYSTEM

Before the Department will provide water service within the subdivision, the subdivider shall convey the subdivision water system to the Department and said subdivision water system thereafter will be maintained and operated as a part of the public water system; provided, however, that the Department

may refuse to operate and maintain facilities installed without the Department's prior approval. Prior to the commencement of water service, and as a prerequisite to such service, the subdivider shall also deliver to the Department perpetual easements for all portions of the subdivision water system installed in other than publicly owned property. The subdivider shall also convey to the Department fee simple title to all sites on which are located tanks, reservoirs, sources of supply, and pumps constructed by the subdivider and connected to the public water system together with easements for ingress and egress. The subdivider shall also convey to the Department a breakdown of costs of the subdivision water system on forms provided by the Department.

SECTION XII - MODIFICATION OF REQUIREMENTS

When conditions pertaining to any subdivision are such that the public may be properly served with water and with fire protection without full and strict compliance with these rules and regulations, or where the subdivision site or layout is such that the public interest will be adequately protected, such modification thereof as is reasonably necessary or expedient, and not contrary to law or the intent and purposes of these rules and regulations, may be made by the Department.

SECTION XIII - CONSTRUCTION AGREEMENT AND BOND

To secure final approval prior to construction of the required improvements in a subdivision, the subdivider shall enter into a written agreement with the County and the Department to make, install and complete all of the required improvements within a specified time. In addition thereto, a Surety Bond or other security as hereinafter specified shall be filed with and attached to the agreement by the subdivider.

A. **Construction Agreement**:

(1) The Agreement shall specify that the subdivider will complete the subdivision to the satisfaction of the Manager and Chief Engineer.

(2) The Agreement shall further specify that the Department may complete the work at the expense of the subdivider where the subdivider fails to complete the work to the satisfaction of the Manager and Chief Engineer, or fails to complete the work within the time specified.

B. **Surety Bond**:

(1) The Surety Bond shall be filed with the agreement and shall be for the following purposes:

(a) The Surety Bond shall assure to the County and the Department that the actual construction and installation of the improvements and utilities specified will be carried out.

(b) The Surety Bond shall further assure to the Department that the facilities reserve charge will be paid, if said charge is not already paid.

(2) The Surety Bond shall be executed by the subdivider as principal and the surety shall be a company authorized to transact a surety business in the State of Hawaii.

(3) The bond or other security shall be one of the following:

(a) A Surety Bond in a sum equal to the cost of the work required to be done as estimated by the Manager and Chief Engineer; payable to the County and the Department, and shall be conditioned upon the faithful performance of all work

required to be done by the subdivider, and shall be further conditioned to the effect that should the subdivider fail to complete all work required to be done within a specified reasonable time, the Department may cause all required work which is not finished to be completed, and the parties executing the bond shall be firmly bound for the payment of all necessary costs, therefore; or

(b) Where the subdivider has entered into a contract with a reputable contractor, and has filed with the Director all three of the following: 1) a certified copy of his said contract and specifications; 2) a certified copy of the performance bond of his said contractor; and 3) a surety bond in a sum equal to at least 50 per cent of the cost of all work required to be done by the subdivider as estimated by the Manager and Chief Engineer, and shall be payable and conditioned as above set forth; or

(c) The subdivider shall make a deposit of money with the Director as agent of the County and the Department, in an amount equal to the cost of the construction of said improvements as estimated by the Manager and Chief Engineer. Under this arrangement, the agreement may provide for progress payments to be made to the contractor for materials used and services and labor performed, out of said deposit as the work progresses; provided that said progress payments shall at no time exceed the value of the completed portion of said improvements as determined by the Manager and Chief Engineer and the County Engineer of the County; or

(d) In lieu of said surety bond or deposit in escrow mentioned in Paragraphs 3 (a) (b) (c) above, the subdivider may deposit with the Director bonds or other negotiable securities in the amount as provided by Paragraphs 3 (a) (b) (c) respectively of this Section and acceptable to the Manager and Chief Engineer.

(4) Facilities Reserve Charge. All bonds or other securities as provided in Paragraphs 3 (a) (b) (c) (d) above shall include the assurance of payment of the facilities reserve charge except for the following:

(a) This paragraph shall not be applied where the facilities reserve charge has already been paid.

(b) A separate bond primarily for the purpose of paying the facilities reserve charge may be filed by the subdivider.

(5) All bonds or securities posted under this Section shall not be canceled except with approval of the County and the Department

SECTION XIV – NON-DEVELOPMENT AGREEMENTS

1. **Purpose.** The purpose of this section is to assist families who wish to transfer interests in real property between themselves without immediately complying with Departmental rules and construction standards and specifications imposed when family members request subdivision approval.

2. **Definitions.** As used within this section:
"**Development**" includes, but is not limited to:

(1) the construction, reconstruction, alteration, remodeling, renovation, or repairing of single-family residences, additional dwelling units, or any other dwelling, building, or structure of any kind on or within the property being subdivided, or

(2) the construction of additions or extensions to any dwelling, structure, or building existing as of the date of this agreement, or

(3) the construction, reconstruction, installation, alteration, or repair of piping, waste-water systems, landscaping or irrigation systems.

which result in increased fire protection requirements arising because of the property's development, increased consumption of water upon the property being subdivided, calculated from the date of the agreement described in this section, or which may, in the Department's judgment, possibly contaminate existing potable water-well sources located in the vicinity of the property being subdivided.

"**Hanai child**" means a person for whom an adult once provided food, nourishment, and support for a minimum period of at least one year prior to the time that the applicant applied for subdivision approval and who is generally acknowledged as the adult's child among friends, relatives, and the community.

"**H.R.S**" means Hawaii Revised Statutes, as amended.

"**Non-development agreement**" means the agreement required to be executed under this section.

"**Rule**" or "**Rules**" mean the Rules and Regulations of the County of Kauai Department of Water.

"**Water System Facilities**" means all water infrastructure of the Department determines to be necessary to provide adequate residential water service and fire protection for the property being subdivided and shall include, but not be limited to, any and all necessary wells, pumps, storage tanks, water transmission and distribution lines and related meters, valves, and other water system improvements and equipment.

3. **Authorization to defer subdivision improvements under certain terms and conditions.** The Manager and Chief Engineer may approve requests for subdivision approval and temporarily defer subdivision requirements imposed by the Department's rules and construction standards and specifications for the sole and limited purpose of allowing a subdivision applicant to transfer interests in real property from the applicant to others, provided the applicant satisfies or complies with the following conditions:

a. Property interests may be transferred only between: natural persons who are related to the applicant by birth, blood, adoption, marriage, or prior marriage. Eligible transferees are limited to:

Spouse,
Ex-spouse,
Parents,
Grandparents,
Children,
Hanai children,
Grandchildren,
Brothers, and
Sisters.

The preceding list of terms shall be understood according to their most widely-known and usual significance, without attending so much to the literal and strictly grammatical construction as to their general, ordinary, or popular use or meaning.

b. The Manager and Chief Engineer shall not approve subdivision requests under this section if development will occur as a result of the subdivision.

c. With respect to the property being subdivided, the Department shall not approve further subdivision requests, requests for water service when apartments within the property have been created pursuant to Chapter 514A, H.R.S., or development of any kind, unless and until adequate water system facilities, as may be determined by the Department when development occurs, are constructed, in place and complete, to provide adequate residential water service and fire protection for the property being subdivided.

d. The Department shall not approve residential building permits for any property which is subject to a non-development agreement unless adequate water-system facilities are constructed pursuant to subparagraph 3.c. of this section.

If the Department erroneously or inadvertently approves a building permit before necessary water-system facilities are constructed, the Department shall, upon learning of its action, immediately rescind its approval.

e. If, before necessary water-system facilities are constructed to service the property being subdivided, the Department erroneously or inadvertently approves the issuance of a building permit for any development within the subdivision and development occurs, the developer shall either construct the necessary water-system facilities or remove the development at the developer's own cost and expense.

Should the Department be required to enforce the provisions of this subparagraph through civil court action, the developer shall pay to the Department and be jointly and severally liable for any and all attorneys' fees, court costs, and other related fees, costs, and expenses necessary to prosecute and defend such an action.

f. The subdivision applicant and all persons to whom an interest in the property may be transferred shall release the Department of any and all liability arising from the Department's decision to recommend subdivision approval under this section.

The applicant and all persons to whom an interest in the property may be transferred shall also forever indemnify, defend, save, and hold harmless the Department from and against any and all injury to persons and damage to property, deaths, claims, fines, suits, actions, economic and non-economic damages, costs, losses, and liabilities of every nature and kind arising or growing out of the Department's decision to recommend subdivision approval of the applicant's property under this section.

g. The provisions of this section shall be implemented through an agreement executed between 1) the Manager and Chief Engineer, and 2) the subdivision applicant and all persons to whom an interest in the property may be transferred. The agreement shall contain terms and conditions determined to be necessary by the Manager and Chief Engineer and the County Attorney. The covenants and servitudes created by the agreement shall constitute covenants which shall run with the land and constitute notice to all who may claim an interest in the property being subdivided.

Any subdivision approval granted under this section shall be null, void, and of no legal effect unless 1) the Department receives a non-development agreement containing original signatures executed by all of the parties to the agreement, and 2) the agreement has been recorded in the State of Hawaii Land Court or Bureau of Conveyances.

h. The documents conveying title or an interest in real property shall specifically incorporate by reference the non-development agreement. Further, the agreement shall be attached to the conveyance documents as an exhibit.

011

i. The final subdivision map shall contain a brief and concise statement stating that the lots created by the subdivision are subject to a non-development agreement. The statement shall further summarize the major terms and conditions of the agreement.

4. **Applicability.** This section shall apply only to subdivisions served by County water systems, and not to private water systems not served by the County.

5. **Fees, Charges, and costs under this section**. Notwithstanding any other section or provision in the Rules to the contrary including, but not limited to, Paragraph 1, Section III, Part 3 of the Rules, any and all applicable Departmental fees, charges, and costs, including facilities reserve charges, shall be paid at such future time that development occurs at the amount in effect at the time that development occurs, and not at the time that the non-development agreement is entered into by the County.

6. **Changed development conditions**. The applicant or subsequent transferees of the applicant shall be responsible for checking with the Department and determining whether water infrastructure development requirements have so changed such that necessary water-system facilities no longer need to be constructed. The Department shall not be responsible for informing the applicant or subsequent transferees of the applicant of such changed development conditions."

SECTION XV - SEVERABILITY

If any rule, section, sentence, clause, or phrase of these rules and regulations or its application to any person or circumstance or property is held to be unconstitutional or invalid, the remaining portions of these rules and regulations or the application of these rules and regulations to other persons or circumstances or property shall not be affected. The Department hereby declares that it would have adopted these rules and regulations and each and every rule, section, sentence, clause or phrase thereof, irrespective of the fact that any one or more other rules, sections, sentences, clauses, or phrases be declared unconstitutional or invalid.

SECTION XVI - PENALTIES

Any person, firm or corporation which violates any rule or regulation herein shall be fined not more than $500.00, except that in cases where the offense shall be of a continuing nature, each day's continuance of the same, shall constitute a separate offense.

PART 4
FIXING RATES FOR THE FURNISHING OF WATER SERVICE IN THE COUNTY OF KAUAI

SECTION I - GENERAL USE RATES

1. **Service Charge**. For each service there shall be a charge per month imposed based on the size of the meter, or its service capacity equivalence in the case of parallel meters, as follows:

Meter Size			Amount (per month): Effec. January 1, 2008	Amount (per month): Effec. July 1, 2010
5/8"	$ 10.00 plus	first 1,000 gal. consumption	= $ 10.00	13.20
¾"	$ 14.00 plus	2,500 gal. consumption	= $ 14.00	22.00
1"	$ 20.00 plus	3,500 consumption	= $ 20.00	31.20
1 ½"	$ 40.00 plus	10,000 consumption	= $ 40.00	72.00
2"	$ 60.00 plus	12,500 consumption	= $ 60.00	100.00
3"	$120.00 plus	50,000 consumption	= $120.00	280.00
4"	$190.00 plus	175,000 consumption	= $190.00	750.00
6"	$360.00 plus	225.000 consumption	= $360.00	1,080.00
8"	$580.00 plus	250,000 consumption	= $580.00	1,380.00

2. **Use Charge**. In addition thereto, there shall be a consumption charge imposed per 1,000 gallons as follows:

	Effective January 1, 2009	Effective January 1, 2010
1st Block	$2.90	$3.20
2nd Block	$3.70	$4.00
3rd Block	$5.40	$6.00
4th Block	Effective July 1, 2010	$6.25

The 1st, 2nd, 3rd, and 4th block consumption thresholds vary with the size of each meter, and shall be as follows:

Meter Size (inches)	First Rate Block (1,000 gal.) used bi-monthly	Second Rate Block (1,000 gal.) used bi-monthly	Third Rate Block (1,000 gal.) used bi-monthly	Fourth Rate Block (1,000 gal.) used bi-monthly
	From - To	From - To	From - To	Over
5/8"	2 - 14	14 - 28	28 - 35	35
¾"	5 - 58	58 - 114	114 - 130	130
1"	7 - 137	137 - 274	274 - 350	350
1 ½"	20 - 338	338 - 675	675 - 775	775
2"	25 - 800	800 - 1,500	1,500 - 1,850	1,850
3"	100 - 1,200	1,200 - 2,400	2,400 - 3,500	3,500
4"	350 - 2,000	2,000 - 5,000	5,000 - 5,500	5,500
6"	450 - 8,000	8,000 -15,000	15,000 - 20,000	20,000
8"	500 - 2,000	2,000 - 5,000	5,000 - 25,000	25,000

3. Wharfage Fee. Where applicable, the Department of Transportation's wharfage fee shall be charged in addition to the above use and service charges.

SECTION II - BULK RATES

Bulk rates for specified areas may be established by the Board providing the following conditions are met:

1. The area consists of existing dwellings or business establishment with bulk rates built prior to September 11, 1992.

2. The system has been offered to the Board but refused because of substandard or obsolete pipeline and fixtures.

3. The lots or parcels are under diversified ownership and not under a single or limited number of owners (three (3) and less).

4. There is a savings to the Board in maintenance and operating costs in contrast to accepting the system.

5. All bulk rates shall be renegotiated biennially and may continue upon concurrence of both parties.

SECTION III - AGRICULTURAL RATES

1. Service Charge. For each agricultural service there shall be a charge per month imposed based on the size of the meter, or its service capacity equivalence in the case of parallel meters, as follows:

Meter Size	Amount (per month) Effective January 1, 2008
5/8"	$ 15.00
¾"	$ 20.00
1"	$ 30.00
1 ½"	$ 55.00
2"	$ 90.00
3"	$ 160.00
4"	$ 260.00
6"	$ 500.00
8"	$ 800.00

2. In addition to the agricultural service charge described in this Section III, for all water drawn, where such water is used for agriculture, stock raising, or dairy farming on a commercial basis, the following consumption charge shall be imposed for each 1,000 gallons used, as of the following effective dates:

Effective January 1, 2009:	$1.45
Effective January 1, 2010:	$1.60

3. In order to qualify for the charges and rates described in this Section III, the applicant shall file annually with the Department of Water a written application [and], shall furnish annually satisfactory proof, including State of Hawaii General Excise Tax License for the engagement of business in agriculture, stock raising or dairy farming on a commercial basis and shall have a DOW approved reduced pressure backflow preventer installed on the customers side of the meter with a current inspection certificate. The applicant for agricultural rates must agree to

accepting service from the Department of Water on an interruptible basis; i.e., the Department retains the right to limit or restrict water flow for agricultural uses in the event of water shortage or in the event water service to domestic users is curtailed due to agricultural uses. The agricultural rates shall not apply to processing activities, such as canneries, mills, markets or other establishments engaged in the conversion, treatment or packaging of agricultural products.

SECTION IV - SHIPPING RATES

1. For each ship or vessel served, there shall be both an opening charge and a closing charge imposed as follows:

   A. Opening and Closing Charges:

      1. Charges applicable during regular Water Department working hours: $53.00

      2. Charges applicable during Saturdays, Sundays, State of Hawai'i holidays, and hours other than regular Water Department working hours: $123.00

2. Additionally, for all water drawn by ships and vessels, there shall be a consumption charge imposed for each 1,000 gallons of water drawn, as follows:

   Effective January 1, 2009: $3.70
   Effective January 1, 2010: $4.00

3. Additionally, for all water drawn by ships and vessels, there shall be a State of Hawai'i Department of Transportation wharfage fee which is the current approved rate as per the Hawai'I Department of Transportation Approved Rate imposed for each 1,000 gallons of water drawn.

SECTION V - PRIVATE FIRE SERVICE CHARGES

For each service connection for the sole purpose of automatic fire sprinklers or other private fire protection, there shall be a charge for a Private Fire Service Inlet Line per month based on the diameter of the inlet line connection as follows:

	Effective January 1, 2008
Two-inch (2")	$ 11.00
Three-inch (3")	$ 20.00
Four-inch (4")	$ 35.00
Six-inch (6")	$ 75.00
Eight-inch (8")	$135.00

Consumption Charges:
Detector check and full flow meters used for the sole purpose of fire fighting will not be charged a consumption charge in the case of an actual fire that is verified in writing by the County Fire Chief stating the time the fire fighting started and ended.

Detector Check Meters:
In addition to the Private Fire Service Inlet Line Charge there will be a meter reading service charge equal to the service charge imposed in Section I. based on the detector check meter size. Any

consumption, including consumption for annual line testing and line leakage, on the detector check meter will be billed at the normal rate for water service times the ratio between the area of the detector check meter cross-sectional area and the cross-sectional area of the inlet line listed below in the Area Ratio Table.

Full Flow Meters on Dual Use Lines:
In addition to the Private Fire Service Inlet Line Charge there will be a meter reading charge equal to the service charge imposed in Section I. based on the full flow meter size. Any consumption, including consumption for annual line testing and line leakage, measured on the meter will be billed at the general use rate for water in Section I. Removal of the security tag shall result in a fine of $2,000.00.

Line Diameter	5/8 meter to line size dia ratio	3/4 meter to line size dia ratio	1" meter to line size dia ratio	1 1/2" meter to line size dia ratio	2" meter to line size dia ratio	3" meter to line size dia ratio	4" meter to line size dia ratio
2.000	10.24	7.1	4.0	1.8			
3.000	23.04	16.0	9.0	4.0	2.3		
4.000	40.96	28.4	16.0	7.1	4.0	1.8	
6.000	92.16	64.0	36.0	16.0	9.0	4.0	2.25
8.000	163.84	113.8	64.0	28.4	16.0	7.1	4

AREA RATIO TABLE

SECTION VI - PUBLIC FIRE SERVICE CHARGES

For each fire hydrant or standpipe connected to operating pipelines of the Department of Water, there shall be a charge imposed against the County of Kauai as follows:

	Effec. January 1, 2008	Effec. July 1, 2010
6-inch hydrant	$31.00 per month	$34.00 per month
4-inch hydrant	$11.25 per month	$12.40 per month
Standpipes less than 4-inch but greater than 2-inch	$5.25 per month	$ 5.75 per month

SECTION VII - FACILITIES RESERVE CHARGE

1. The water system facilities reserve charge shall be assessed against all new developments and subdivisions requiring supply of water from the County of Kauai, Department of Water, and existing developments requiring additional supply of water from the Department's system. The facilities reserve charge must be paid before water services are made available to the new or existing development.

2. The water system facilities reserve charge shall be paid by all applicants for water service, including but not limited to the following:

016

a. All irrigation services and/or meters.

b. Additional buildings to be connected to existing services where additional demands or supplies are indicated. The charges shall be based on the meter sizes required if the buildings were metered separately.

c. Additional units connected to existing services and meters under the categories of single family and multi-family residential units. The charges will be based on the established schedule of charges for the respective categories.

3. The water system facilities reserve charges shall apply to all applicants for water service as follows:

a. For each parcel created by subdivision, including the first lot created; and for every new single family residential dwelling unit not yet metered and a facilities reserve charge has not yet been paid, the charge shall be $4,600.00.

b. For each unit or hotel room in a multi-family residential development and/or resort development, which applies to each unit or hotel room, the charge shall be $4,600.00.

c. For all other uses, the facilities reserve charge shall be determined by the size of the meter as follows:

Meter Size	Amount
5/8"	$ 4,600.00
¾"	$ 14,300.00
1"	$ 26,400.00
1 ½"	$ 53,200.00
2"	$ 90,700.00
3"	$ 170,000.00
4"	$ 283,400.00
6"	$ 566,800.00
8"	$ 907,000.00

Meter sizes shall be determined by the Department and not by the Developer or Applicant. The facilities reserve charge for multi-family and/or resort development will be determined by the approved meter size or the number of units, whichever number is larger.
Facilities reserve charges are periodically adjusted by the Department. These adjustments may increase or decrease existing facilities reserve charge amounts. Where adjustments to facilities reserve charges result in decreases of such charges, no refund will be made of the difference between the higher, pre-existing charges and the lower, adjusted charges.

4. FRC Offsets.

a. Definitions and construction of words. As used in this paragraph 4, the following definitions shall apply:

"Applicant" means any person, individual, corporation, partnership, business, organization, association, or other entity whatsoever that applies for water service from the Department.

017

"Consumer" has the meaning ascribed to it under Section I of Part 2 of the Department's Rules and Regulations.

"FRC" means the facilities reserve charges described in section VII of Part 4 and Section III of Part 3 of the Department's rules.

"Offset" means reduced or reduction.

"Subdivider" has the meaning ascribed to it under section I of Part 3 of the Department's Rules and Regulations.

"Subdivision" has the meaning ascribed to it under section I of Part 3 of the Department's Rules and Regulations.

"Water transmission main" or "main" means a main extension under Paragraph 2.d [2.a.(4)] of Section II of Part 2 of the Department's Rules and Regulations.

As used in this Paragraph 4, the following rules of construction shall apply:

Number. Words in the singular or plural number signify both the singular and plural number.

"Or", "and". Each of the terms "or" and "and", has the meaning of the other or of both.

b. When an applicant, consumer, or subdivider is required to construct and dedicate water source or water storage facilities, or water transmission mains, to the Department, the following rules shall apply.

Subject to the provisions of this paragraph 4, the applicable FRC liability of such applicants, consumers, or subdividers shall be offset by up to 33% each where water source or water storage improvements are constructed, and up to 50% where water transmission mains are constructed; provided that the total amount of all offsets that an applicant, consumer, or subdivider receives shall not exceed 100% of the applicant's, consumer's, or subdivider's FRC liability, and provided further that the offset for any source or storage improvement or transmission main shall not exceed the actual cost of the source or storage improvement or transmission main.

The Department, and not the applicant, consumer, or subdivider, shall calculate and determine the total amount of an applicant's, consumers, or subdivider's FRC offset in any given case. The Department may require the applicant, consumer, or subdivider to submit documentation verifying the actual cost of a source or storage improvement or transmission main.

c. The offsets described in this Paragraph 4 "FRC Offsets" shall not apply to water transmission mains constructed by a subdivider, applicant or consumer which are within or adjacent to a subdivision or lands either 1) owned by the applicant or consumer, or 2) developed by the applicant or consumer for uses such as, but not limited to, residential, agricultural, commercial, resort, industrial, governmental, religious, or educational uses. Where water transmission mains are constructed within, adjacent to, or outside of such subdivisions or lands, the offsets shall apply only to mains constructed outside of and off-site from such subdivisions or lands."

018

SECTION VIII - OTHER CHARGES

1. **Restoration of Water Service**. If a consumer's water service is turned off for failure to pay a bill, for violation of any of the provisions of these rules and regulations, or for other reasons, all outstanding accounts against said consumer plus the charge for reopening, reinstallation or reconnection must be paid before water service be restored. Said charges shall be as established by the Department.

2. **Fire Hydrant and Other Temporary Meters.** In addition to regular meter service charge and water consumption charge, there shall be installation, removal, testing and user charges for all Fire Hydrant and other temporary meters as established by the Department.

3. **Pass Through of Private Charges**.

a) As used in this Paragraph 3:

"Private charge" or "private charges" means charges, fees, assessments, exactions, and all other moneys a private water company may require the Department to pay to permit the Department to purchase water from the company. The terms include contribution-in-aid-of-construction charges that a company may assess against the Department.

"Private water company" or "company" means any department or agency of the federal government or the State of Hawaii, any private person, trust, association, corporation, partnership, or business, and any water utility regulated by the Hawaii Public Utilities Commission.

(b) Whenever the Department purchases water from a private water company for end use by any of the Department's consumers or prospective consumers and the company imposes private charges in excess of any similar charge or fee imposed under the Department's administrative rules, the Department shall require a consumer or prospective consumer to pay, in addition to the Department's charge or fee, the difference between the charge or fee imposed under the Department's rules and the similar private charge imposed by the company. If the private charge imposed is less than the similar charge or fee imposed under the Department's administrative rules, the consumer or prospective consumer shall not be entitled to the difference between the private charge imposed and the similar charge or fee imposed under the Department's rules.

Whenever the Department purchases water from a private water company for end use by any of the Department's consumers or prospective consumers and the company imposes private charges that are dissimilar to any charge or fee imposed under the Department's administrative rules, the Department shall require a consumer or prospective consumer to pay an amount equal to the dissimilar private charge imposed by the company."

SECTION IX - TEMPORARY GRANTS OF WATER

1. **Purpose.** The purpose of this section is to establish standards for temporary grants of water to support the initial development of county or state public beautification projects or the initial or further development of county or state public parks and public ways.

2. **Temporary Grants of Water**. The Board of Water Supply may, in its discretion, authorize temporary grants of water to support the initial development of county or state public

beautification projects or the initial or further development of county or state public parks and public ways.

Any county or state department, office, or agency wishing to receive such temporary grants of water shall apply to the Board of Water Supply for such temporary grants. The application shall explain or describe in detail the contemplated project, why a temporary grant of water from the Department is necessary, what other efforts the applicant has made to obtain water from other sources, for what specific purposes the water will be used, and how the water provided will yield public benefits. The applicant shall also certify that there were no other available sources which can be used to support the project in question.

For each application, the Board shall determine and establish a maximum time limit that water may be provided to an applicant and a quantity limit on the amount of water that may be drawn.

The Board and the Manager and Chief Engineer may prescribe conditions under which water may be drawn so that the provision of water to the applicant does not adversely affect the Department's ability to provide water to its other users.

SECTION X - COST OF POWER ADJUSTMENT CLAUSE

Cost of Power Adjustment

All water consumption (for general use, agriculture use and ships) shall be subject to the imposition of a Cost of Power Adjustment as part of all water consumption charges.

As part of the Department's annual budget review process, the Department will review the actual unit costs of power for each twelve month period ending March 31st. At this time, the power cost adjustment for the upcoming fiscal year will be calculated as the sum of the following two components: (1) the difference (plus or minus) between budgeted unit power costs for the upcoming fiscal year and the projected unit power costs shown in Schedule A below, and (2) the difference (plus or minus) between the actual unit power costs incurred during the twelve-month period ending March 31st as previously described and the projected unit power costs effective for the same twelve month periods as shown in Schedule A below. The sum of these two components, calculated on a dollars per thousand gallons basis, will be applied to all water consumption.

Any power cost adjustments will be implemented on July 1st of each year.

Schedule A
Anticipated Unit Power Costs

Implementation Date	Projected Power Cost (per 1,000 gallons)[1]
July 1, 2005	$ 0.45
July 1, 2006	$ 0.47
July 1, 2007	$ 0.48
July 1, 2008	$ 0.50
July 1, 2009	$ 0.51

[1] Projections based on July 2005 power cost assumptions. Actual unit power cost in each fiscal year is calculated as described in this Section.

020

PART V

WATER SYSTEM DEVELOPMENT FEES

within the County of Kaua'i

and Providing Penalties for the Violations Thereof

Subchapter 1 General Provisions
5-1 Purpose.
5-2 Definitions.

Subchapter 2 Water System Development Fee Procedures
5-3 Water system development fee schedule.
5-4 Applicability.
5-5 Water service.
5-6 Building permits.
5-7 Request for additional meter(s).
5-8 Exemptions from payment of the fee.
5-9 Payment of water system development fee.
5-10 Payment plan.

Subchapter 3 Credit and Accounts
5-11 Application of credit.
5-12 Water system development fee account.

Subchapter 4 Unauthorized Service
5-13 Conversion of unauthorized service.
5-14 Effective date.
5-15 Severability.

SUBCHAPTER 1
GENERAL PROVISIONS

5-1 Purpose. The purpose of this rule is to authorize the Kaua'i Department of Water Supply to collect fees for the department's costs for water system improvements or dedicated water system improvements which are necessary to increase the service capacity or to replace existing capacity in the Board's water system to serve new water consumers or additional demand by

existing consumers, and to establish the appropriate accounting mechanisms to carry out this purpose.
[Eff.; Am] (Auth: HRS 54-33)(Imp: HRS 54-33)

5-2 Definitions. For the purpose of this rule, unless it is plainly evident from the context that a different meaning is intended, certain words and phrases are defined as follows:

"Additional Dwelling Unit" is as defined in Kaua'i County Code Section 8-26.1 and means living quarters attached to a main dwelling or within an accessory building located on the same lot as the main dwelling for use as a separate dwelling.

"Additional water service" means a provision for additional water service through the installation of an additional water meter or a consolidated metering system, the replacement of an existing water meter with a larger-capacity water meter.

"Allocation" means quantity and size of meter(s) identified for the purpose of reserving water service and quantity of water to meet the anticipated demand of that service.

"Applicant" means a person who applies for water service or applies for a building permit which will require additional water service.

"Application" means a request for water service or county building permit requiring additional water service.

"Board" means the Board of Water Supply of the County of Kaua'i.

"Building permit" means the official document or certificate issued by the county authorizing the construction of any structure.

"Consumer" has the meaning prescribed to it under Part 2 section 1 of the Department Rules and Regulations

"Consolidated meter system" means water that is furnished to multiple dwellings through a centralized or single meter.

"County" means the County of Kaua'i, a political subdivision of the State of Hawaii.

"Credit" means the amount of money that an applicant or the applicant's predecessor in interest has paid or spent for construction, engineering, land with exclusive easement or fee

simple dedication or the amount of water in gallons an applicant or the applicant's predecessor in interest has developed in accordance with the Water System Standards and dedicated to the Board of Water Supply for source development, transmission pipelines, storage tanks, or a combination of any of the foregoing, which is used to offset the fee.

"Dedicated water system improvements" means water system improvements that are privately designed and constructed and then accepted by the Board of Water Supply for operation, for which credits shall be applied to all or to a portion of the fee.

"Distribution system" means the water pipelines used to bring water from the transmission system or storage tank to an individual water service lateral and public fire hydrants. Transmission systems that currently provide this function shall not be construed to be a distribution system.

"Developer" means any person causing an increase in demand on the Kaua'i County water system.

"Department of Water" (DOW) means the County of Kaua'i Department of Water.

"Fixture Units" means a flow rate of one cubic foot per minute. (See Water System Fixture Unit Flow)

"Impact fee" means the charges imposed on a developer by a county to fund all or a portion of the public facility capital improvement costs required by the development from which it is collected or to recoup the cost of existing public facility capital improvements made in anticipation of the needs of a development.

"Manager" means the Manager and Chief Engineer Department of Water Supply of the County of Kaua'i.

"Person" means an individual, firm, partnership, company, corporation, association, syndicate, governmental agency, or any legal entity, including but not limited to a trustee, receiver, assignee, or similar representative thereof.

"Premises" means a parcel of real property and any structures thereon which have water service will require water service or requires additional water service and including subdivisions or Horizontal Property Regimes of a parcel of real property.

"Schedule" means the development impact fees as approved by the Board set out in Part IV section VII of these rules and regulations.

"Service lateral" means the connection to a pipeline, pipes, fittings, valves, and other appurtenances up to and including the consumer shut-off valve and water-meter box, but not including the water meter.

"Source development" means the construction of any structure to capture, convey, store, and treat currently unutilized non-potable surface waters; the construction of facilities for currently unutilized ground water and its treatment, including pumps, motor control stations, pump control or disinfection contact time tanks or portions of transmission line needed to meet disinfection contact time, the construction of desalination facilities; which provides or recaptures state department of health acceptable water and any easements or land required for the improvements.

"Storage tank" means an enclosed reservoir to store water for peak-hour flow, and any easements or land required for the improvements.

"Structure" shall have the same meaning as defined in the uniform building code as adopted, amended, or replaced by the county.

"Temporary meter" means any meter connected to a fire hydrant or a service lateral used less than one year by agreement of the DOW.

"Transmission pipeline" means a pipeline that delivers water from a source development to a storage tank or distribution system, including any booster pump stations and appurtenances to the transmission pipeline system to increase its capacity, and any easements or land required for the improvements this does not include any fire hydrants or services that should not be attached to such line but for convenience may be where it is shown that the line cannot operate at pressures less than 40 pounds per square inch.

"Unauthorized Service" means people or their successors in interest that have added facilities requiring water that meet the applicability requirements of subsection 5-4 and have not followed the provisions outlined in this chapter.

"Water meter" means a device that measures the volume of water delivered to any premises.

"Water service lateral" means the provision for delivering water to any premises.

"Water system development fee (WSDF)" means a monetary rate imposed on any applicant to fund a portion of costs to construct water system improvements or to recover the cost of existing water system improvements made in anticipation of additional demand on the water system.

"Water System Fixture Units Flow" (WSFUF) means the utilization of the design factor from the most current Uniform Plumbing Code (UPC) comparing fixture units to flow. Plus any irrigation system flows or other non standard water flow additions to a premise water system. i.e.: swimming pool, fish ponds. This WSFUF may be adjusted downward by DOW staff from the (UPC) tables for fixtures that cannot be altered utilizing water conservation features based on historical information.

"Water system improvement" means any project which will provide additional source development capacity, additional transmission pipeline capacity, or additional storage tank capacity for any of the Board's water systems.
[Eff.; am, §5-2 and] (Auth: HRS 54-33) (Imp: HRS 54-33)

SUBCHAPTER 2
WATER SYSTEM DEVELOPMENT FEE PROCEDURES

5-3 Water system development fee schedule. Fees shall be charged in the amounts set forth in the schedule ("the Schedule") in Part 4 Section VII of these rules and regulations and are due no later than the time this rule is applicable or should have been applicable. Exceptions pursuant to section 5-8 may apply.

[Eff.; am, §5-3 and] Auth: HRS 54-33) (Imp: HRS 54-33)

5-4 Applicability. This rule shall apply to all, persons who want a guarantee or allocation of water service or persons with existing service needing additional water service from the Board water system or persons who are granted approval of a building permit by the County for the construction of any structure on any premises, including but not limited to;

a. Irrigation services.

b. Additional buildings to be connected to existing meters where additional fixture units are indicated.
c. Additional units connected to existing meters under single family and multifamily residential units.

[Eff.; am, §5-4 and] (Auth: HRS 54-33) (Imp: HRS 54-33)

5-5 Water service.

(a) Unless exempted, the fee imposed on any applicant granted water service shall be as set forth in the schedule, based on the gallons per maximum day as set out in the water system standards as corrected to provide for existing conditions and the WSFUF to determine the size of water meter(s) required.

(b) Unless exempted, the fee shall be imposed on any applicant granted additional water service in an amount equal to the difference in gallons per maximum day as set out in the water system standards as corrected to provide for existing conditions and the WSFUF to determine the size of water meter(s) required and the existing water meter size contained in the schedule of fees.

(c) An applicant requesting the reduction of a water meter size shall not be entitled to any reimbursement.

(d) Reimbursement of fees shall not be made with the termination of water service. However, the fee paid shall be credited to future applications for service at those premises.

(e) When premises with existing water service are subdivided, the owner may request relocation of the existing meter or a reduced-size meter upon payment of relocation costs. All new premises resulting from the subdivision of the original premises will be required to have separate water service.

(f) A penalty equal to the WSDF shall be imposed on any applicant granted water service for a meter removed in accordance with rules of the board, in the amount set forth in the WSDF schedule less any portion of the WSDF as enacted (original fee) that has previously been paid for the size of meter replaced unless exempted pursuant to Section 5-8(d).

[Eff. ; am,] (Auth: HRS 54-33) (Imp: HRS 54-33)

5-6 Building permits. Any applicant for a building permit approved by the County shall be required to apply for separate water service or additional water service based on the Manager's estimate as to the size of service required for the structure unless exceptions pursuant to section 5-8(b) can be applied.

[Eff.; am,](Auth: HRS 54-33) (Imp: HRS 54-33)

5-7 Request for additional meter(s). Additional meter(s) for existing accessory dwellings may be requested at premises presently provided water service and, if granted, shall be subject to one half of the pertinent fee in the schedule.
[Eff.; am,] (Auth: HRS 54-33) (Imp: HRS 54-33)

5-8 Exemptions from the rule.

(a) Any applicant for a building permit for an accessory dwelling shall pay one half of the fee in the schedule for the size meter required to be installed. If the accessory dwelling is later subdivided from the premises, the applicant for subdivision shall pay the balance of the fee in effect at the time of subdivision upon proof of the initial one-half payment and, upon the Manager's request, shall be required to relocate the meter.
(b) Any applicant for a building permit for any structure shall be exempted from paying the fee, upon proof presented, that the structure or the premises on which the structure is located does not require water service from the department's system or that they have already paid the fee.
(c) Any temporary meter shall be exempt from the fee. The deposit made shall be returned upon full compliance with the temporary meter agreement and the return of the meter.
(d) Any application for water service within thirty six months after removal due to delinquency pursuant to rules of the board shall be exempt from the fee.
(e) The board by a two thirds vote of the entire voting membership may waive or modify requirements of this rule when not contrary to the purpose of the rule or the public interest, and when the board finds that:
1. Strict application of the rule would cause an absurd, unfair, or unreasonably harsh result;
2. The applicant's circumstance or condition is unique or exceptional, and the board would grant the same request if made by every similarly situated applicant;
3. In cases of exemption from or reduction of the fee, the resulting financial impact upon the department and future consumers is acceptable to the board.
[Eff., am,] (Auth: HRS 54-33)(Imp: HRS 54-33)

5-9 Payment of water system development fee.

(a) Applicant ready for water service:
The Manager shall approve applications only upon payment of fee or application of credit for available water service or additional water service. Application shall be accepted only

upon payment of the fee or application of credit for water service that is available at that time. Total payment for service will be the fee in effect at the time the meter is installed.

(b) Applicant not ready for water service:

Upon payment of a deposit equal to the fee set forth in section 5-3 by an applicant who, to the Manager's satisfaction, is unable to accept water service immediately, the DOW shall reserve an allocation of service capacity available at that time. Total payment for service will be the fee in effect at the time the meter is installed. The duration of such reservation shall not exceed two years plus two six-month extensions, each for good cause shown and approved by the Manger if water service is still available. The DOW and the applicant shall agree in writing on the amount of any allocation. If within two years, or longer with extension(s), the applicant is not able to accept installation of water service, unless for good cause shown and approved by the Manager, the application and the reservation of the allocation shall expire and the fee paid shall be returned or credit released less five percent 5% which shall be considered as a penalty, and forfeited, to be applied to the WSDF fund to cover administrative costs. Any event, occurrence, or condition not caused by the board which prevents the board from performing its obligations excuses the board from those obligations except to refund the fee plus interest at the rate invested for the time the funds were held by the Board.
[Eff.; am,] (Auth: HRS 54-33) (Imp: HRS 54-33)

5-10 Payment plan. When the fee for owner-occupied residential premises with a 5/8-inch meter exceeds two percent of the premises real property assessed value (including the value of any existing or proposed structures at the time of the owner's application for water service), the owner occupant may request to pay one sixth of the fee upon application and the balance in equal bi-monthly installments over three years. Upon sale of the property, any balance shall be due prior to transferring the meter.
[Eff.; am,] (Auth: HRS 54-33) (Imp: HRS 54-33)

SUBCHAPTER 3
CREDITS AND ACCOUNTS

5-11 Application of credit.
(a) The fee credits shall be attributable to:
(1) source developments;
(2) the construction of transmission pipelines;

(3) the construction of storage tanks.

Schedule of Fee Credits shall be as indicated in Part IV of the Rules

(b) Any applicant who is a successor in interest to a premise shall be required to submit evidence supporting any credit claimed.
(c) Credit shall be applicable only to premises which are served by the source, transmission pipeline, or storage tank which the applicant or the applicant's predecessor in interest has developed or constructed, or has participated in developing or constructing unless otherwise specifically provided for in a prior agreement.
The foregoing shall not apply to governmental agencies.
(d) Any credit in a source, which by prior agreement is measured in gallons, which the applicant or the applicant's predecessor in interest has developed or has participated in developing shall be determined in an amount according to that prior agreement.
(e) For dedicated water system improvements any approved credit activity will be recorded pursuant to 5-12.
[Eff.](Auth: HRS 54-33) (Imp: HRS 54-33)

5-12 Water system development fee account.
(a) The board shall maintain separate accounts for:
(1) Fees collected plus interest at the prevailing County treasury rate;
(2) Advance payments from government agencies for particular classes of persons made by agreement with the board,
(b) For dedicated water system improvements, the Department shall, upon acceptance and by agreement, establish and record a value for the system and any credit activity.
[Eff.](Auth: HRS 54-33) (Imp: HRS 54-33)

SUBCHAPTER 4
UNAUTHORIZED SERVICE

5-13 Conversion of unauthorized service. The water service of any current consumer which provides water to any location not identified in the application for water service shall be considered terminated within 60 days of the enactment of this rule and shall not be reactivated until all recipients of said

Finance Committee
August 23, 2011

Re: Managers' Report 11-49 Financial Planning Analysis and Water Rate Study Rates Explanation/Background of Additional Information

Explanation:
The following is an explanation for the water rate pages numbered 1 - 16 that are attached. SAIC (BRW Beck) has submitted its final break down of cost of service for the various blocks recommendation based on the committee instructions and the proposed four year 11.2 percent per year increase.

The first two pages are proposed increases for General and Agricultural services.

The next two pages are sample bills for various amounts of water.

The fifth and sixth pages show the service charges and consumption charges based on the proposed rates.

The next nine pages are the cost of service study which breaks all meters down to 5/8" equivalents for service costs and determines cost for one average unit of consumption.

The sixteenth page is a summary of the cost of service analysis to get the consumption charge at cost of service per 1000 gallons for the test year 2012.

Background:
To further explain service cost allocation equivalent meters are used to get at the meter and customer service costs per 5/8" meter. Equivalent meter are determined by area ratios as we use in the private fire line charges. These costs are part on fixed customer service charges and costs for maintaining the service lines and meters. The cost per equivalent 5/8" meter is calculated and this unit cost times the equivalent meters for each meter size to get revenues required for each meter size, then we divide these revenues by the average meters, divided by 12 to get monthly meter charge. As noted this is done for fixed costs by adding the meter and customer costs together to get the fixed total monthly service charge cost of service.

To further explain the consumption cost allocation, the unit cost of service for consumption related costs is divided by total usage for the unit cost of service. Then this number, $3.48 in this rate case, is used as a guide for the rate design to determine where to set the blocks. Generally, the first block is lower than Cost of Service. In our case, the first block was slightly higher than cost of service at $3.50. The other block rates take into account the system rate increase. Nothing was done to significantly change the rate relationships between the blocks. In making these changes SAIC had to balance the revenues coming in from the service charges with the consumption charges as well as determining impacts to typical customers at different meter sizes and consumption levels; this may cause some changes to the rates that may not follow the general system rate increase. The goal is to balance the level of rate increases with the cost of service results and also make the rate increases as fair for all customers as possible.

Regarding the hydrant charges and private fire service the approach was changed. The county contra charges are confusing this analysis as they are supposed to represent costs for county services provided to the Department. This charge has been designated to be equal to public fire protection revenues. As a result of this change, costs for public fire protection increased and private fire protection decreased. You will see this in the rates where private fire protection rates are lower than what we had previously.

Another issue that we need to consider is the timing of the subsequent rate increases for FY 2013. Currently we have rates going up in January and then again in July. Looking back on this I don't know that this is the best decision. If we change the implementation date all to January like you had last time, there will be rate impacts as revenues will be collected later. I apologize for this oversight on my part. The revenue requirement analysis is showing 6 months of implementation in FY 2012 and 12 months for subsequent years – I should have brought this to your attention earlier. So I need to know how you want to handle this and then if we need to change the revenue requirement, we can adjust that.

Respectfully submitted,

David R. Craddick, PE
Manager and Chief Engineer

MANAGER'S REPORT NO. 11-49

Re: Rate Proposal

The R.W. Beck Report is submitted for your review and action. At this point the Report is in Draft format and subject to change. One matter that can be decided is the methodology used to prepare the report. Listed below are some of the issues affecting the rates:

1. Debt Service Coverage
2. Cost of Service
3. System Replacement Needs
4. User Pays Principle
5. Amount of Working Capital
6. Leak Rebates

With agreement on these issues the process to meet these requirements and determination of the rates are fairly rote.

1. A conservative debt service coverage has been suggested during previous rates studies that good bond ratings follow. In this regard there are few if any AAA and AA rated utilities that have debt coverage ratios less than 1.50. One and one half is the debt coverage suggested by R.W. Beck in the previous rate study and what we told R.W. Beck to strive for in the current study. **It is our suggestion to not try and meet 1.5 in the first year and build to it over the five years.** This will avoid the jump you see in the first year.

2. Cost of Service with guaranteed rate of return on Plant in Place is used by the PUC for most rate determinations. DOW is not a for-profit entity and as such does no try to get any rate of return on its plant in place. Agricultural rates and Private Fire Lines are not meeting cost of service requirements. **It is our suggestion to bring the private fire lines up to cost of service levels.** This will result in about a three percent lower rate or 10% of the total increase in the draft report.

3. We still have over $500 million in 2020 Plan Projects to complete. As the BAB projects are completed most water systems should not be under restrictions. There is the possibility that one developer could take a disproportional share to the available water and a side Rule may be needed to prevent this from happening. In the rate study we asked the consultant to try and get us back to a point where we are making our debt payments and we still have sufficient cash to continue installing about seven to ten miles of lines per year and still have a little for our tanks and pumps. **It is our suggestion to get the cash funded replacement level up to ten million per year.** The reason for this suggestion is that our current debt ratio is about 0.37. Exceeding this number by much without a very strong economy results in reduced bond ratings. We will possibly need to look at improvement district methodologies for generating more funding than the proposed amount if we feel increasing debt is prudent.

4. The user pay principle requires the user of the service to be the one carrying the financial impact. Both our 2005 Bond and some EPA financed projects were using rate payer funds to

cover system expansion debt. These discrepancies have been corrected. The other issue is the labor costs related to approving plans. This is about $0.5 million per year. The 2010 Bonds are about half for system replacement projects. There is some sort of adjustment for facilities being built to meet system deficits. What caused this is allowing customers to have a guarantee of water without the funds provided to build the needed infrastructure. To pay for expansion related projects the FRC funds should be used but typically rating agencies do not look at impact fees as operation revenue. There are a couple of things we can do.

A. Transfer the debt to the FRC fund
B. Transfer funding from the FRC to the General Fund, and reduce the debt coverage

It is our recommendation to just move a sum of money over each budget year to cover the debt service and labor costs and reduce the debt coverage. We make this recommendation because moving a portion the bond funds to the FRC fund may result in a flurry of resolutions to make it legally possible to do this once the bonds have been issued.

5. The working capital reserve is also a factor in the bond rating of an agency. Typically a well run utility will look at the worst case scenario where some disaster hits preventing normal collection of revenue. In our case the hurricanes in 1982 and 1992 give the best example and the consultants are recommending four months of revenue. **It is our recommendation to keep a four month operating cash reserve.** We make this recommendation to maintain our bond rating.

6. Leak rebates are in excess of $0.5 million per year. This amounts to about a 2.5% rate increase which can be avoided by making people responsible for their own lines and not make the other ratepayers cover this expense. **It is our recommendation to eliminate the leak rebate and provide a leak avoidance service.** We make this recommendation as it is not good policy to increase rates while allowing water wastage to continue.

If we can work on these issues and come to a consensus the rates should be very straight forward. Thank you for your attention to this matter.

Respectfully submitted,

David R. Craddick, P.E.
Manager and Chief Engineer

DRC/cab
Mgrrp-RW Beck-Rate Proposal (1-20-11):cab

February 10, 2011

11 FEB 10 P12:25

DEPT. OF WATER
COUNTY OF KAUAI

RW BECK
An SAIC Company

Mr. David Craddick
Manager & Chief Engineer
Department of Water
County of Kauai
P.O. Box 1706
Lihue, Hawaii 96766

Subject: **Update to Preliminary Results – 2011 Financial Management Planning and Water Rate Analysis**

Dear David:

This letter summarizes additional updates to the preliminary results of our revenue requirements analysis for the subject project. These results are different than the results shared with you in mid-January due to changes in certain capital funding assumptions, level of FRC revenues and the inclusion of leak rebate revenues. A more detailed discussion follows.

Updated Revenue Requirements Preliminary Results

The following table summarizes the **updated** preliminary results of the revenue requirements analysis. These rate adjustments assume a target debt service coverage of 1.50 and 90 days of O&M for a reserve balance like the previous analysis. All other assumptions, except those described below remained the same.

Full FRC Debt Service Obligations Met				
FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
8.4%	8.4%	0.0%	0.0%	0.0%

The key driver in this scenario is capital funding, specifically the level of cash funded capital and the level of FRC revenues. Cash funded capital in FYs 2010 and 2011 were updated to reflect the most current numbers. The level of FRC revenues was increased to reflect the minimum debt obligation payback for BAB funds used for FRC projects. Achieving this level of FRC revenue increase would require a roughly *five-fold rate increase for FRCs* assuming current growth assumptions.

Minimum FRC Debt Service Obligations Met				
FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
10.0%	11.2%	4.3%	1.3%	1.8%

The table above illustrates what the rate increases would be if only the minimum or available FRC debt obligations were met. This assumes a 30 percent increase in FRC revenues like the mid-January scenario.

Under both of these scenarios, debt service coverage and reserve targets are met.

1001 FOURTH AVENUE, SUITE 2500 SEATTLE, WA 98154-1004 (P) 206.695.4700 (F) 206.695.4701

Updated Revenue Requirements Assumptions

The following reflects changes in the assumptions used in the development of the updated revenue requirements analysis:

1. Revenue adjustments – we included approximately $400,000 per year in leak rebate revenues that would otherwise be returned to customers. No corresponding adjustments were made for leak insurance program costs; this needs to be added.
2. Debt service – new SRF debt is assumed for FYs 2013-2016 to pay for 50% of capital during this time period. The other 50% is cash-funded.
3. FRC funds – as discussed, FRC revenues are assumed to increase almost five-fold to meet the minimum obligation for BAB debt service. If additional FRC related projects are planned beyond FY 2012, additional FRC revenues will need to be raised to continue to meet this obligation.
4. Cash funded capital – these values were updated for FYs 2010 and 2011 and materially reduced the level of cash available for ending balances and capital in FY 2012.

Next Steps

After the Board has provided guidance, let us discuss how you would like to finalize these results.

As a budget update, we are nearing our allocated budget. As we discussed a couple weeks ago, if we can finalize the revenue requirements quickly, move on to cost of service and update final rates on a generally across the board basis, we can stay within our allocated budget. Additional scenarios will cause overruns to our budget.

Sincerely,

R. W. BECK, INC.

Ann Hajnosz

Ann Miyahira Hajnosz, P. E.
Project Manager

Enclosure
c: A. Baker, R. W. Beck

December 14, 2010

DRAFT

RW BECK
An SAIC Company

Mr. David Craddick
Manager & Chief Engineer
Department of Water
County of Kauai
P.O. Box 1706
Lihue, Hawaii 96766

Subject: **Preliminary Results – 2011 Financial Management Planning and Water Rate Analysis**

Dear David:

This letter summarizes the preliminary results of our revenue requirements analysis for the subject project. This letter also summarizes the key assumptions used in the analysis; changes to these assumptions could materially impact the final results. We are also attaching a printout of the current model. There are a number of areas that we need your input in and those are documented in this letter. I am planning on calling you tomorrow at 10 am to discuss this.

Revenue Requirements Draft Results

The following table summarizes the preliminary results of the revenue requirements analysis *to date*. In addition to the financing assumptions for the capital program, a key driver for these rate increases is maintaining a 1.50 debt service coverage in each year. In FY 2012, approximately $3.35 million is needed to meet the debt service coverage requirement.

In subsequent years, the rate increases are needed to offset significant increases in debt service, e.g. 27 percent in FY 2013 and 21 percent in FY 2014. In the last two years of the time period, FYs 2015-2016 the debt service levels off and so do rate increases.

FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
16.7%	1.6%	12.3%	0.2%	1.7%

Revenue Requirements Analysis

The following key assumptions were used in the development of the revenue requirements analysis:

1. Customer and Sales Growth Rates – annual average increases in customers and sales of 1.10 percent through 2016; Hawaii State CEDS 2010 Population Growth is being used to project customer and sales growth.
2. CIP escalator – Hawaii construction costs are estimated to increase at 1 percent per year through FY 2016. However, at this point we have not escalated the capital costs you provided as we need to confirm with you what base year these costs are for. Any changes to these costs will impact the final rate increase results.

1001 FOURTH AVENUE, SUITE 2500 SEATTLE, WA 98154-1001 (T) 206.695.4200 (F) 206.695.4701

3. General escalator – the 4th quarter DBEDT economic outlook for Hawaii indicates inflation will be average 1 percent over the next five years.
4. CIP Carry Forward – currently no annual carry forward is assumed. We need to discuss with you whether this is a reasonable assumption.
5. Long term debt assumptions – we are not assuming any more general obligation (GO) bond debt over the $60 million sold this past year (2011).
6. Debt service – as mentioned above, no additional debt (GO bonds or SRF loans) are assumed over what DOW has provided to us. Debt service increases in FY 2013 as principal payments on the $60 million bond begin.
7. SRF Loans – we are not assuming any additional SRF loan proceeds for the FY 2012-FY 2016 time period.
8. FRC funds – we need to discuss with you how much we should be using from this funding source. We have added a one-time escalator of 30 percent to reflect some "to be determined" change in the FRC rate in FY 2012. The subsequent years' revenues are held constant at the FY 2012 levels. Also, since GO bond funds are being used to finance growth-related capital, we should discuss how to model transfers from the FRC fund to pay back the General Fund (where the debt service for the GO bonds is being paid from). Currently, FRC revenues are being used to fund future capital.
9. Capital costs charged to operations – we need to resolve questions on the FY 2011 data.
10. Cash reserves – we have established a target of 90 days of previous year's O&M. This equates to about $4.3 million on average per year over the study period. At the beginning of the study period (FY 2012), the beginning cash balance in the revenue fund is about $14 million. This balance increases slightly in FY 2013 but then decreases over the next few years as more capital is cash-funded in the later years. At the end of the time period, the ending balance is projected to be close to the target balance of $4.6 million.

Next Steps

Once you and your staff have had a chance to review these preliminary results, let's discuss next steps:

1. Discuss the appropriateness of the assumptions noted above.
2. Discuss areas of the model that need clarification as indicated by yellow highlighting on the attached printout of the model.
3. Finalize revenue requirements analysis.
4. Finalize cost of service analysis.
5. Present financial planning workshop to the Board via conference call and receive guidance on rate design.
6. Finalize rate design analysis.

Look forward to talking with you tomorrow.

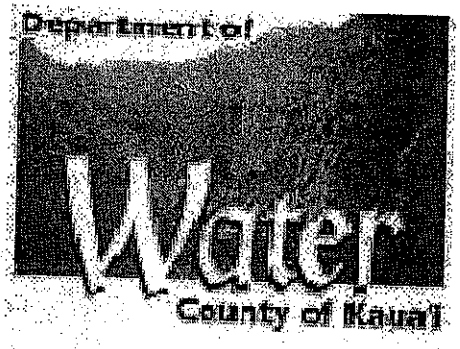
Sincerely,

R. W. BECK, INC.

Ann Hajnosz

Ann Miyahira Hajnosz, P. E.
Project Manager

Enclosure
c: A. Baker, R. W. Beck



Department of Water
County of Kauai
Financial Planning Analysis and Water Rate Study
Revenue Requirements and Cost-of-Service Analysis
Fiscal Years
2008 - 2016

R·W·BECK

Model Updated by R. W. Beck, Inc. in 2010
Kauai County DOW Run Date: December 14, 2010

Copyright 2010, R. W. Beck, Inc.
All Rights Reserved

Table 1
County of Kauai
Department of Water
Financial Planning Analysis and Water Rate Study
Assumptions and General Parameters

Rounding	-2
Budget Year	2011
Operating Expenses/Income	
General Inflation (1)	2.0%
Minimum Debt Service Coverage	1.50

Customer Growth Rate (2)	
General Service	1.10%
Agricultural	1.10%
Sales Growth Rate (2)	
General Service	1.10%
Agricultural	1.10%

Capital Funding (3)	
CIP Escalator	1.0%
CIP Carry Forward	0.0%
Long-Term Debt (Facilities)	
Interest Rate (4)	4.5%
Repayment Period (Years)	25
Bond Financing Expense	0.67%
State Revolving Loan Funds	
Interest Rate + Issuance Expense	4.00%
Repayment Period (Years)	20
Net FRC Escalator	30.0%

(1) Based on DBEDT projections for inflation - "Outlook for Economy, 4th Quarter 2010".
(2) Based on Hawaii Statewide CEDS 2010, page 10.
(3) Based on article on Hawaii construction costs - "Construction costs stable, November 2010".
(4) Based on recent water bond sale completed for GWA (5.6%).

DRAFT

Table 2
County of Kauai
Department of Water
Financial Planning Analysis and Water Rate Study
Historical and Projected Customer Accounts, Water Consumption and Total Revenues Under Existing Rates
Fiscal Years Ending June 30

	Customer Accounts	Historical (1) 2008	2009	2010	2008-2010 Annual Growth	Estimated (2) 2011	Budget 2012	Projected (3) 2013	2014	2015	2016	2011-2016 Annual Growth
	General Use											
	5/8"	18,872	18,676	18,553	-0.9%	18,757	18,9[illegible]	19,172	19,383	19,596	19,814	1.1%
	3/4"	86	85	83	-2.1%	83	[illegible]	85	86	87	90	1.6%
	1"	201	198	187	-3.7%	189	[illegible]91	193	195	197	200	1.1%
	1 1/2"	200	199	197	-0.8%	199	[illegible]	203	205	207	210	1.1%
	2"	170	174	160	-3.1%	161	16[illegible]	165	167	169	171	1.2%
	3"	47	47	51	3.7%	51	52	53	54	55	56	1.9%
	4"	23	22	15	-19.2%	15	15	15	15	15	15	0.0%
	6"	20	20	10	-29.3%	10	10	10	10	10	10	0.0%
	8"	15	15	3	-55.3%	3	3	3	3	3	3	0.0%
	Total General Use	19,634	19,436	19,257	-1.0%	19,468	19,682	19,899	20,118	20,339	20,569	1.1%
	Agricultural											
	5/8"	377	375	394	2.2%	398	402	406	410	416	422	1.2%
	3/4"	2	5	5	58.1%	5	5	5	5	5	5	0.0%
	1"	13	11	12	-3.9%	12	12	12	12	12	12	0.0%
	1 1/2"	3	3	3	0.0%	[illegible]	3	3	3	3	3	0.0%
	2"	2	1	1	-29.3%	[illegible]	1	1	1	1	1	0.0%
	Total Agricultural	397	395	41[illegible]	2.2%	419	423	427	431	437	443	1.1%
	Private Fire Protection											
	2"	35	57	57	[illegible]7.6%	58	59	60	61	62	63	1.7%
	3"	2	5	5	58.1%	5	5	5	5	5	5	0.0%
	4"	12	22	[illegible]	35.4%	22	22	22	22	22	22	0.0%
	6"	18	[illegible]	[illegible]	56.3%	44	44	44	44	44	44	0.0%
	8"	27	[illegible]	[illegible]	36.1%	51	52	53	54	55	56	1.9%
	Total Private Fire Protection	94	177	178	37.6%	180	182	184	186	188	190	1.1%
	Total System											
	5/8"	19,249	[illegible]	[illegible]47	-0.8%	19,155	19,365	19,578	19,793	20,012	20,236	1.1%
	3/4"	88	[illegible]	88	-0.3%	88	89	90	91	92	95	1.5%
	1"	214	209	199	-3.7%	201	203	205	207	209	212	1.1%
	1 1/2"	203	202	200	-0.7%	202	204	206	208	210	213	1.1%
	2"	207	232	218	2.5%	220	223	226	229	232	235	1.3%
	3"	49	52	56	6.4%	56	57	58	59	60	61	1.7%
	4"	35	44	37	2.8%	37	37	37	37	37	37	0.0%
	6"	38	64	54	19.2%	54	54	54	54	54	54	0.0%
	8"	42	64	53	12.3%	54	55	56	57	58	59	1.8%
	Total System	20,125	20,008	19,850	-0.7%	20,067	20,287	20,510	20,735	20,964	21,202	1.1%

DRAFT

Table 2
County of Kauai
Department of Water
Financial Planning Analysis and Water Rate Study
Historical and Projected Customer Accounts, Water Consumption and Total Revenues Under Existing Rates
Fiscal Years Ending June 30

		Historical (1)			2008-2010 Annual	Estimated (2)	Projected (3)					2011-2016 Annual
Water Consumption (Kgal)		2008	2009	2010	Growth	2011	2012	2013	2014	2015	2016	Growth
General Use												
	5/8"	2,377,453	2,280,112	2,296,357	-1.7%	2,321,600	2,347,100	2,372,900	2,399,000	2,425,400	2,452,100	1.10%
	3/4"	46,959	47,711	47,418	0.5%	47,900	48,400	48,900	49,400	49,900	50,400	1.02%
	1"	120,573	103,410	103,914	-7.2%	105,100	106,200	107,500	108,700	109,900	111,100	1.12%
	1 1/2"	305,307	318,055	319,126	2.2%	322,600	326,000	329,700	333,300	337,000	340,700	1.10%
	2"	398,986	393,945	395,124	-0.5%	399,500	403,900	408,300	412,800	417,300	421,900	1.10%
	3"	387,897	373,028	392,208	0.6%	396,500	400,900	405,300	409,800	414,300	418,900	1.11%
	4"	257,512	224,304	226,233	-6.3%	228,700	231,200	233,700	236,300	238,900	241,500	1.10%
	6"	546,853	427,541	431,332	-11.2%	436,100	440,900	445,700	450,600	455,600	460,600	1.10%
	8"	221,774	62,439	60,534	-47.8%	61,200	61,900	62,600	63,300	64,000	64,700	1.12%
Total General Use		4,663,315	4,230,546	4,272,246	-4.3%	4,319,200	4,366,700	4,414,600	4,463,200	4,512,300	4,561,900	1.10%
Agricultural												
	5/8"	177,000	145,272	163,620	-3.9%	165,400	167,200	169,000	170,900	172,800	174,700	1.10%
	3/4"	6,116	5,719	5,563	-4.6%	5,600	5,700	5,800	5,900	6,000	6,100	1.73%
	1"	15,796	10,814	10,262	-19.4%	10,400	10,500	10,600	10,700	10,800	10,900	0.94%
	1 1/2"	4,234	3,328	9,533	50.0%	9,600	9,700	9,800	9,900	10,000	10,100	1.02%
	2"	1,016	1,679	230	-52.5%	200	200	200	200	200	200	0.00%
Total Agricultural		204,163	166,812	189,207	-3.7%	191,200	193,300	195,400	197,600	199,800	202,000	1.11%
Total System												
	5/8"	2,554,453	2,425,384	2,460,977	-1.9%	2,487,000	2,514,300	2,541,900	2,569,900	2,598,200	2,626,800	1.10%
	3/4"	53,075	53,430	52,981	-0.1%	53,500	54,100	54,700	55,300	55,900	56,500	1.10%
	1"	136,369	114,224	114,176	-8.4%	115,500	116,800	118,100	119,400	120,700	122,000	1.10%
	1 1/2"	309,541	321,383	328,659	3.0%	332,200	335,800	339,500	343,200	347,000	350,800	1.10%
	2"	400,002	395,624	395,354	-0.6%	399,700	404,100	408,500	413,000	417,500	422,100	1.10%
	3"	387,897	373,028	392,208	0.6%	396,500	400,900	405,300	409,800	414,300	418,900	1.11%
	4"	257,512	224,304	226,233	-6.3%	228,700	231,200	233,700	236,300	238,900	241,500	1.10%
	6"	546,853	427,541	431,332	-11.2%	436,100	440,900	445,700	450,600	455,600	460,600	1.10%
	8"	221,774	62,439	60,534	-47.8%	61,200	61,900	62,600	63,300	64,000	64,700	1.12%
Total System		4,867,478	4,397,358	4,466,453	-4.3%	4,510,400	4,560,000	4,610,000	4,660,800	4,712,100	4,763,900	1.10%

DRAFT

Notes:
(1) Per 'Rate Study Tables with Data DRC PG' provided by Kauai Board of Water Supply.
(2) Budgeted numbers per FYE 2011 Annual Operating and Capital Improvement Budget.
(3) Based on previous year's data times projected growth rate. (See Table 1 for details).

Table 3
County of Kauai
Department of Water
Financial Planning Analysis and Water Rate Study
Historical, Budgeted, and Projected Revenues Under Existing Rates
Fiscal Years Ending June 30

		Actual (1)			2008-2010 Annual	Estimated (2)	Budget	Projected (3)			
	Service Charge Revenues	2008	2009	2010	Growth	2011	2012	2013	2014	2015	2016
	5/8"	$2,151,400	$2,241,100	$2,226,300	1.7%	$2,250,840	$2,275,560	$2,300,640	$2,325,960	$2,351,520	$2,377,680
	3/4"	13,400	14,300	13,900	1.8%	13,944	14,112	14,280	14,448	14,616	15,120
	1"	45,800	47,500	44,800	-1.1%	45,360	45,840	46,320	46,800	47,280	48,000
	1 1/2"	90,000	95,500	94,600	2.5%	95,520	96,480	97,440	98,400	99,360	100,800
	2"	117,300	125,300	114,800	-1.1%	115,920	117,360	118,800	120,240	121,680	123,120
	3"	62,000	67,700	72,700	8.3%	73,440	74,880	76,320	77,760	79,200	80,640
	4"	49,000	50,200	34,200	-16.5%	34,200	34,200	34,200	34,200	34,200	34,200
	6"	82,200	86,400	43,200	-27.5%	43,200	43,200	43,200	43,200	43,200	43,200
	8"	99,000	104,400	20,900	-54.1%	20,880	20,880	20,880	20,880	20,880	20,880
	Total General Use	$2,710,100	$2,832,400	$2,665,400	-0.8%	$2,693,304	$2,723,552	$2,752,080	$2,781,888	$2,811,936	$2,843,640
	Agricultural										
	5/8"	$61,100	$67,500	$70,900	7.7%	$71,600	$72,400	$73,100	$73,800	$74,900	$76,000
	3/4"	400	1,200	1,200	73.2%	1,200	1,200	1,200	1,200	1,200	1,200	
	1"	4,200	4,000	4,300	1.2%	4,300	4,300	4,300	4,300	4,300	4,300
	1 1/2"	1,800	2,000	2,000	5.4%	2,000	2,000	2,000	2,000	2,000	2,000
	2"	1,900	1,100	1,100	-23.9%	1,100	1,100	1,100	1,100	1,100	1,100
	Total Agricultural	$69,400	$75,800	$79,500	7.0%	$80,200	$81,000	$81,700	$82,400	$83,500	$84,600
	Private Fire Protection										
	2"	$3,800	$6,800	$7,200	40.5%	$7,700	$7,800	$7,900	$8,100	$8,200	$8,300
	3"	400	1,100	1,200	73.2%	1,200	1,200	1,200	1,200	1,200	1,200
	4"	3,700	8,100	9,200	57.7%	9,200	9,200	9,200	9,200	9,200	9,200
	6"	13,000	35,600	39,600	74.5%	39,600	39,600	39,600	39,600	39,600	39,600
	8"	35,600	72,000	77,000	30.8%	82,600	84,200	85,900	87,500	89,100	90,700
	Total Fire Protection	$56,500	$123,600	$138,500	56.6%	$140,300	$142,000	$143,800	$145,600	$147,300	$149,000
	Total System										
	5/8"	$2,212,400	$2,308,600	$2,297,200	1.9%	$2,322,440	$2,347,960	$2,373,740	$2,399,760	$2,426,420	$2,453,680
	3/4"	13,800	15,500	15,100	4.6%	15,144	15,312	15,480	15,648	15,816	16,320
	1"	50,000	51,500	49,100	-0.9%	49,660	50,140	50,620	51,100	51,580	52,300
	1 1/2"	91,800	97,500	96,600	2.6%	97,520	98,480	99,440	100,400	101,360	102,800
	2"	123,000	133,200	123,400	0.2%	124,720	126,260	127,800	129,440	130,980	132,520
	3"	62,400	68,800	73,900	8.8%	74,640	76,080	77,520	78,960	80,400	81,840
	4"	52,700	50,200	43,400	-9.3%	43,400	43,400	43,400	43,400	43,400	43,400
	6"	95,200	122,000	82,800	-6.7%	82,800	82,800	82,800	82,800	82,800	82,800
	8"	134,800	176,400	101,900	-13.0%	103,480	105,080	106,780	108,380	109,980	111,580
	Total System	$2,836,000	$3,031,800	$2,883,400	0.8%	$2,913,804	$2,945,512	$2,977,580	$3,009,888	$3,042,736	$3,077,240
	Adjusted Revenues (4)					$3,046,100	$3,079,200	$3,112,800	$3,146,500	$3,180,900	$3,217,000
	Actual (5)	$2,769,917	$3,009,416	$3,087,800		$3,046,100					
	% Difference	-2.33%	-0.74%	7.09%		4.54%					
	Actual HBoW	$2,483,438	$2,915,100	$2,939,842							

DRAFT

Table 3
County of Kauai
Department of Water
Financial Planning Analysis and Water Rate Study
Historical, Budgeted, and Projected Revenues Under Existing Rates
Fiscal Years Ending June 30

		Actual (1)			2008-2010 Annual	Budget (2)		Projected (3)			
48	Usage Charge Revenues	2008	2009	2010	Growth	2011	2012	2013	2014	2015	2016
49	General Use										
50	5/8"	$7,199,400	$7,553,700	$8,355,500	7.7%	$8,738,000	$8,834,000	$8,931,100	$9,029,400	$9,128,700	$9,229,200
51	3/4"	152,300	169,600	185,300	10.3%	$200,600	$202,700	$204,800	$206,900	$209,000	$211,100
52	1"	344,200	322,300	355,600	1.6%	$356,900	$361,000	$365,100	$369,200	$373,300	$377,300
53	1 1/2"	853,700	970,500	1,069,200	11.9%	$1,191,100	$1,204,000	$1,217,300	$1,230,600	$1,244,200	$1,257,900
54	2"	1,081,600	1,164,000	1,281,100	8.8%	$1,416,700	$1,432,300	$1,447,900	$1,463,900	$1,479,800	$1,496,200
55	3"	1,005,600	1,052,800	1,215,600	9.9%	$1,391,500	$1,406,300	$1,421,700	$1,437,500	$1,453,300	$1,469,400
56	4"	661,300	626,900	694,600	2.5%	$701,100	$708,700	$716,400	$724,400	$732,300	$740,300
57	6"	1,471,400	1,253,000	1,384,900	-3.0%	$1,593,300	$1,610,900	$1,628,400	$1,646,300	$1,664,800	$1,682,800
58	8"	565,500	173,300	184,600	-42.9%	$205,700	$208,100	$210,400	$212,800	$215,100	$217,500
59	General Use Usage Charge	$13,335,000	$13,286,100	$14,726,400	5.1%	$15,794,200	$15,965,000	$16,143,100	$16,321,000	$16,500,300	$16,681,700
60											
61	Minimum Usage Charge (6)										
62	5/8"	$0	$0	$0		$720,269	$728,179	$736,205	$744,307	$752,486	$760,858
63	3/4"	$0	$0	$0		$7,968	$8,064	$8,160	$8,256	$8,352	$8,640
64	1"	$0	$0	$0		$25,402	$25,670	$25,939	$26,208	$26,477	$26,880
65	1 1/2"	$0	$0	$0		$76,416	$77,184	$77,952	$78,720	$79,488	$80,640
66	2"	$0	$0	$0		$77,280	$78,240	$79,200	$80,160	$81,120	$82,080
67	3"	$0	$0	$0		$97,920	$99,840	$101,760	$103,680	$105,600	$107,520
68	4"	$0	$0	$0		$100,800	$100,800	$100,800	$100,800	$100,800	$100,800
69	6"	$0	$0	$0		$86,400	$86,400	$86,400	$86,400	$86,400	$86,400
70	8"	$0	$0	$0		$28,800	$28,800	$28,800	$28,800	$28,800	$28,800
71	General Use Minimum Usage	$0	$0	$0		$1,221,255	$1,233,177	$1,245,216	$1,257,331	$1,269,523	$1,282,618
72											
73	Total General Use	$13,335,000	$13,286,100	$14,726,400	5.1%	$17,015,455	$17,201,177	$17,388,316	$17,578,331	$17,769,823	$17,964,318
74											
75	Actual (5)	$12,943,274	$13,237,518	$15,050,000		15,598,300					
76	% Difference	3.03%		0.16%							
77	Actual BoWS Historical (7)	$13,005,585	$13,757,500	$15,000,200							
78	Actual HBoW	$9,378,000	$14,496,761	$15,718,000							
79											
80	Agricultural										
81	5/8"	$221,300	$199,700	$249,500	6.2%	$264,600	$267,500	$270,400	$273,400	$276,500	$279,500
82	3/4"	7,600	7,900	8,500	5.8%	9,000	9,100	9,300	9,400	9,600	9,800
83	1"	19,700	14,800	15,600	-11.0%	16,600	16,800	17,000	17,100	17,300	17,400
84	1 1/2"	5,300	8,800	14,500	65.4%	15,400	15,500	15,700	15,800	16,000	16,200
85	2"	1,300	2,300	400	-44.5%	300	300	300	300	300	300
86	Total Agricultural	$255,200	$229,400	$288,500	6.3%	$305,900	$309,200	$312,700	$316,000	$319,700	$323,200
87											
88											
89	Total System										
90	5/8"	$7,420,700	$7,753,400	$8,605,000	7.7%	$9,722,869	$9,829,679	$9,937,705	$10,047,107	$10,157,686	$10,269,558
91	3/4"	159,900	177,500	193,800	10.1%	217,568	219,864	222,260	224,556	226,952	229,540
92	1"	363,900	337,200	371,200	1.0%	398,902	403,470	408,039	412,508	417,077	421,580
93	1 1/2"	859,000	975,100	1,083,700	12.3%	1,282,916	1,296,684	1,310,952	1,325,120	1,339,688	1,354,740
94	2"	1,082,900	1,166,300	1,281,500	8.8%	1,494,280	1,510,840	1,527,400	1,544,360	1,561,220	1,578,580
95	3"	1,005,600	1,052,800	1,215,600	9.9%	1,488,720	1,506,140	1,523,460	1,541,180	1,558,900	1,576,920
96	4"	661,300	626,900	694,600	2.5%	801,900	809,500	817,200	825,200	833,100	841,100
97	6"	1,471,400	1,253,000	1,384,900	-3.0%	1,679,700	1,697,300	1,714,800	1,732,700	1,751,000	1,769,200
98	8"	565,500	173,300	184,600	-42.9%	234,500	238,900	239,200	241,600	243,900	246,300
99	Total	$13,590,200	$13,515,500	$15,014,900	5.1%	$17,321,355	$17,510,377	$17,701,016	$17,894,331	$18,089,523	$18,287,518

DRAFT

Table 3
County of Kauai
Department of Water
Financial Planning Analysis and Water Rate Study
Historical, Budgeted, and Projected Revenues Under Existing Rates
Fiscal Years Ending June 30

	Usage Charge Revenues	Actual (1) 2008	2009	2010	2008-2010 Annual Growth	Budget (2) 2011	Projected (3) 2012	2013	2014	2015	2016
100											
101	Actual (5)	$13,125,947	$13,433,062			$16,314,601					
102	% Difference	3.54%	0.61%								
103	Actual HBoW	$9,585,599	$14,800,175	$16,073,894							
104	Adjusted Revenues (4)					$16,800,000	$16,983,300	$17,168,200	$17,355,700	$17,545,000	$17,737,100
105											
106	Total Water Sales Revenues	$16,426,200	$16,547,300	$17,898,300	4.4%	$20,236,[illegible]	$20,455,889	$20,678,596	$20,904,219	$21,132,259	$21,364,758
107											
108	Actual (5)	$15,993,813	$15,770,435	$17,360,111							
109	% Difference	2.70%	4.93%	3.10%							
110											
111	Total Adjusted Water Sales Revenues					$19,846,100	$20,062,500	$20,281,000	$20,502,200	$20,725,900	$20,954,100
112											
113					2008-2010						
114	Other Revenues	Actual (5) 2008	2009	2010	Annual Growth	Budget (6) 2011	Projected (8) 2012	2013	2014	2015	2016
115	Miscellaneous Receipts	$116,649	$175,333	$149,855	13.4%	[illegible]112,000	$112,000	$112,000	$112,000	$112,000	$112,000
116	Interest Earned (9)	817,557	562,949	275,535	[illegible]%	[illegible]0,000	260,000	260,000	260,000	260,000	260,000
117	Fire Hydrant Service Charge	736,888	817,839	925,133	12.0%	8[illegible]500	932,257	943,151	954,175	965,330	976,619
118	Cost of Power Adjustment (10)	1,007,308	1,325,366	1,470,700	20.8%	1,351,100	1,500,000	1,600,000	1,700,000	1,700,000	1,700,000
119	Build Am Bond Subsidy	0	0	0	[illegible]%	[illegible]871,800	$ 860,000	$ 850,000	$ 840,000	$ 830,000	$ 820,000
120	Other	107,354	608,262	[illegible]140	[illegible]%	2,500,000	0	0	0	0	0
121	Other - SRF Loan	488,549	59,081	[illegible],713,[illegible]	44[illegible]%	10,315,542	0	0	0	0	0
122	Total	$3,274,276	$3,548,830	$17,561,[illegible]	131[illegible]%	$16,243,942	$3,664,257	$3,765,151	$3,866,175	$3,867,330	$3,868,619
123											
124	**Total Revenues**										
125	Service Charge Revenue	$2,769,917	$3,009,416	$3,[illegible]87,800	[illegible]%	$3,046,100	$3,079,200	$3,112,800	$3,146,500	$3,180,900	$3,217,000
126	Usage Charge	13,223,896	13,433,062	[illegible]272,311	3.9%	16,314,601	16,983,300	17,168,200	17,355,700	17,545,000	17,737,100
127	Total Water Sales Revenues	$15,993,813	$[illegible]	$[illegible]60,111	4.2%	$19,360,701	$20,062,500	$20,281,000	$20,502,200	$20,725,900	$20,954,100
128											
129	Other Revenue	3,274,[illegible]	3,548,830	17,561,[illegible]37	131.6%	16,243,942	3,664,257	3,765,151	3,866,175	3,867,330	3,868,619
130	Total Revenue	$19,268,[illegible]	$19,319,265	$34,921,548	34.6%	$35,604,643	$23,726,757	$24,046,151	$24,368,375	$24,593,230	$24,822,719

Notes:
(1) Calculated FY 2008 - FY 2010 revenues based on existing rates using customer and consumption data based on Department of Water Historical Budgetary Operating Results Fiscal Year 2000-2004 and Honolulu BWS provided bill frequency data. See Table [illegible] for details.
(2,3) See Table 2 for projected customer accounts and consumption.
(4) Budget and Projected revenues include an adjustment factor based on FY 2010 actuals versus calculated revenues.
(5) Per 'Rate Study Tables with Data DRC PG' provided by Kauai Board of Water Supply.
(6) The rate structure was revised in FY2011 to a 4-block rate, with a minimum usage charge of 1Kgal/month for 5/8" meters, and increasing up to 250kGal/month for 8" meters.
(7) Actual revenues per Department of Water Historical Budgetary Operating Results Fiscal Year 2008, FYE 2011 Budget spreadsheets actual results for FY 2009, estimated results for FY 2010.
(8) Other revenues for FY 2011 based on DOW Annual Operating and Capital Improvement Budget, Revenues for FY 2012 and beyond are projected to remain constant at FY 2011 levels.
(9) Projected interest income based on approximately 2% of the Water Utility Fund Beginning of Year Balance. See Table D for details.
(10) Projected Consumption for FY 10-11 of 4,358,500, gallons @ Cost of Power adjustment rate of $0.31 per 1,000 gallons

DRAFT

Table 4
County of Kauai
Department of Water
Financial Planning Analysis and Water Rate Study
Rates
Fiscal Years Ending June 30

General Rates
($/month)

		Historic (1)				Projected (2)					
		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
1	**Usage Charges**										
2	1st Block	$2.35	$2.55	$2.78	$3.05	$3.20	$3.20	$3.20	$3.20	$3.20	$3.20
3	2nd Block	$2.90	$3.25	$3.55	$3.85	$4.00	$4.00	$4.00	$4.00	$4.00	$4.00
4	3rd Block	$4.15	$4.65	$5.15	$5.70	$6.00	$6.00	$6.00	$6.00	$6.00	$6.00
5	4th Block					$6.25	$6.25	$6.25	$6.25	$6.25	$6.25
6	Note: Historic rates per Kauai Board of Water Supply General Fee Schedule. Rate changes are effective January 1, so they are averaged to match Fiscal Year.										
7											
8											
9	**Service Charge**	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
10	5/8"	$9.00	$9.50	$10.00	$10.00	$10.00	$10.00	$10.00	$10.00	$10.00	$10.00
11	3/4"	$12.00	$13.00	$14.00	$14.00	$14.00	$14.00	$14.00	$14.00	$14.00	$14.00
12	1"	$18.00	$19.00	$20.00	$20.00	$20.00	$20.00	$20.00	$20.00	$20.00	$20.00
13	1 1/2"	$35.00	$37.50	$40.00	$40.00	$40.00	$40.00	$40.00	$40.00	$40.00	$40.00
14	2"	$55.00	$57.50	$60.00	$60.00	$60.00	$60.00	$60.00	$60.00	$60.00	$60.00
15	3"	$100.00	$110.00	$120.00	$120.00	$120.00	$120.00	$120.00	$120.00	$120.00	$120.00
16	4"	$165.00	$177.50	$190.00	$190.00	$190.00	$190.00	$190.00	$190.00	$190.00	$190.00
17	6"	$325.00	$342.50	$360.00	$360.00	$360.00	$360.00	$360.00	$360.00	$360.00	$360.00
18	8"	$520.00	$550.00	$580.00	$580.00	$580.00	$580.00	$580.00	$580.00	$580.00	$580.00
19											
20	**Minimum Usage Charge**	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
21	5/8" (1 Kgal)	$0.00	$0.00	$0.00	$0.00	$3.20	$3.20	$3.20	$3.20	$3.20	$3.20
22	3/4" (2.5 Kgal)	$0.00	$0.00	$0.00	$0.00	$8.00	$8.00	$8.00	$8.00	$8.00	$8.00
23	1" (3.5 Kgal)	$0.00	$0.00	$0.00	$0.00	$11.20	$11.20	$11.20	$11.20	$11.20	$11.20
24	1 1/2" (10 Kgal)	$0.00	$0.00	$0.00	$0.00	$32.00	$32.00	$32.00	$32.00	$32.00	$32.00
25	2" (12.5 Kgal)	$0.00	$0.00	$0.00	$0.00	$40.00	$40.00	$40.00	$40.00	$40.00	$40.00
26	3" (50Kgal)	$0.00	$0.00	$0.00	$0.00	$160.00	$160.00	$160.00	$160.00	$160.00	$160.00
27	4" (175 Kgal)	$0.00	$0.00	$0.00	$0.00	$560.00	$560.00	$560.00	$560.00	$560.00	$560.00
28	6" (225 Kgal)	$0.00	$0.00	$0.00	$0.00	$720.00	$720.00	$720.00	$720.00	$720.00	$720.00
29	8" (250 Kgal)	$0.00	$0.00	$0.00	$0.00	$800.00	$800.00	$800.00	$800.00	$800.00	$800.00

DRAFT

Table 4
County of Kauai
Department of Water
Financial Planning Analysis and Water Rate Study

Rates
Fiscal Years Ending June 30

Agricultural Rates
($/month)

	Historic (1)				Projected (2)					
Usage Charges	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
1st Block	$1.13	$1.25	$1.38	$1.53	$1.60	$1.60	$1.60	$1.60	$1.60	$1.60

Note: Historic rates per Kauai Board of Water Supply General Fee Schedule. Rate changes are effective January 1, so they are averaged to match Fiscal Year.

Service Charge	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
5/8"	$12.00	$13.50	$15.00	$15.00	$15.00	$15.00	$15.00	$15.00	$15.00	$15.00
3/4"	$16.00	$18.00	$20.00	$20.00	$20.00	$20.00	$20.00	$20.00	$20.00	$20.00
1"	$24.00	$27.00	$30.00	$30.00	$30.00	$30.00	$30.00	$30.00	$30.00	$30.00
1 1/2"	$46.00	$50.50	$55.00	$55.00	$55.00	$55.00	$55.00	$55.00	$55.00	$55.00
2"	$72.00	$81.00	$90.00	$90.00	$90.00	$90.00	$90.00	$90.00	$90.00	$90.00
3"	$130.00	$145.00	$160.00	$160.00	$160.00	$160.00	$160.00	$160.00	$160.00	$160.00
4"	$210.00	$235.00	$260.00	$260.00	$260.00	$260.00	$260.00	$260.00	$260.00	$260.00
6"	$400.00	$450.00	$500.00	$500.00	$500.00	$500.00	$500.00	$500.00	$500.00	$500.00
8"	$640.00	$720.00	$800.00	$800.00	$800.00	$800.00	$800.00	$800.00	$800.00	$800.00

Private Fire Protection
($/month)

	Historic (1)				Projected (2)					
Service Charge	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
5/8"										
3/4"										
1"										
1 1/2"										
2"	$9.00	$10.00	$11.00	$11.00	$11.00	$11.00	$11.00	$11.00	$11.00	$11.00
3"	$16.00	$18.00	$20.00	$20.00	$20.00	$20.00	$20.00	$20.00	$20.00	$20.00
4"	$26.00	$30.50	$35.00	$35.00	$35.00	$35.00	$35.00	$35.00	$35.00	$35.00
6"	$60.00	$67.50	$75.00	$75.00	$75.00	$75.00	$75.00	$75.00	$75.00	$75.00
8"	$110.00	$122.50	$135.00	$135.00	$135.00	$135.00	$135.00	$135.00	$135.00	$135.00

DRAFT

Table 5
County of Kauai
Department of Water
Financial Planning Analysis and Water Rate Study

Revised Usage Blocks
Fiscal Years Ending June 30

General Service Block Percentages
($/month)

Block	Zero	1st	2nd	3rd	4th
5/8"	9.72%	44.90%	22.08%	4.94%	18.36%
3/4"	9.33%	34.18%	19.01%	3.64%	33.84%
1"	9.66%	60.80%	17.14%	4.16%	8.25%
1 1/2"	6.28%	55.81%	16.78%	3.10%	16.78%
2"	5.77%	63.26%	17.99%	3.66%	9.33%
3"	8.20%	53.79%	25.29%	8.02%	4.70%
4"	14.04%	55.27%	27.42%	1.72%	1.55%
6"	6.00%	56.76%	21.89%	11.31%	5.04%
8"	14.41%	28.83%	48.33%	8.42%	0.00%

DRAFT

Table 6
County of Kauai
Department of Water
Financial Planning Analysis and Water Rate Study

Historical and Projected Operating Expenses
Fiscal Years Ending June 30

		Actual (1)			2008-2010 Annual Growth	(2) Estimated	(2) Budget	Projected (3)				2011-2016 Annual Growth
		2008	2009	2010		2011	2012	2013	2014	2015	2016	
1	**Source of Supply**											
2	Salaries - Wtr Resource & Planning	$319,778	$335,438	$437,900	17.0%	$452,000	$466,000	$480,400	$495,300	$510,700	$526,500	3.10%
3	Benefits (4)	118,781	176,202	259,166	47.7%	235,299	297,215	306,399	315,902	325,724	335,802	7.37%
4	Water Purchase (5)	2,061,279	1,764,067	1,558,688	-13.0%	2,248,700	2,318,400	2,390,300	2,464,400	2,540,800	2,619,600	3.10%
5	Subtotal - Source of Supply	$2,499,838	$2,275,707	$2,255,754	-5.0%	$2,935,999	$3,081,615	$3,177,099	$3,275,602	$3,377,224	$3,481,902	3.47%
6												
7	**Pumping**											
8	Pump Diesel and Pumping Power	$0	$0	$0			$0	$0	$0	$0	$0	n/a
9	Pumping Power - Electrical (6)	2,947,947	2,556,313	2,576,227	-6.5%	3,000,000	3,300,000	3,630,000	3,811,500	4,002,100	4,202,200	6.97%
10	Subtotal Pumping	$2,947,947	$2,556,313	$2,576,227	-6.5%	3,000,000	3,300,000	$3,630,000	$3,811,500	$4,002,100	$4,202,200	6.97%
11												
12	**Water Treatment Plant**											
13	Salaries - Operations Plant (7)	$811,465	$804,826	$750,000	-3.9%	$909,000	$936,300	$964,400	$993,300	$1,023,100	$1,053,800	3.00%
14	Salaries - Special Projects Engr Design & Construction	293,973	328,465	365,500	11.5%	464,350	478,300	492,600	507,400	522,600	538,300	3.00%
15												
16	Subtotal Salaries	$1,105,438	$1,133,290	$1,115,500	0.5%	1,373,350	$1,414,600	$1,457,000	$1,500,700	$1,545,700	$1,592,100	3.00%
17												
18	Benefits (4)	$445,066	$526,873	$660,194	21.8%	714,930	$902,232	$929,275	$957,146	$985,847	$1,015,441	7.27%
19	Chemicals	32,895	33,667	34,600		36,700	36,800	37,900	39,000	40,200	41,400	3.01%
20	Microlab Material & Supply	16,459	17,666	12,493	-12.9%	18,055	19,600	20,200	20,800	21,400	22,000	2.92%
21	Safe Drinking Water Act	75,236	12,125	125,000	28.9%	150,000	154,500	159,100	163,900	168,800	173,900	3.00%
22	Subtotal - Total Water Treatment Plant	$1,675,094	$1,723,621	$1,947,787	7.8%	$2,293,035	$2,527,732	$2,603,475	$2,681,546	$2,761,947	$2,844,841	4.41%
23												
24	**Transmission and Distribution**											
25	Salaries - Operations Field (7)	$1,246,246	$1,207,23	$1,125,0	-5	$1,363,500	$1,431,700	$1,503,300	$1,578,500	$1,657,400	$1,740,300	5.00%
26	Salaries - Special Projects Engr Design & Construction	293,973	328	$ 365,0	11.5	464,350	487,600	512,000	537,600	564,500	592,700	5.00%
27												n/a
28	Subtotal - Salaries	$1,540,219	$1,535,70	$1,490,500	6%	$1,827,850	$1,919,300	$2,015,300	$2,116,100	$2,221,900	$2,333,000	5.00%
29												
30	Benefits (4)	956,458	935,319	1,523	37.6%	1,751,584	1,224,130	1,285,358	1,349,649	1,417,128	1,487,987	-3.21%
31	Subtotal - Transmission and Distribution	$2,496,6	$2,471,	$3,002,023	15.0%	$3,579,434	$3,143,430	$3,300,658	$3,465,749	$3,639,028	$3,820,987	1.31%
32												
33	**Customer Services**											
34	Salaries - Fiscal Cons Srvc	$363,6	$390,024	$474,137	14.1%	$476,790	$491,100	$505,800	$521,000	$536,600	$552,700	3.00%
35	Benefits (4)	154,6	211,560	280,612	34.7%	248,205	313,224	322,599	332,294	342,243	352,512	7.27%
36	Meter Parts	1,702	9,01	8,000	116.8%	8,300	8,400	8,500	8,600	8,700	8,800	1.18%
37	Subtotal - Customer Services	$520,281	$610,	$762,749	21.1%	$733,295	$812,724	$836,899	$861,894	$887,543	$914,012	4.50%
38												
39	**Administrative & Engineering**											
40	Salaries - Fiscal Admin (7)	$653,065	$606,503	$692,300	3.0%	$874,600	$909,600	$946,000	$983,800	$1,023,200	$1,064,100	4.00%
41	Salaries - Fiscal Accounting	389,497	433,264	383,663	-0.8%	385,810	397,400	409,300	421,600	434,200	447,200	3.00%
42	Salaries - Operations Admin											n/a
43	Subtotal - Salaries	$1,042,562	$1,039,767	$1,075,963	1.6%	$1,260,410	$1,307,000	$1,355,300	$1,405,400	$1,457,400	$1,511,300	3.70%
44												

DRAFT

Table 6
County of Kauai
Department of Water
Financial Planning Analysis and Water Rate Study

Historical and Projected Operating Expenses
Fiscal Years Ending June 30

		Actual (1)			2008-2010 Annual	(2) Estimated	(2) Budget	Projected (3)				2011-2016 Annual
		2008	2009	2010	Growth	2011	2012	2013	2014	2015	2016	Growth
45	Benefits (4)	$367,744	$453,157	$636,795	31.6%	$656,136	$833,605	$864,410	$896,364	$929,530	$963,907	8.00%
46	Utilities	203,660	169,696	168,944	-8.9%	195,300	201,400	207,600	214,000	220,600	227,400	3.09%
47	Postage and Printing	95,345	111,002	93,108	-1.2%	117,554	124,600	132,100	140,000	148,400	157,300	6.00%
48	Office Equip & Maint	80,522	85,490	106,453	15.0%	151,100	152,600	154,100	155,600	157,200	158,800	1.00%
49	Contractual Service	688,141	321,445	165,304	-51.0%	1,060,700	558,898	575,700	593,000	610,800	629,100	-9.92%
50	Travel & Incidentals - Board	11,924	6,669	4,659	-37.5%	17,000	17,300	17,600	17,900	18,200	18,500	1.71%
51	Travel & Incidentals - Staff	31,759	25,196	18,249	-24.2%	82,5[illegible]	33,000	33,500	34,000	34,500	35,000	1.49%
52	Collector's Commission	-	-	-		20,[illegible]	20,000	20,000	20,000	20,000	20,001	0.00%
53	Miscellaneous	23,410	14,658	12,713	-26.3%	[illegible],000	16,200	16,400	16,600	16,800	17,000	1.22%
54	Auditing Fee	66,000	55,000	66,000	0.0%	79,000	[illegible],400	83,800	86,300	88,900	91,600	3.00%
55	In-Service Training	47,269	55,832	32,466	-17.1%	53,100	[illegible],600	54,100	54,600	55,100	55,700	0.96%
56	Supplies - Office & Eng	26,194	32,934	31,474	9.6%	33,000	33,[illegible]00	33,600	33,900	34,200	34,500	0.89%
57	Operating Rsv Fund	-	-	-		-	-	-	-	-	-	n/a
58	Public Relations	49,084	44,395	76,304	24,7%	34,[illegible]00	129,071	130,400	131,700	133,000	134,300	-17.27%
59	Computer Supplies	48,798	60,055	25,059	-26.3%	[illegible],500	85,800	87,100	88,400	89,700	91,000	1.49%
60	Subtotal - Total Admin & Eng	$2,782,432	$2,476,297	$2,513,490	-5.0%	[illegible]22,800	$3,647,773	$3,765,710	$3,887,764	$4,014,330	$4,145,408	0.11%
61												
62	**County Service Charge**	$736,888	$817,839	$925,532	12.1%	[illegible]33,856	$842,200	$850,600	$859,100	$867,700	$876,400	1.00%
63												
64	**Vehicles**											
65	Vehicle- Material & Service	$108,712	$97,577	$89,592	-9.2%	$107,600	$108,700	$109,800	$110,900	$112,000	$113,100	1.00%
66	Vehicle- Fuel	75,661	109,730	94,282	[illegible]6%	126,000	128,500	131,100	133,700	136,400	139,100	2.00%
67	Subtotal - Vehicles	$184,373	$207,307	[illegible]874	[illegible]%	$233,600	$237,200	$240,900	$244,600	$248,400	$252,200	1.54%
68												
69	**Other Operating Expenses**											
70	Utilities	$58,860	$5[illegible]	$55,[illegible]00	-3.2%	$56,100	$57,200	$58,300	$59,500	$60,700	$61,900	1.99%
71	Electrical Parts	26,011	13,[illegible]	[illegible]	-99.5%	15,000	15,200	15,400	15,600	15,800	16,000	1.30%
72	Miscellaneous	(10,573)	[illegible]	0	-100.0%	5,000	5,100	5,200	5,300	5,400	5,500	1.92%
73	Miscellaneous - Tapping Team	8,421	3,372	0	-100.0%	8,000	8,100	8,200	8,300	8,400	8,500	1.22%
74	Contractual Services	97,548	[illegible]25	[illegible]4,748	-32.3%	408,000	412,100	416,200	420,400	424,600	428,800	1.00%
75	Steel Tank Maintenance Fund			0	n/a	-	-	-	-	-	-	n/a
76	Materials & Supplies	19[illegible]62	214,00[illegible]	179,[illegible]62	-5.2%	227,000	229,300	231,600	233,900	236,200	238,600	1.00%
77	Collective Bargaining Items	[illegible]20	17,169	20,042	-3.0%	24,000	24,200	24,400	24,600	24,800	25,000	0.82%
78	Accrued Vacation	(41[illegible]	61,871	105,609	n/a	100,000	102,000	104,000	106,100	108,200	110,400	
79	Subtotal - Other Operating Expenses	$359,21[illegible]	$415,079	$417,380	7.8%	$743,100	$751,200	$759,300	$767,600	$775,900	$784,300	1.09%
80												
	Total Unaudited	$14,202,745	[illegible]552,[illegible]8	$14,884,817								
81	**Budgeted Operating Expenses**	14,202,745	13,592,886	14,884,817	2.4%	18,475,119	18,343,873	19,164,642	19,855,355	20,574,173	21,322,251	
82	Historical/Annual Budget for FY 2011	14,100,598	13,374,990	13,447,131	-2.3%		-	-	-	-	-	
83	Adjustments	(102,147)	(177,896)	(1,437,686)	275.2%							
84	Staffing Increases (8)	n/a	n/a	n/a	n/a	0	0	0	0	0	0	
85	Other Operating Expenses Adjustments	n/a	n/a	n/a	n/a	-	-	-	-	-	-	n/a
86	Projected Adjustments (9)	n/a	n/a	n/a	n/a	(2,000,000)	(2,000,000)	(2,000,000)	(2,000,000)	(2,000,000)	(2,000,000)	n/a
87	Subtotal - Adjustments	(102,147)	(177,896)	(1,437,686)		($2,000,000)	($2,000,000)	($2,000,000)	($2,000,000)	($2,000,000)	($2,000,000)	
88												

DRAFT

Table 6
County of Kauai
Department of Water
Financial Planning Analysis and Water Rate Study

Historical and Projected Operating Expenses
Fiscal Years Ending June 30

		Actual (1)			2008-2010 Annual Growth	(2) Estimated	(2) Budget	Projected (3)				2011-2016 Annual Growth
		2008	2009	2010		2011	2012	2013	2014	2015	2016	
89	Total Operating Expenditures	$14,100,598	$13,374,990	$13,447,131	-2.3%	$16,475,119	$16,343,820	$17,164,642	$17,855,355	$18,574,173	$19,322,251	3.24%
90	for Rate Study		-5.1%	0.5%		22.5%	-0.8%	5.0%	4.0%	4.0%	4.0%	
91												
92	DOW Approved FTEs (10)	96	96	96	0.0%	96	96	96	96	96	96	
93	DOW Actual FTEs (11)	76	76	76	0.0%	76	76	76	76	76	76	-4.56%
94	Unit Power Costs ($/1,000 gals) (12)	0.61	0.58	0.58	-2.4%	0.6	0.72	0.79	0.82	0.85	0.88	5.81%

Notes:
(1) Source: 2008 results per 'historical budgetary operating results', 2009-2010 per FY 2011 Annual Budget spreadsheets.
(2) Source: DOW Annual Operating and Capital Improvement Budget, Fiscal Year 2011.
(3) Projections for FY 2012 - FY 2016 based on assumed growth and inflation escalation rates of 1% and 2%, respectively.
(4) Provision for accrued vacation is included in benefits. Benefit Factor per Fringe Cost Rates memo, 6/21/2010.
(5) Includes payments of $1,919,185, $1,497,406 and $1,359,372 for FYs 2008-2010, respectively per the Water Treatment & Delivery Agreement. What else is includes in this line?
(6) Using 10% escalation through 2013 and 5% escalation through 2016 - ok?
(7) Salaries for Operations and Fiscal are escalated at 5% and 4%, respectively - ok? Should all salaries be going up at different rates?
(8) Assumes no new positions are filled.
(9) Adjustments made to reduce O&M expenditures due to staff vacancies, and to reflect the historical trend of reduced budgetary expenditure levels.
(10) Need to confirm staffing numbers.
(11) Need to confirm staffing numbers.
(12) Calculated unit power cost based on Pumping Costs (Line 10) and total annual consumption from Table 2.

DRAFT

Table 7
County of Kauai
Department of Water
Financial Planning Analysis and Water Rate Study
Projected Capital Encumbrances and Sources of Funds
Fiscal Years Ending June 30

		Estimated	Projected					6-Year
		2011	2012	2013	2014	2015	2016	Total
1	**Planned Capital Encumbrances ($000s)**							
2	Carry Forward (1)		$0	$0	$0	$0	$0	
3								
4	CRPL							0
5	CRP							0
6	504 Waimea Main Replacement	3,223,000						
7	507 Waimea Canyon	1,735,000						
8	WK-14 Kapaa Pipeline	2,754,000						
9	WK-32 Kapaa Pipeline	2,760,000	82,000					
10	WH-01 Wainiha Tank Rd	1,451,000	188,000					
11	PLH-30 Nawiliwili, Niumalu, Kupolo Pipe	691,000	2,125,000					
12	PLH-25 Eiwa, Umi, Akahi, Elua Pipe	778,000	667,000					
13	WK-28 Wailua House lots Pipe	107,837	2,379,000					
14	WK-36 Ohana, Anolani, Kuamoo Pipe	425,000	661,000					
15	WK-12 Waipouli Main Pipe	40,000	2,000,000					
16	H-01 Maka Ridge Pipe	44,380	2,000,000					
17	H-02 Maka Ridge Well CL	0	500,000					
18	H-03 Rehab Maka Ridge Tank	0	500,000					
19	10-02 Kaumualii 16x24 Pipeline	4,100,000						
20	HE-08 Rehab Eleele Tank	139,819	1,500,000					
21	HE-11 Salt Pond Pipeline	3,500						
22	WK-30 Waipouli/Hauiki Pipe	174,900						
23	PLH-03 Drill and Dev Hi L Water	0	8,127,000	3,525,000				
24	LO-10 Lawai Omao Pipeline	50,000	200,000	540,410				
25								
26	CIP							
27	PLH-02 Kokolau Tunnel	118,382		1,000,000				
28	WK-02 Akulikuli Tunnel	30,000		1,662,000	338,000			
29	KW-28 AMFAC Well	139,900	2,000,000	1,000,000				
30	WK-08 Kapahi Tank	0	2,000,000	1,000,000				
31	PLH-39A Lihue Baseyard Improvements	500,000	1,400,000	2,000,000	4,000,000			
32	Ani-01A Anini Kalihiwai Pipeline	400,000	351,000					
33	K-1, K-12 Nursery Tank Replace & Pipeline	600,000	1,500,000	2,000,000				
34	K-05A Kalaheo Kukulolono Tank 0.5MG	16,840	100,000	2,277,000				
35	WKK-02 Drill and Develop Kilauea Well	100,000	300,000	1,419,600	560,000			
36	WKK-15 Kilauea 466' Tank 1.0 MG	89,595	3,000,000	2,214,000				
37	H-07 Hanalei Tank 0.5 MG	0	914,983	396,828				
38	H-08 Hanalei Well	0	0	848,130				
39	WK-01 Rehab Moalepe Tunnel	0	1,000,000	55,000				
40	WH-12 Wainiha Well #4	100,000	100,000	1,800,000				
41	Subtotal (2)	$20,592,199	$33,594,983	$21,737,968	$4,898,000	$5,000,000	$7,000,000	92,823,150
42	Other Projects	0	0	0	0	0	0	0

DRAFT

Table 7
County of Kauai
Department of Water
Financial Planning Analysis and Water Rate Study
Projected Capital Encumbrances and Sources of Funds
Fiscal Years Ending June 30

		Estimated	Projected					
	Planned Capital Encumbrances ($000s)	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**6-Year Total**
43	Subtotal New Projects	$20,592,199	$33,594,983	$21,737,968	$4,898,000	$5,000,000	$7,000,000	$92,823,150
44								
45	Total Projects (Carry Forward + New Projects)	$20,592,199	$33,594,983	$21,737,968	$4,898,000	$5,000,000	$7,000,000	$92,823,150
46								
47	Projected Carry Forward (3)	0	0	0	0	0	0	
48								
49	**Funded Encumbrances for Rate Study**	$20,592,200	$33,595,000	$21,738,000	$4,898,000	$5,000,000	$7,000,000	$92,823,200
50	**(rounded)**							
51								
52	**Bond Fund**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**6-Year Total**
53	BOY Balance (4)	$200,656	$47,010,000	$14,077,000	$0	$0	$0	
54								
55	New G.O. Bonds (5)	$0	0	0	0	0	0	$0
56	Less: Issuance Expense (1%)	0	0	0	0	0	0	-
57	GO Bonds Proceeds	60,000,000	$0	$0	$0	$0	$0	60,000,000
58	Use of Bond Funds (6)	(13,190,700)	(32,933,000)	(14,077,000)	0	0	0	(60,200,700)
59	EOY Balance	$47,010,000	$14,077,000	$0	$0	$0	$0	($200,700)
60								
61								
62	**Facilities Reserve Fund**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**6-Year Total**
63	BOY Balance (4)	$4,312,305	$0	$0	$0	$0	$0	
64	Net FRC Revenues (7)	[illegible]	649,000	649,000	649,000	649,000	649,000	$3,744,200
65	Interest (8)	90,000	13,000	13,000	13,000	13,000	13,000	155,000
66	Use of FRC (9)	(4,901,500)	(662,000)	(662,000)	(662,000)	(662,000)	(662,000)	(8,211,500)
67	EOY Balance	$0	$0	$0	$0	$0	$0	

DRAFT

Table 7
County of Kauai
Department of Water
Financial Planning Analysis and Water Rate Study

Projected Capital Encumbrances and Sources of Funds
Fiscal Years Ending June 30

68	**Sources of Funds**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**6-Year Total**
69	From Bond Fund	$13,190,700	$32,933,000	$14,077,000	$0	$0	$0	$60,200,700
70	From FRC Revenues	4,901,500	662,000	662,000	662,000	662,000	662,000	8,211,500
71	Grants/Contributions	2,500,000	0	0	0	0	0	2,500,000
72	New SRF Loans (10)	0	0	0	0	0	0	0
73	Current Reserves and Rates (11)	0	0	6,999,000	4,236,000	4,338,000	6,338,000	21,911,000
74	Total Sources of Funds	$20,592,200	$33,595,000	$21,738,000	$4,898,000	$5,000,000	$7,000,000	$92,823,200
75								
76								
77	**Allocation of Sources**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**6-Year Total**
78	General Obligation Bonds (GO)	64%	98%	65%	0%	0%	0%	65%
79	Facilities Reserve Fund	24%	2%	3%	14%	13%	9%	9%
80	Grants/Contributions (G)	12%	0%	0%	0%	0%	0%	3%
81	New State Revolving Loans (SRF)	0%	0%	0%	0%	0%	0%	0%
82	Current Reserves and Rates (R)	0%	0%	32%	86%	87%	91%	24%
83	Total	100%	100%	100%	100%	100%	100%	100%

DRAFT

Notes:
(1) No carry forwards are assumed.
(2) Per DOW Staff - source 19CIP worksheet_110110_sent to client (version1).xls
(3) No carry forwards are assumed.
(4) Source: DOW Annual Operating and Capital Improvement Budget, Fiscal Year 2010-2011.
(5) Terms are 4.5% and 25 years. New G.O. Bonds are based on maintaining a positive balance in the water utility fund and debt service coverage ratio of 1.50.
(6) Use of Bond Funds is estimated, based on available funds of other funding sources. FY 2011 per DOW Staff.
(7) Assumes 30% FRC increase in FY 2012.
(8) Per DOW Staff interest revenues projected to remain similar to historical levell - need to update formulas.
(9) Projected use of FRC Funds are estimated per DOW Staff.
(10) No additional SRF Loans are projected.
(11) Cash financed capital

Table 8
County of Kauai
Department of Water
Financial Planning Analysis and Water Rate Study

Existing and Proposed Debt Service
Fiscal Years Ending June 30

		Estimated	Projected				
		2011	2012	2013	2014	2015	2016
1	Existing Debt Service (1)						
2	1980 FmHA Loan	$18,550	$18,825	$18,550	$18,750	$18,900	$0
3	SRF Loan - Kokolau Tunnel Repairs	130,907	128,169	125,395	122,582	119,731	116,841
4	SRF Loan - Kapilimao Well	70,341	69,136	67,917	66,083	64,532	62,966
5	SRF Loan - Hanapepe River Crossing	98,564	96,556	94,527	92,478	90,409	88,319
6	SRF Loan - Hanapepe 27" Steel	54,929	53,810	52,680	51,538	50,385	49,220
7	SRF Loan - Waitua Homesteads Well	31,676	31,006	30,333	29,657	28,976	28,293
8	SRF Loan - Rehabilitate Lihue Steel Tanks 1 & 2	100,787	98,692	96,589	94,475	92,352	90,218
9	SRF Loan - Ornellas 0.2 MG Tank Refurbish	65,138	63,803	62,457	61,112	59,753	58,388
10	SRF Loan - 16" Waterline along Kuhio Highway	185,578	181,769	177,754	173,832	169,906	165,971
11	SRF Loan - 16" Waterline along Poipu Road	413,900	406,376	396,838	388,286	379,721	371,141
12	SRF Loan - Stable Tank 1.0 MG	489,998	480,469	470,926	461,356	451,761	442,141
13	SRF Loan - Kapilimao Tank 0.5 MG	73,940	145,848	143,081	140,304	137,516	134,714
14	SRF Loan - Kaumualii Highway 12-inch Main Replaceme	319,593	313,502	307,398	301,273	295,129	288,965
15	SRF Loan - Waha, Wawae, Niho Roads	156,867	153,882	150,887	147,880	144,864	141,840
16	2001A Gen Obligation Bonds/Series2005A Refunded por	670,575	679,419	676,359	676,188	113,094	313,688
17	2005A Gen Obligation Bonds	218,150	214,965	212,309	209,628	265,631	265,213
18	2001A Gen Obligation Bonds- Refunded Portion	33,900	149,988	149,988	149,988	477,869	473,419
19	DOW BOND, Series 2010A (2)	2,400,862	2,920,881	2,920,881	4,777,552	4,775,306	4,777,645
20	SRF Loan - Kapaa Pipeline (2)	200,354	382,044	384,711	376,624	361,123	0
21	Total Existing Debt Service	$5,941,498	$6,591,425	$6,539,283	$8,339,587	$8,096,959	$7,868,983
22					0		
23	New Debt Service						
24	New General Obligation Bonds (2)						
25	2012		0	0	0	0	0
26	2013			0	0	0	0
27	2014				0	0	0
28	2015					0	0
29	2016						0
30	Total GO Bonds	$0	$0	$0	$0	$0	$0
31							
32	New SRF Loans (3)						
33	2012	$0	$0	$0	$0	$0	$0
34	2013	0		0	0	0	0
35	2014	0		0	0	0	0
36	2015	0		0	0	0	0
37	2016				0	0	0
38	Total SRF	$0	$0	$0	$0	$0	$0
39							
40	Total New Debt Service	$0	$0	$0	$0	$0	$0
41							
42	Total Annual Debt Service	$5,941,498	$6,591,425	$6,539,283	$8,339,587	$8,096,959	$7,868,983

Notes:
(1) Debt Service schedule per 'Rate Study Tables With Data DRC PG(3).xlsx', Debt Schedule tab.
(2) Debt Service schedule per 'Rate Study Tables With Data DRC PG(3).xlsx', #8 tab.
(3) No new SRF Loans are projected.

DRAFT

Table 9
County of Kauai
Department of Water
Financial Planning Analysis and Water Rate Study

Historical and Projected Operating Revenues and Revenue Requirements (Cash Basis)
Fiscal Years Ending June 30

		Historical			Estimated	Budget	Projected			
		2008	2009	2010	2011	2012	2013	2014	2015	2016
1	**REVENUES**									
2	Beginning Balance	$ 18,707,779	$15,215,397	$9,011,095	$8,970,168	$14,337,286	$15,649,224	$10,717,450	$9,420,983	$7,910,481
3	Revenue Under Existing Rates:									
4	Operating Revenues (1)									
5	Water Sales	$13,223,896	$13,433,062	$14,272,311	$16,314,601	$16,[illegible]3,300	$17,168,200	$17,355,700	$17,545,000	$17,737,100
6	Service Charge	2,769,917	3,009,416	3,087,800	3,046,100	[illegible]079,200	3,112,800	3,146,500	3,180,900	3,217,000
7	Total Operating Revenues	$15,993,813	$15,770,435	$17,360,111	$19,360,701	$20,[illegible]62,500	$20,281,000	$20,502,200	$20,725,900	$20,954,100
8										
9	Other Income (1)									
10	Miscellaneous Receipts	$116,619	$175,333	$149,855	$112,000	$112,000	$112,000	$112,000	$112,000	$112,000
11	Interest Earned	817,557	562,949	275,535	[illegible]60,000	260,000	260,000	260,000	260,000	260,000
12	Fire Hydrant Svc. Charge	736,888	817,839	925,133	833,500	932,257	943,151	954,175	965,330	976,619
13	Other (2)	107,354	608,262	27,140	2,500,000	0	0	0	0	0
14	Other - SRF Loan (3)	488,549	59,081	14,713,074	10,[illegible]	0	0	0	0	0
15	Cost of Power Adjustment	1,007,308	1,325,366	1,470,700	1,3[illegible]00	1,500,000	1,600,000	1,700,000	1,700,000	1,700,000
16	Total Other Income	$3,274,275	$3,548,830	$17,56[illegible]437	$15,792,[illegible]	$2,804,257	$2,915,151	$3,026,175	$3,037,330	$3,048,619
17										
18	Total Revenue	$19,268,088	$19,319,265	$34,921,548	[illegible]152,843	$22,866,757	$23,196,151	$23,528,375	$23,763,230	$24,002,719
19										
20	Additional Revenue Required									
21	% of Water									
22	Year / Sales Revenue / Months Effective									
23	FY 2012 16.7% 12					$3,350,400	$3,386,900	$3,423,900	$3,461,200	$3,499,300
24	FY 2013 1.6% 12						378,700	382,800	387,000	391,300
25	FY 2014 12.3% 12							2,990,000	3,022,600	3,055,900
26	FY 2015 0.2% 12								55,200	55,800
27	FY 2016 1.7% 12									475,300
28	Total Additional Revenue Required	$0	$0	$0	$0	$3,350,400	$3,765,600	$6,796,700	$6,926,000	$7,477,600
29										
30	Total Revenue	$19,268,088	$19,319,265	$34,921,548	$35,152,843	$26,217,157	$26,961,751	$30,325,075	$30,689,230	$31,480,319

Notes:
(1) See Table 3 for details.
(2) Includes grant funds for Waimea project in FY 2011.
(3) Includes SRF Loan proceeds.

DRAFT

Table 9
County of Kauai
Department of Water
Financial Planning Analysis and Water Rate Study

Historical and Projected Operating Revenues and Revenue Requirements (Cash Basis)
Fiscal Years Ending June 30

		Historical			Estimated	Budget	Projected			
		2008	2009	2010	2011	2012	2013	2014	2015	2016
31	**REVENUE REQUIREMENTS**									
32	Operating Expenditures (4)									
33	Source of Supply	$2,499,838	$2,275,707	$2,255,754	2,935,999	3,081,615	$3,177,099	$3,275,602	$3,377,224	$3,481,902
34	Pumping	2,947,947	2,556,313	2,576,227	3,000,000	3,300,000	3,630,000	3,811,500	4,002,100	4,202,200
35	Water Treatment Plant	1,675,094	1,723,621	1,947,787	2,293,035	[illegible]732	2,603,475	2,681,546	2,761,947	2,844,841
36	Transmission & Distribution	2,496,677	2,471,122	3,302,023	3,579,434	[illegible]430	3,300,658	3,465,749	3,639,028	3,820,987
37	Customer Services	520,281	610,600	762,749	733,295	[illegible]724	836,899	861,894	887,543	914,012
38	Administrative & Engineering	2,782,432	2,475,297	2,513,490	4,122,800	[illegible]773	3,765,710	3,887,764	4,014,330	4,145,408
39	Manager's Office	0	0	0	0	0	0	0	0	0
40	County Service Charge	736,888	817,839	925,532	833,[illegible]56	842,2[illegible]	850,600	859,100	867,700	876,400
41	Vehicles	184,373	207,307	183,874	[illegible],600	237,200	240,900	244,600	248,400	252,200
42	Other Operating Expenses	359,215	415,079	417,380	[illegible]43,100	751,200	759,300	767,600	775,900	784,300
43	Adjustments (5)	(102,147)	(177,896)	(1,437,686)	[illegible],000,000)	(2,000,000)	(2,000,000)	(2,000,000)	(2,000,000)	(2,000,000)
44	Total Operating Expenditures	$14,100,598	$13,374,990	$13,447,131	$16,[illegible]75,1[illegible]	$16,343,873	$17,164,642	$17,855,355	$18,574,173	$19,322,251
45										
46	Operating Income	$5,167,490	$5,944,275	$21,474,417	$18,677,[illegible]24	$9,873,284	$9,797,109	$12,469,719	$12,115,057	$12,158,069
47	Funds Available for Debt Service (6)	$4,678,941	$5,885,194	$6,7[illegible]4	$8,362,18[illegible]	$9,873,284	$9,797,109	$12,469,719	$12,115,057	$12,158,069
48										
49	Debt Service Requirement									
47	Existing Debt Service (7)	$1,943,760	$2,248,716	$2,496,309	$5,941,498	$6,591,425	$6,539,283	$8,339,587	$8,096,959	$7,868,983
48	Proposed Debt Service (7)	0			0	0	0	0	0	0
49	Total Debt Service Requirement	$1,943,760	$2,248,716	$2,496,309	$5,941,498	$6,591,425	$6,539,283	$8,339,587	$8,096,959	$7,868,983
50										
51	Capital Costs Charged to Operations									
52	Equipment (8)	$412,887	$4[illegible]949	$370,[illegible]	$800,700	$965,950	$411,800	$411,800	$411,800	$411,800
53	Property & Supply (8)	677,438	463,[illegible]	1,195,541	903,314	1,003,970	778,800	778,800	778,800	778,800
54	SRF Financed Capital (8)	2,185,8[illegible]	[illegible]81,285	5,410,800	5,665,094	0	0	0	0	0
55	Cash Financed Capital (8)	3,43[illegible]13	4,[illegible]176	12,041,995	0	0	6,999,000	4,236,000	4,338,000	6,338,000
56	Total Capital Costs Charged to Ops	$6,[illegible],112	$9,89[illegible]61	$19,019,035	$7,369,108	$1,969,920	$8,189,600	$5,426,600	$5,528,600	$7,528,600
57										
58	Total Revenue Requirements	$22,76[illegible]0	$25,623,[illegible]7	$34,962,475	$29,785,725	$24,905,218	$31,893,525	$31,621,542	$32,199,732	$34,719,833
59										
60	Revenue Surplus/Deficiency	($3,492,382)	($[illegible],302)	($40,927)	$5,367,118	$1,311,939	($4,931,774)	($1,296,467)	($1,510,502)	($3,239,514)
61										
62	Ending Balance	$15,215,397	$[illegible],095	$8,970,168	$14,337,286	$15,649,224	$10,717,450	$9,420,983	$7,910,481	$4,670,967
63										
64	Reserve Target (9)	N/A	N/A	N/A	$3,361,800	$4,118,800	$4,086,000	$4,291,200	$4,463,800	$4,643,500
65										
66	Debt Service Coverage (10)	2.41	2.62	2.71	1.41	1.50	1.50	1.50	1.50	1.55
67										
68	Minimum Debt Service Coverage (11)	N/A	N/A	N/A	1.50	1.50	1.50	1.50	1.50	1.50
69										
70	Average Residential Bill ($/month) (12)	$30.00	$30.00	$30.00	$30.00	$35.01	$35.57	$39.95	$40.03	$40.71
71	Increase			$0.00	$0.00	$5.01	$0.56	$4.38	$0.08	$0.68
72						16.7%	1.6%	12.3%	0.2%	1.7%
73										
74	DOW FTEs (13)	76	76	76	76	76	76	76	76	76

DRAFT

Table 9
County of Kauai
Department of Water
Financial Planning Analysis and Water Rate Study

Historical and Projected Operating Revenues and Revenue Requirements (Cash Basis)
Fiscal Years Ending June 30

Historical			Estimated	Budget	Projected			
2008	2009	2010	2011	2012	2013	2014	2015	2016

Notes:
(4) See Table 6 for details.
(5) Adjustments made to reduce O&M expenditures due to staff vacancies, and to reflect the historical trend of reduced budgetary expenditure levels.
(6) Equals Operating Income less SRF loan proceeds.
(7) See Table 8 for details.
(8) Per FY 2011 Annual Budget (Budget Summary FYE 2011.xls)
(9) Equals 90 days of previous year's operating and maintenance expenses.
(10) Equals Funds Available for Debt Service divided by Total Debt Service. Doesn't include SRF proceeds.
(11) Target for planning purposes.
(12) Based on a 5/8" meter using 10,000 gallons per month.
(13) Board approved level is 90 FTEs for FY 2005. Projected staff levels per DOW Staff.

DRAFT

Table 9
County of Kauai
Department of Water
Financial Planning Analysis and Water Rate Study

Historical and Projected Operating Revenues and Revenue Requirements (Cash Basis)
Fiscal Years Ending June 30

		Historical			Estimated	Budget	Projected			
		2008	2009	2010	2011	2012	2013	2014	2015	2016
1	REVENUES									
2	Beginning Balance	$ 18,707,779	$15,215,397	$9,011,095	$14,362,450	$4,151,054	$5,601,103	$4,148,778	$5,751,719	$6,944,019
3	Revenue Under Existing Rates:									
4	Operating Revenues (1)									
5	Water Sales	$13,223,896	$13,433,062	$14,272,311	$16,314,601	$16,983,300	$17,168,200	$17,355,700	$17,545,000	$17,737,100
6	Service Charge	2,769,917	3,009,416	3,087,800	3,046,100	3,079,200	3,112,800	3,146,500	3,180,900	3,217,000
7	Total Operating Revenues	$15,993,813	$15,770,435	$17,360,111	$19,360,701	$20,062,500	$20,281,000	$20,502,200	$20,725,900	$20,954,100
8										
9	Other Income (1)									
10	Miscellaneous Receipts	$116,619	$175,333	$149,855	$112,000	$112,000	$112,000	$112,000	$112,000	$112,000
11	Interest Earned	817,557	562,949	275,535	260,000	260,000	260,000	260,000	260,000	260,000
12	Fire Hydrant Svc. Charge	736,888	817,839	925,133	833,500	932,257	943,151	954,175	965,330	976,619
13	Other (2)	107,354	608,262	27,140	0	0	0	0	0	0
14	Other - SRF Loan (3)	488,549	59,081	14,713,074	3,880,000	0	6,907,200	2,449,000	2,500,000	3,500,000
15	BAB Subsidy				871,800	860,000	850,000	840,000	830,000	820,000
16	Removal of Leak Rebate (4)					400,000	400,000	400,000	400,000	400,000
17	Cost of Power Adjustment	1,007,308	1,325,366	1,470,700	1,351,100	1,500,000	1,600,000	1,700,000	1,700,000	1,700,000
18	Total Other Income	$3,274,275	$3,548,830	$17,561,437	$7,308,400	$4,064,257	$11,072,351	$6,715,175	$6,767,330	$7,768,619
19										
20	Total Revenue	$19,268,088	$19,319,265	$34,921,548	$26,669,101	$24,126,757	$31,353,351	$27,217,375	$27,493,230	$28,722,719
21										
22	Additional Revenue Required									
23										
24	Year	% of Water Sales Revenue	Months Effective		2011	2012	2013	2014	2015	2016
25	FY 2012	8.4%	12			$1,685,300	$1,703,600	$1,722,200	$1,741,000	$1,760,100
26	FY 2013	8.4%	12				1,846,700	1,866,800	1,887,200	1,908,000
27	FY 2014	0.0%	12					0	0	0
28	FY 2015	0.0%	12						0	0
29	FY 2016	0.0%	12							0
30	Total Additional Revenue Required				$0	$1,685,300	$3,550,300	$3,589,000	$3,628,200	$3,688,100
31										
32	Total Revenue				$26,669,101	$25,812,057	$34,903,651	$30,806,375	$31,121,430	$32,390,819

Notes:
(1) See Table 3 for details.
(2) Includes grant funds for Waimea project in FY 2011.
(3) Includes SRF Loan proceeds and reimbursements.
(4) Estimated net increase for removal of leak rebate per DOW, 2/7/11.

Table 9
County of Kauai
Department of Water
Financial Planning Analysis and Water Rate Study
Historical and Projected Operating Revenues and Revenue Requirements (Cash Basis)
Fiscal Years Ending June 30

	Historical			Estimated	Budget	Projected			
	2008	2009	2010	2011	2012	2013	2014	2015	2016
REVENUE REQUIREMENTS									
Operating Expenditures (5)									
Source of Supply	$2,499,838	$2,275,707	$2,255,754	2,935,999	3,081,615	$3,177,099	$3,275,602	$3,377,224	$3,481,902
Pumping	2,947,947	2,556,313	2,576,227	3,000,000	3,300,000	3,630,000	3,811,500	4,002,100	4,202,200
Water Treatment Plant	1,675,094	1,723,621	1,947,787	2,293,035	2,527,732	2,603,475	2,681,546	2,761,947	2,844,841
Transmission & Distribution	2,496,677	2,471,122	3,302,023	3,579,434	3,143,430	3,300,658	3,465,749	3,639,028	3,820,987
Customer Services	520,281	610,600	762,749	733,295	812,724	836,899	861,894	887,543	914,012
Administrative & Engineering	2,782,432	2,475,297	2,513,490	4,122,800	3,647,773	3,765,710	3,887,764	4,014,330	4,145,408
Manager's Office	0	0	0	0	0	0	0	0	0
County Service Charge	736,888	817,839	925,133	833,856	842,200	850,600	859,100	867,700	876,400
Vehicles	184,373	207,307	183,874	233,600	237,200	240,900	244,600	248,400	252,200
Other Operating Expenses	359,215	415,079	417,380	743,100	751,200	759,300	767,600	775,900	784,300
Adjustments (6)	(102,147)	(177,896)	(1,437,686)	(2,000,000)	(2,000,000)	(2,000,000)	(2,000,000)	(2,000,000)	(2,000,000)
Total Operating Expenditures	$14,100,598	$13,374,990	$13,446,732	$16,475,119	$16,343,873	$17,164,642	$17,855,355	$18,574,173	$19,322,251
Operating Income	$5,167,490	$5,944,275	$21,474,816	$10,193,982	$9,468,184	$17,739,009	$12,951,019	$12,547,257	$13,068,569
Funds Available for Debt Service (7)	$4,678,941	$5,885,194	$6,761,742	$6,313,982	$9,468,184	$10,831,809	$10,502,019	$10,047,257	$9,568,569
Debt Service Requirement									
Existing Debt Service (8)	$1,943,760	$2,248,716	$2,496,309	$5,950,285	$6,591,425	$6,539,283	$8,339,587	$8,096,959	$7,868,983
Proposed Debt Service (8)	0	0	0	0	0	508,200	688,400	872,400	1,129,900
Total Debt Service Requirement	$1,943,760	$2,248,716	$2,496,309	$5,950,285	$6,591,425	$7,047,483	$9,027,987	$8,969,359	$8,998,883
FRC Debt Service Payback (9)				($2,304,241)	($2,573,291)	($2,552,449)	($3,459,808)	($3,496,302)	($3,478,573)
Total Debt Service Requirement				$3,646,044	$4,018,135	$4,495,035	$5,568,178	$5,473,057	$5,520,310
Capital Costs Charged to Operations									
Equipment (10)	$412,887	$451,949	$215,969	$800,700	$965,950	$360,300	$360,300	$360,300	$360,300
Property & Supply (10)	677,438	463,447	423,994	780,000	1,003,970	521,600	521,600	521,600	521,600
SRF Financed Capital (10)	2,185,874	4,781,289	5,410,800	3,880,000	0	6,907,200	2,449,000	2,500,000	3,500,000
Cash Financed Capital	3,439,913	4,203,176	7,592,391	11,298,635	2,030,080	6,907,200	2,449,000	2,500,000	3,500,000
Total Capital Costs Charged to Ops	$6,716,112	$9,899,861	$13,643,154	$16,759,335	$4,000,000	$14,696,300	$5,779,900	$5,881,900	$7,881,900
Total Revenue Requirements	$22,760,470	$25,523,567	$29,586,195	$36,880,497	$24,362,007	$36,355,976	$29,203,433	$29,929,130	$32,724,461
Revenue Surplus/Deficiency	($3,492,382)	($6,204,302)	$5,335,353	($10,211,396)	$1,450,049	($1,452,326)	$1,602,941	$1,192,300	($333,642)
Ending Balance	$15,215,397	$9,011,095	$14,362,450	$4,151,054	$5,601,103	$4,148,778	$5,751,719	$6,944,019	$6,610,377
Reserve Target (11)	N/A	N/A	N/A	$3,361,700	$4,118,800	$4,086,000	$4,291,200	$4,463,800	$4,643,500
Debt Service Coverage w/o FRC Payback	2.41	2.62	2.71	1.06	1.44	1.54	1.16	1.12	1.06
Debt Service Coverage w/ FRC Payback (12)				1.73	2.36	2.41	1.89	1.84	1.73
Minimum Debt Service Coverage (13)	N/A	N/A	N/A	1.50	1.50	1.50	1.50	1.50	1.50
Average Residential Bill ($/month) (14)	$30.00	$30.00	$30.00	$30.00	$32.52	$35.25	$35.25	$35.25	$35.25
Increase			$0.00	$0.00	$2.52	$2.73	$0.00	$0.00	$0.00
					8.4%	8.4%	0.0%	0.0%	0.0%
DOW FTEs (15)	76	76	76	76	76	76	76	76	76

Table 9
County of Kauai
Department of Water
Financial Planning Analysis and Water Rate Study
Historical and Projected Operating Revenues and Revenue Requirements (Cash Basis)
Fiscal Years Ending June 30

Historical			Estimated	Budget	Projected			
2008	2009	2010	2011	2012	2013	2014	2015	2016

Notes:
(5) See Table 6 for details.
(6) Adjustments made to reduce O&M expenditures due to staff vacancies, and to reflect the historical trend of reduced budgetary expenditure levels.
(7) Equals Operating Income less SRF loan proceeds.
(8) See Table 8 for details.
(9) FRC Debt Service Payback per DOW, 1/4/11.
(10) Per FY 2011 Annual Budget (Budget Summary FYE 2011.xls). Projected expenses based on average of FY 08-10.
(11) Equals 90 days of previous year's operating and maintenance expenses.
(12) Equals Funds Available for Debt Service divided by Total Debt Service. Doesn't include SRF proceeds.
(13) Target for planning purposes.
(14) Based on a 5/8" meter using 10,000 gallons per month.
(15) Board approved level is 90 FTEs for FY 2005. Projected staff levels per DOW Staff.

Tabl
County o .ai
Department of Water
Financial Planning Analysis and Water Rate Study
Historical and Projected Operating Revenues and Revenue Requirements
Fiscal Years Ending June 30

		Historical			Estimated	Budget	Projected			
		2008	2009	2010	2011	2012	2013	2014	2015	2016
1	**REVENUES**									
2	Beginning Balance	$18,707,779	$15,215,397	$9,011,095	$14,362,450	$11,406,300	$2,726,100	$908,000	$926,200	$933,100
3										
4	Revenue Under Existing Rates:									
5	Operating Revenues (1)									
6	Water Sales	$13,223,896	$13,433,062	$14,272,311	n/a	$16,643,743	$16,826,824	$17,011,919	$17,199,050	$17,388,240
7	Service Charge	2,769,917	3,009,416	3,087,800	n/a	[redacted]	3,079,607	3,113,483	3,147,731	3,182,356
8	Total Operating Revenues	$15,993,813	$16,770,435	$17,360,111	$18,472,405	$18,946,417	$19,154,827	$19,365,531	$19,578,551	$19,793,915
9										
10	Other Income (1)									
11	Miscellaneous Receipts	$116,619	$175,333	$149,855	$5,000	$112,000	$112,000	$112,000	$112,000	$112,000
12	Interest Earned	817,557	562,949	275,535	461,000	355,000	355,000	355,000	355,000	355,000
13	Fire Hydrant Svc. Charge	736,888	817,839	925,133	925,133	925,133	935,943	946,881	957,951	969,153
14	Other (2)	107,354	608,262	27,140	101,216	0	0	0	0	0
15	Other - SRF Loan (3)	488,549	59,081	14,713,074	3,843,000	0	3,871,850	2,449,000	2,500,000	3,500,000
16	BAB Subsidy	0	0	0	871,800	[redacted]	1,022,308	1,022,308	1,022,308	1,022,308
17	Leak Rebate (4)	0	0	0	0	(393,797)	(393,797)	(393,797)	(393,797)	(393,797)
18	Cost of Power Adjustment	1,007,308	1,325,366	1,470,700	1,289,110	[redacted]	1,295,200	1,295,200	1,295,200	1,295,200
19	Total Other Income	$3,274,275	$3,548,830	$17,561,437	$7,496,259	$3,892,923	$7,198,504	$5,786,593	$5,848,662	$6,859,864
20										
21	Total Revenue	$19,268,088	$19,319,265	$34,921,548	$25,968,664	$22,839,339	$26,353,331	$25,152,123	$25,427,213	$26,653,779
22										
23	Additional Revenue Required									
24			% of Water	Months						
25		Year	Sales Revenue	Effective	2011	2012	2013	2014	2015	2016
26		FY 2012	1.7%	6		$161,000	$325,600	$329,200	$332,800	$336,500
27		FY 2013	13.7%	12			2,668,800	2,698,200	2,727,900	2,757,900
28		FY 2014	12.7%	12				2,843,900	2,875,200	2,906,800
29		FY 2015	1.7%	12					433,700	438,500
30		FY 2016	5.8%	12						1,521,500
31	Total Additional Revenue Required				$0	$161,000	$2,994,400	$3,871,300	$6,369,600	$7,961,200
32										
33	Total Revenue				$25,968,664	$23,000,339	$29,347,731	$29,023,423	$31,796,813	$34,614,979
		$19,268,088	$19,319,265	$34,921,548						

Notes:
(1) Projected Revenues revised to correspond to 02Budget Summary FYE 2012.xls.
(2) Includes grant funds for Waimea project in FY 2011.
(3) Includes SRF Loan proceeds and reimbursements.
(4) Placeholder.

Table 9
County of Kauai
Department of Water
Financial Planning Analysis and Water Rate Study
Historical and Projected Operating Revenues and Revenue Requirements
Fiscal Years Ending June 30

		Historical			Estimated	Budget	Projected			
		2008	2009	2010	2011	2012	2013	2014	2015	2016
34	**REVENUE REQUIREMENTS**									
35	Operating Expenditures (5)									
36	Source of Supply	$2,499,838	$2,275,707	$2,245,072	$2,223,761	$3,008,611	$3,101,886	$3,198,160	$3,297,340	$3,399,526
37	Pumping	2,947,947	2,556,313	2,576,227	3,064,600	3,100,000	3,410,000	3,580,500	3,759,500	3,947,500
38	Water Treatment Plant	1,675,094	1,723,621	1,949,808	2,306,740	2,624,967	2,703,653	2,784,636	2,868,115	2,954,267
39	Transmission & Distribution	2,496,677	2,471,122	3,302,023	3,579,434	3,389,868	3,559,423	3,737,456	3,924,320	4,120,545
40	Customer Services	520,281	610,600	762,749	730,664	875,681	901,744	928,690	956,343	984,879
41	Administrative & Engineering	2,782,432	2,475,297	2,513,490	3,038,246	3,248,822	3,353,231	3,461,317	3,573,260	3,689,359
42	Manager's Office	0	0	0	0	0	0	0	0	0
43	County Service Charge	736,888	817,839	925,133	833,500	925,133	934,400	943,700	953,100	962,600
44	Vehicles	184,373	207,307	183,874	201,310	275,600	280,100	284,600	289,200	293,900
45	Other Operating Expenses	359,215	415,079	417,380	481,679	551,400	557,600	563,900	570,200	576,600
46	Adjustments (6)	(102,147)	(177,896)	(1,429,025)	(966,957)	(701,097)	(1,500,000)	(1,500,000)	(1,500,000)	(1,500,000)
47	Total Operating Expenditures	$14,100,598	$13,374,990	$13,446,732	$15,492,977	$17,298,984	$17,302,037	$17,982,960	$18,691,378	$19,429,176
48										
49	Operating Income	$5,167,490	$5,944,275	$21,474,816	$10,475,687	$5,701,355	$12,045,694	$13,040,463	$13,105,436	$15,185,803
50	Funds Available for Debt Service (7)	4,678,941	5,885,194	6,761,742	6,632,687	5,701,355	8,173,844	10,591,463	10,605,436	11,685,803
51										
52	Debt Service Requirement									
50	Existing Debt Service (8)	$1,943,760	$2,248,716	$2,496,309	$5,738,947	$6,518,998	$6,539,283	$8,339,587	$8,096,959	$7,868,983
51	Proposed Debt Service (8)	0	0	0	0	0	284,900	465,100	649,100	906,600
52	Debt Service Paid by FRC	0	0	0			(1,948,967)	(1,925,231)	(1,892,281)	(1,845,906)
53	Total Debt Service Requirement	$1,943,760	$2,248,716	$2,496,309	$6,023,569	$4,237,796	$4,875,217	$6,879,456	$6,853,778	$6,929,677
54										
55	Capital Costs Charged to Operations									
56	Equipment (10)	$412,887	$451,949	$215,969	$465,529	$1,122,700	$533,800	$533,800	$533,800	$533,800
57	Property & Supply (10)	677,438	463,447	423,994	1,005,524	984,500	711,000	711,000	711,000	711,000
58	SRF Financed Capital (10)	2,185,874	4,781,289	5,410,800	3,843,000	0	3,871,900	2,449,000	2,500,000	3,500,000
59	Cash Financed Capital	3,439,913	4,203,176	7,592,391	2,094,257		3,871,850	2,449,000	2,500,000	3,500,000
60	Adjustment (11)									
61	Total Capital Costs Charged to Ops	$6,716,112	$9,899,861	$13,643,154	$7,408,310	$10,143,807	$8,988,550	$6,142,800	$6,244,800	$8,244,800
62										
63	Total Revenue Requirements	$22,760,470	$25,523,567	$29,586,195	$28,924,856	$31,680,587	$31,165,804	$31,005,216	$31,789,956	$34,603,653
64										
65	Revenue Surplus/Deficiency	($3,492,382)	($6,204,302)	$5,335,353	($2,956,192)	($8,680,248)	($1,818,073)	$18,208	$6,858	$11,326
66										
67	Ending Balance	$15,215,397	$9,011,095	$14,362,450	$11,406,258	$2,726,052	$908,027	$926,208	$933,058	$944,426
68										
69	Days of O&M Reserve	N/A	N/A	N/A	310	64	19	20	19	18
70										
71	Debt Service Coverage w/ FRC Payback (13)	2.41	2.62	2.71	1.10	1.35	1.68	1.54	1.55	1.69
72	Minimum Debt Service Coverage (14)	N/A	N/A	N/A	1.25	1.25	1.25	1.25	1.25	1.25
73										
74	Average Residential Bill ($/month) (15)	$35.00	$37.75	$40.50	$44.40	$44.40	$50.48	$56.89	$57.86	$61.22
75	Increase		2.75	2.75	3.90	0.00	6.08	6.41	0.97	3.36
76										
77	DOW FTEs (16)	76	76	76	76	76	76	76	76	76

Tab[illegible]
County o[illegible]al
Department of Water
Financial Planning Analysis and Water Rate Study
Historical and Projected Operating Revenues and Revenue Requirements
Fiscal Years Ending June 30

A

Historical			Estimated	Budget	Projected			
2008	2009	2010	2011	2012	2013	2014	2015	2016

Notes:
(5) See Table 6 for details.
(6) Adjustments made to reduce O&M expenditures due to staff vacancies, and to reflect the historical trend of reduced budgetary expenditure levels.
(7) Equals Operating Income less SRF loan proceeds.
(8) See Table 8 for details.
(9) FRC Debt Service Payback per DOW, 1/4/11.
(10) Per FY 2011 Annual Budget (Budget Summary FYE 2011.xls). Projected expenses based on average of FY 08-10.
(11) Adjustment per DOW, 2/18/11, based on lower than budgeted capital expenditures.
(12) Equals 90 days of previous year's operating and maintenance expenses.
(13) Equals Funds Available for Debt Service divided by Total Debt Service. This scenario counts the FRC Payback as a revenue.
(14) Target for planning purposes.
(15) Based on a 5/8" meter using 10,000 gallons per month.
(16) Board approved level is 90 FTEs for FY 2005. Projected staff levels per DOW Staff.

Table 9 (B)
County of Kauai
Department of Water
Financial Planning Analysis and Water Rate Study
Historical and Projected Operating Revenues and Revenue Requirements
Fiscal Years Ending June 30

		Historical			Estimated	Budget	Projected			
		2008	2009	2010	2011	2012	2013	2014	2015	2016
1	**REVENUES**									
2	Beginning Balance	$18,707,779	$15,215,397	$9,011,095	$14,362,450	$11,975,500	$2,000,000	$0	$0	$0
3										
4	Revenue Under Existing Rates:									
5	Operating Revenues (1)									
6	Water Sales	$13,223,896	$13,433,062	$14,272,311	n/a	$16,643,743	$16,826,824	$17,011,919	$17,199,050	$17,388,240
7	Service Charge	2,769,917	3,009,416	3,087,800	n/a	3,684,000	3,724,524	3,765,494	3,806,914	3,848,790
8	Leak Rebate (2)	0	0	0	0	(406,555)	(406,555)	(406,555)	(406,555)	(406,555)
9	Total Operating Revenues	$15,993,813	$15,770,435	$17,360,111	$18,472,405	$19,158,250	$19,368,991	$19,582,050	$19,797,453	$20,015,225
10										
11	Other Income (1)									
12	Miscellaneous Receipts	$116,619	$175,333	$149,855	$5,000	$112,000	$112,000	$112,000	$112,000	$112,000
13	Interest Earned	817,557	562,949	275,535	461,000	355,000	355,000	355,000	355,000	355,000
14	Fire Hydrant Svc. Charge	736,888	817,839	925,133	925,133	925,133	935,943	946,881	957,951	969,153
15	Other (3)	107,354	608,262	27,140	101,216	0	0	0	0	0
16	Other - SRF Loan (4)	488,549	59,081	14,713,074	3,843,000	0	4,336,521	4,161,288	4,248,339	5,157,894
17	BAB Subsidy	0	0	0	871,800	613,385	613,385	613,385	613,385	613,385
18	Cost of Power Adjustment	1,007,308	1,325,366	1,470,700	1,289,110	1,383,517	1,295,200	1,295,200	1,295,200	1,295,200
19	Total Other Income	$3,274,275	$3,548,830	$17,561,437	$7,496,259	$3,389,035	$7,648,048	$7,483,755	$7,581,874	$8,502,632
20										
21	Total Revenue	$19,268,088	$19,319,265	$34,921,548	$25,968,664	$22,547,285	$27,017,039	$27,065,805	$27,379,327	$28,517,856
22										
23	Additional Revenue Required									
24										
25	Year / % of Water Sales Revenue / Months Effective				2011	2012	2013	2014	2015	2016
26	FY 2012 1.7% 6					$162,800	$329,300	$332,900	$336,600	$340,300
27	FY 2013 3.4% 12						669,700	677,100	684,600	692,100
28	FY 2014 12.3% 12							2,532,800	2,560,700	2,588,900
29	FY 2015 2.1% 12								491,000	496,400
30	FY 2016 3.0% 12									724,000
31	Total Additional Revenue Required	$0	$0	$0	$0	$162,800	$999,000	$3,542,800	$4,072,900	$4,841,700
32										
33	Total Revenue	$19,268,088	$19,319,265	$34,921,548	$25,968,664	$22,710,085	$28,016,039	$30,608,605	$31,452,227	$33,359,556

Notes:
(1) Projected Revenues revised to correspond to 02Budget Summary FYE 2012.xls. 2013-2016 projected at 1.1%
(2) Placeholder
(3) Includes grant funds for Waimea project in FY 2011.
(4) Includes SRF Loan proceeds and reimbursements.

#11 - 402 BAB FRC

Table
County of [illegible]
Department of Water
Financial Planning Analysis and Water Rate Study
Historical and Projected Operating Revenues and Revenue Requirements
Fiscal Years Ending June 30

		Historical			Estimated	Budget	Projected			
		2008	2009	2010	2011	2012	2013	2014	2015	2016
34	**REVENUE REQUIREMENTS**									
35	Operating Expenditures (5)									
36	Source of Supply	$2,499,838	$2,275,707	$2,245,072	$2,223,761	$3,008,611	$3,101,886	$3,198,160	$3,297,340	$3,399,526
37	Pumping	2,947,947	2,556,313	2,576,227	3,064,600	3,100,000	3,410,000	3,580,500	3,759,500	3,947,500
38	Water Treatment Plant	1,675,094	1,723,621	1,949,808	2,306,740	2,624,967	2,703,653	2,784,636	2,868,115	2,954,267
39	Transmission & Distribution	2,496,677	2,471,122	3,302,023	3,579,434	3,389,868	3,559,423	3,737,456	3,924,320	4,120,545
40	Customer Services	520,281	610,600	762,749	730,664	875,681	901,744	928,690	956,343	984,879
41	Administrative & Engineering	2,782,432	2,475,297	2,513,490	3,038,246	3,248,822	3,353,231	3,461,317	3,573,260	3,689,359
42	Manager's Office	0	0	0	0	0	0	0	0	0
43	County Service Charge	736,888	817,839	925,133	833,500	925,133	934,400	943,700	953,100	962,600
44	Vehicles	184,373	207,307	183,874	201,310	275,600	280,100	284,600	289,200	293,900
45	Other Operating Expenses	359,215	415,079	417,380	481,679	551,400	557,600	563,900	570,200	576,600
46	Adjustments (6)	(102,147)	(177,896)	(1,429,025)	(966,957)	(696,099)	(2,000,000)	(2,000,000)	(2,000,000)	(2,000,000)
47	Total Operating Expenditures	$14,100,598	$13,374,990	$13,446,732	$15,492,977	$17,303,983	$16,802,037	$17,482,960	$18,191,378	$18,929,176
48										
49	Operating Income	$5,167,490	$5,944,275	$21,474,816	$10,475,687	$5,406,102	$11,214,002	$13,125,645	$13,260,849	$14,430,380
50	Funds Available for Debt Service (7)	4,678,941	5,885,194	6,761,742	6,632,687	5,406,102	6,877,481	8,964,357	9,012,511	9,272,486
51										
52	Debt Service Requirement									
50	Existing Debt Service (8)	$1,943,760	$2,248,716	$2,496,309	$5,738,947	$6,518,998	$6,539,283	$8,339,587	$8,096,959	$7,868,983
51	Proposed Debt Service (8)	0	0	0	0	0	319,100	625,300	937,900	1,317,400
52	Debt Service Paid by FRC (9)	0	0	0	(284,622)	(2,281,203)	(2,260,361)	(2,982,053)	(3,018,771)	(3,000,808)
53	Total Debt Service Requirement	$1,943,760	$2,248,716	$2,496,309	$5,454,325	$4,237,795	$4,598,023	$5,982,833	$6,016,088	$6,185,575
54										
55	Capital Costs Charged to Operations									
56	Equipment (10)	$412,887	$451,949	$215,969	$465,529	$1,122,700	$533,800	$533,800	$533,800	$533,800
57	Property & Supply (10)	677,438	463,447	423,994	1,005,524	984,500	711,000	711,000	711,000	711,000
58	SRF Financed Capital (10)	2,185,874	4,781,289	5,410,800	3,843,000	0	4,336,500	4,161,300	4,248,300	5,157,900
59	Cash Financed Capital	3,439,913	4,203,176	7,592,391	2,094,257	8,036,607	2,034,679	736,712	751,661	1,842,106
60	Adjustment (11)	0	0	0	0	0	0	0	0	0
61	Total Capital Costs Charged to Ops	$6,716,112	$9,899,861	$13,643,154	$7,408,310	$10,143,807	$7,615,979	$6,142,812	$6,244,761	$8,244,806
62										
63	Transfer to Emergency Reserve Fund	$0	$0	$0	$0	$1,000,000	$1,000,000	$1,000,000	$1,000,000	$0
64										
65	Total Revenue Requirements	$22,760,470	$25,523,567	$29,586,195	$28,355,612	$32,685,585	$30,016,039	$30,608,605	$31,452,227	$33,359,556
66										
67	Revenue Surplus/Deficiency	($3,492,382)	($6,204,302)	$5,335,353	($2,386,948)	($9,975,500)	($2,000,000)	$0	$0	$0
68										
69	Ending Balance	$15,215,397	$9,011,095	$14,362,450	$11,975,502	$2,000,000	$0	$0	$0	$0
70										
71	Debt Service Coverage w/ FRC Payback (13)	2.41	2.62	2.71	1.22	1.28	1.50	1.50	1.50	1.50
72	Minimum Debt Service Coverage (14)	N/A	N/A	N/A	1.50	1.50	1.50	1.50	1.50	1.50
73										
74	Average Residential Bill ($/month) (15)	$35.00	$37.75	$40.50	$44.40	$45.15	$46.69	$52.43	$53.53	$55.14
75	Increase		2.75	2.75	3.90	0.75	1.54	5.74	1.10	1.61

Table 9 (B)
County of Kauai
Department of Water
Financial Planning Analysis and Water Rate Study
Historical and Projected Operating Revenues and Revenue Requirements
Fiscal Years Ending June 30

Historical			Estimated	Budget	Projected			
2008	2009	2010	2011	2012	2013	2014	2015	2016

Notes:
(5) See Table 6 for details.
(6) Adjustments made to reduce O&M expenditures due to staff vacancies, and to reflect the historical trend of reduced budgetary expenditure levels.
(7) Equals Operating Income less SRF loan proceeds.
(8) See Table 8 for details.
(9) FRC Debt Service Payback per DOW, 3/23/11.
(10) Per FY 2012 Annual Budget (Budget Summary FYE 2012.xls). Projected expenses based on average of FY 08-12.
(11) Adjustment per DOW, 2/18/11, based on lower than budgeted capital expenditures.
(12) Equals Funds Available for Debt Service divided by Total Debt Service.
(13) Target for planning purposes.
(14) Based on a 5/8" meter using 10,000 gallons per month.

County of Kauai
Department of Water
Financial Planning Analysis - Water Rate Study
Historical and Projected Operating Revenues and Revenue Requirements
Fiscal Years Ending June 30

		Historical			Estimated	Budget	Projected			
		2008	2009	2010	2011	2012	2013	2014	2015	2016
1	**REVENUES**									
2	Beginning Balance	$18,707,779	$15,215,397	$9,011,095	$14,362,450	$11,975,500	$2,000,000	$17,200	$5,900	$10,600
3										
4	Revenue Under Existing Rates:									
5	Operating Revenues (1)									
6	Water Sales	$13,223,896	$13,433,062	$14,272,311	n/a	$16,643,743	$16,826,824	$17,011,919	$17,199,050	$17,388,240
7	Service Charge	2,769,917	3,009,416	3,087,800	n/a	3,684,000	3,724,524	3,765,494	3,806,914	3,848,790
8	Leak Rebate (2)	0	0	0	0	(406,555)	(406,555)	(406,555)	(406,555)	(406,555)
9	Total Operating Revenues	$15,993,813	$15,770,435	$17,360,111	$18,472,405	$19,158,250	$19,368,991	$19,582,050	$19,797,453	$20,015,225
10										
11	Other Income (1)									
12	Miscellaneous Receipts	$116,619	$175,333	$149,855	$5,000	$112,000	$112,000	$112,000	$112,000	$112,000
13	Interest Earned	817,557	562,949	275,535	461,000	355,000	355,000	355,000	355,000	355,000
14	Fire Hydrant Svc. Charge	736,888	817,839	925,133	925,133	925,133	935,943	946,881	957,951	969,153
15	Other (3)	107,354	608,262	27,140	101,216	0	0	0	0	0
16	Other - SRF Loan (4)	488,549	59,081	14,713,074	3,843,000	0	3,185,600	2,449,000	2,500,000	3,500,000
17	BAB Subsidy	0	0	0	871,800	613,385	613,385	613,385	613,385	613,385
18	Cost of Power Adjustment	1,007,308	1,325,366	1,470,700	1,289,110	1,383,517	1,295,200	1,295,200	1,295,200	1,295,200
19	Total Other Income	$3,274,275	$3,548,830	$17,561,437	$7,496,259	$3,389,035	$6,497,128	$5,771,466	$5,833,536	$6,844,737
20										
21	Total Revenue	$19,268,088	$19,319,265	$34,921,548	$25,968,664	$22,547,285	$25,866,119	$25,353,516	$25,630,988	$26,859,962
22										
23	Additional Revenue Required									
24		% of Water	Months							
25	Year	Sales Revenue	Effective		2011	2012	2013	2014	2015	2016
26	FY 2012	1.7%	6							
27	FY 2013	8.9%	12			$162,800	$329,300	$332,900	$336,600	$340,300
28	FY 2014	13.5%	12				1,753,100	1,772,400	1,791,900	1,811,600
29	FY 2015	1.6%	12					2,927,800	2,960,000	2,992,600
30	FY 2016	1.9%	12						398,200	402,600
31	Total Additional Revenue Required			$0	$0	$162,800	$2,082,400	$5,033,100	$5,486,700	485,700
32										$6,032,800
33	Total Revenue			$19,268,088	$19,319,265	$34,921,548	$25,968,664	$22,710,085	$27,948,519	$30,386,616

Notes:
(1) Projected Revenues revised to correspond to 02Budget Summary FYE 2012.xls. 2013-2016 projected at 1.1%
(2) Placeholder
(3) Includes grant funds for Waimea project in FY 2011.
(4) Includes SRF Loan proceeds and reimbursements.

#5- 40% BAB FRC

P-29

Table 9 (A)
County of Kauai
Department of Water
Financial Planning Analysis and Water Rate Study
Historical and Projected Operating Revenues and Revenue Requirements
Fiscal Years Ending June 30

		Historical			Estimated	Budget	Projected			
		2008	2009	2010	2011	2012	2013	2014	2015	2016
34	**REVENUE REQUIREMENTS**									
35	Operating Expenditures (5)									
36	Source of Supply	$2,499,838	$2,275,707	$2,245,072	$2,223,761	$3,008,611	$3,101,886	$3,198,160	$3,297,340	$3,399,526
37	Pumping	2,947,947	2,556,313	2,576,227	3,064,600	3,100,000	3,410,000	3,580,500	3,759,500	3,947,500
38	Water Treatment Plant	1,675,094	1,723,621	1,949,808	2,306,740	2,624,967	2,703,653	2,784,636	2,868,115	2,954,267
39	Transmission & Distribution	2,496,677	2,471,122	3,302,023	3,579,434	3,389,868	3,559,423	3,737,456	3,924,320	4,120,545
40	Customer Services	520,281	610,600	762,749	730,664	875,681	901,744	928,690	956,343	984,879
41	Administrative & Engineering	2,782,432	2,475,297	2,513,490	3,038,246	3,248,822	3,353,231	3,461,317	3,573,260	3,689,359
42	Manager's Office	0	0	0	0	0	0	0	0	0
43	County Service Charge	736,888	817,839	925,133	833,500	925,133	934,400	943,700	953,100	962,600
44	Vehicles	184,373	207,307	183,874	201,310	275,600	280,100	284,600	289,200	293,900
45	Other Operating Expenses	359,215	415,079	417,380	481,679	551,400	557,600	563,900	570,200	576,600
46	Adjustments (6)	(102,147)	(177,896)	(1,429,025)	(966,957)	(696,099)	(2,000,000)	(2,000,000)	(2,000,000)	(2,000,000)
47	Total Operating Expenditures	$14,100,598	$13,374,990	$13,446,732	$15,492,977	$17,303,983	$16,802,037	$17,482,960	$18,191,378	$18,929,176
48										
49	Operating Income	$5,167,490	$5,944,275	$21,474,816	$10,475,687	$5,406,102	$11,146,481	$12,903,657	$12,926,311	$13,963,586
50	Funds Available for Debt Service (7)	4,678,941	5,885,194	6,761,742	6,632,687	5,406,102	7,960,881	10,454,657	10,426,311	10,463,586
51										
52	Debt Service Requirement									
50	Existing Debt Service (8)	$1,943,760	$2,248,716	$2,496,309	$5,738,947	$6,518,998	$6,539,283	$8,339,587	$8,096,959	$7,868,983
51	Proposed Debt Service (8)	0	0	0	0	0	234,400	414,600	598,600	856,100
52	Debt Service Paid by FRC (9)	0	0	0	(284,622)	(2,281,203)	(2,260,361)	(2,982,053)	(3,018,771)	(3,000,808)
53	Total Debt Service Requirement	$1,943,760	$2,248,716	$2,496,309	$5,454,325	$4,237,795	$4,513,323	$5,772,133	$5,676,788	$5,724,275
54										
55	Capital Costs Charged to Operations									
56	Equipment (10)	$412,887	$451,949	$215,969	$465,529	$1,122,700	$533,800	$533,800	$533,800	$533,800
57	Property & Supply (10)	677,438	463,447	423,994	1,005,524	984,500	711,000	711,000	711,000	711,000
58	SRF Financed Capital (10)	2,185,874	4,781,289	5,410,800	3,843,000	0	3,185,600	2,449,000	2,500,000	3,500,000
59	Cash Financed Capital	3,439,913	4,203,176	7,592,391	2,094,257	8,036,607	3,185,600	2,449,000	2,500,000	3,500,000
60	Adjustment (11)	0	0	0	0	0	0	0	0	0
61	Total Capital Costs Charged to Ops	$6,716,112	$9,899,861	$13,643,154	$7,408,310	$10,143,807	$7,616,000	$6,142,800	$6,244,800	$8,244,800
62										
63	Transfer to Emergency Reserve Fund	$0	$0	$0	$0	$1,000,000	$1,000,000	$1,000,000	$1,000,000	$0
64										
65	Total Revenue Requirements	$22,760,470	$25,523,567	$29,586,195	$28,355,612	$32,685,585	$29,931,360	$30,397,893	$31,112,966	$32,898,251
66										
67	Revenue Surplus/Deficiency	($3,492,382)	($6,204,302)	$5,335,353	($2,386,948)	($9,975,500)	($1,982,841)	($11,277)	$4,723	($5,489)
68										
69	Ending Balance	$15,215,397	$9,011,095	$14,362,450	$11,975,502	$2,000,000	$17,159	$5,923	$10,623	$5,111
70										
71	Debt Service Coverage w/ FRC (12)	2.41	2.62	2.71	1.22	1.28	1.76	1.81	1.84	1.83
72	Minimum Debt Service Coverage (13)	N/A	N/A	N/A	1.50	1.50	1.50	1.50	1.50	1.50
73										
74	Average Residential Bill ($/month) (14)	$35.00	$37.75	$40.50	$44.40	$45.15	$49.17	$55.81	$56.71	$57.78
75	Increase		$2.75	$2.75	$3.90	$0.75	$4.02	$6.64	$0.89	$1.08

Table
County ... al
Department of Water
Financial Planning Analysis and Water Rate Study
Historical and Projected Operating Revenues and Revenue Requirements
Fiscal Years Ending June 30

Historical			Estimated	Budget	Projected			
2008	2009	2010	2011	2012	2013	2014	2015	2016

Notes:
(5) See Table 6 for details.
(6) Adjustments made to reduce O&M expenditures due to staff vacancies, capitalized expenses, and to reflect the historical trend of reduced budgetary expenditure levels.
(7) Equals Operating Income less SRF loan proceeds.
(8) See Table 8 for details.
(9) FRC Debt Service Payback per DOW, 3/23/11.
(10) Per FY 2012 Annual Budget (Budget Summary FYE 2012.xls). Projected expenses based on average of FY 08-12.
(11) Adjustment per DOW, 2/18/11, based on lower than budgeted capital expenditures.
(12) Equals Funds Available for Debt Service divided by Total Debt Service.
(13) Target for planning purposes.
(14) Based on a 5/8" meter using 10,000 gallons per month.

#5 - 40% BAB FRC

p. 31

Scenario 1: 30% FRC Payback, Level Rates, No Target

County of Kauai

Department of Water

Financial Planning Analysis and Water Rate Study

Historical and Projected Operating Revenues and Revenue Requirements

Fiscal Years Ending June 30

		Historical			Estimated	Budget	Projected			
		2008	2009	2010	2011	2012	2013	2014	2015	2016
1	**REVENUES**									
2	Water Utility Fund Beginning Balance	$18,707,779	$15,215,397	$9,011,095	$14,362,450	$11,936,900	$2,601,800	$1,767,100	$425,800	$745,200
3										
4	Revenue Under Existing Rates:									
5	Operating Revenues (1)									
6	Water Sales	$13,223,896	$13,433,062	$14,272,311	$15,426,305	$15,637,051	$15,809,058	$15,982,958	$16,158,770	$16,336,517
7	Service Charge	2,769,917	3,009,416	3,087,800	3,046,100	3,684,000	3,724,524	3,765,494	3,806,914	3,848,790
8	Total Operating Revenues (2)	$15,993,813	$15,770,435	$17,360,111	$18,472,405	$19,321,051	$19,533,582	$19,748,451	$19,965,684	$20,185,307
9										
10	Other Income (1)									
11	Miscellaneous Receipts	$116,619	$175,333	$149,855	$5,000	$112,000	$112,000	$112,000	$112,000	$112,000
12	Interest Earned	817,557	562,949	275,535	461,000	355,000	355,000	355,000	355,000	355,000
13	Fire Hydrant Svc. Charge	736,888	817,839	925,133	925,133	925,133	935,943	946,881	957,951	969,153
14	Other (3)	107,354	608,262	27,140	101,216	0	0	0	0	0
15	Other - SRF Loan (4)	488,549	59,081	14,713,074	3,843,000	0	1,935,400	2,449,000	2,500,000	3,500,000
16	BAB Subsidy	0	0	0	871,800	715,616	715,616	711,125	700,775	687,873
17	Grant - Drought Mitigation	n/a	n/a	n/a	n/a	126,500	0	0	0	0
18	Cost of Power Adjustment	1,007,308	1,325,366	1,470,700	1,289,110	1,383,517	1,295,200	1,295,200	1,295,200	1,295,200
19	Total Other Income	$3,274,275	$3,548,830	$17,561,437	$7,496,259	$3,617,766	$5,349,158	$5,869,207	$5,920,926	$6,919,226
20										
21	Total Revenue	$19,268,088	$19,319,265	$34,921,548	$25,968,664	$22,938,816	$24,882,741	$25,617,658	$25,886,610	$27,104,533
22										
23	Additional Revenue Required									
24										
25	Year / % of Water Sales Revenue / Months Effective				2011	2012	2013	2014	2015	2016
26	FY 2012 8.3% 6					$801,800	$1,621,300	$1,639,100	$1,657,200	$1,675,400
27	FY 2013 8.3% 12						1,755,900	1,775,200	1,794,700	1,814,400
28	FY 2014 8.3% 12							1,922,500	1,943,700	1,965,000
29	FY 2015 8.3% 12								2,105,000	2,128,100
30	FY 2016 0.0% 12									0
31	Total Additional Revenue Required	$0	$0	$0	$0	$801,800	$3,377,200	$5,336,800	$7,500,600	$7,582,900
32										
33	Total Revenue	$19,268,088	$19,319,265	$34,921,548	$25,968,664	$23,740,616	$28,259,941	$30,954,458	$33,387,210	$34,687,433

Notes:

(1) Projected Revenues revised to correspond to 02Budget Summary FYE 2012.xls. 2013-2016 projected at 1.1%

(2) Matches 2012 Budget, less FRC Payback and Cost of Power Adjustment (accounted for elsewhere).

(3) Includes grant funds for Waimea project in FY 2011.

(4) Includes SRF Loan proceeds and reimbursements.

#2

Scenario 1: 30% FRC Payback, Level Rates, No Target
County of Kauai
Department of Water
Financial Planning Analysis and Water Rate Study

Historical and Projected Operating Revenues and Revenue Requirements
Fiscal Years Ending June 30

		Historical			Estimated	Budget	Projected			
		2008	2009	2010	2011	2012	2013	2014	2015	2016
34	**REVENUE REQUIREMENTS**									
35	Operating Expenditures (5)									
36	Source of Supply	$2,499,838	$2,275,707	$2,245,072	$2,223,761	$3,008,611	$3,101,886	$3,198,160	$3,297,340	$3,399,526
37	Pumping	2,947,947	2,556,313	2,576,227	3,064,600	3,100,000	3,410,000	3,580,500	3,759,500	3,947,500
38	Water Treatment Plant	1,675,094	1,723,621	1,949,808	2,306,740	2,624,967	2,703,653	2,784,636	2,868,115	2,954,267
39	Transmission & Distribution	2,496,677	2,471,122	3,302,023	3,579,434	3,389,868	3,559,423	3,737,456	3,924,320	4,120,545
40	Customer Services	520,281	610,600	762,749	730,664	875,681	901,744	928,690	956,343	984,879
41	Administrative & Engineering	2,782,432	2,475,297	2,513,490	3,038,246	3,260,122	3,364,931	3,473,317	3,585,660	3,702,159
42	Manager's Office	0	0	0	0	0	0	0	0	0
43	County Service Charge	736,888	817,839	925,133	833,500	925,133	934,400	943,700	953,100	962,600
44	Vehicles	184,373	207,307	183,874	201,310	275,600	280,100	284,600	289,200	293,900
45	Other Operating Expenses	359,215	415,079	417,380	481,679	551,400	557,600	563,900	570,200	576,600
46	Misc. Operating Expenses (6)	0	0	0	0	1,298,603	1,337,600	1,377,700	1,419,000	1,461,600
47	Adjustments (7)	(102,147)	(177,896)	(1,429,025)	(393,013)	(2,000,000)	(2,000,000)	(2,000,000)	(2,000,000)	(2,000,000)
48	Total Operating Expenditures	$14,100,598	$13,374,990	$13,446,732	$16,066,921	$17,309,984	$18,151,337	$18,872,660	$19,622,778	$20,403,576
49										
50	Operating Income	$5,167,490	$5,944,275	$21,474,816	$9,901,743	$6,430,632	$10,108,603	$12,081,799	$13,764,433	$14,283,857
51	Funds Available for Debt Service (8)	4,678,941	5,885,194	6,761,742	6,058,743	6,304,132	8,173,203	9,632,799	11,264,433	10,783,857
52										
53	Debt Service Requirement									
51	Existing Debt Service (9)	$1,943,760	$2,248,716	$2,417,456	$5,738,944	$6,198,994	$6,154,572	$7,962,963	$7,735,836	$7,868,983
52	Proposed Debt Service (9)	0	0	0	0	320,000	462,400	642,600	826,600	1,084,100
53	Debt Service Paid by FRC (10)	0	0	0	(284,622)	(1,989,115)	(1,968,273)	(2,504,298)	(2,541,241)	(2,523,043)
54	Total Debt Service Requirement	$1,943,760	$2,248,716	$2,417,456	$5,454,322	$4,529,880	$4,648,700	$6,101,265	$6,021,196	$6,430,039
55										
56	Capital Costs Charged to Operations									
57	Equipment (11)	$412,887	$451,949	$110,884	$465,529	$1,122,700	$512,800	$512,800	$512,800	$512,800
58	Property & Supply (11)	677,438	463,447	423,994	1,005,524	984,500	711,000	711,000	711,000	711,000
59	SRF Financed Capital (11)	2,185,874	4,781,289	5,410,800	3,843,000	0	1,935,400	2,449,000	2,500,000	3,500,000
60	Cash Financed Capital	3,439,913	4,203,176	7,592,391	1,558,884	7,928,682	1,935,400	2,449,000	2,500,000	3,500,000
61	Total Capital Costs Charged to Ops	$6,716,112	$9,899,861	$13,538,069	$6,872,937	$10,035,882	$5,094,600	$6,121,800	$6,223,800	$8,223,800
62										
63	Transfer to Emergency Reserve Fund	$0	$0	$0	$0	$1,200,000	$1,200,000	$1,200,000	$1,200,000	$0
64										
65	Total Revenue Requirements	$22,760,470	$25,523,567	$29,402,257	$28,394,180	$33,075,746	$29,094,637	$32,295,724	$33,067,773	$35,057,415
66										
67	Revenue Surplus/Deficiency	($3,492,382)	($6,204,302)	$5,519,291	($2,425,516)	($9,335,130)	($834,696)	($1,341,266)	$319,437	($369,982)
68										
69	Water Utility Fund Ending Balance	$15,215,397	$9,011,095	$14,362,450	$11,936,934	$2,601,770	$1,767,104	$425,834	$745,237	$375,218
70	Emergency Reserve Fund Balance	N/A	N/A	N/A	N/A	$1,200,000	$2,400,000	$3,600,000	$4,800,000	$4,800,000
71	Total Ending Balance	$15,215,397	$9,011,095	$14,362,450	$11,936,934	$3,801,770	$4,167,104	$4,025,834	$5,545,237	$5,175,218
72	Ending Balance Target (12)				$4,618,101	$4,830,263	$4,883,396	$4,937,113	$4,991,421	$5,046,327
73										
74	Debt Service Coverage w/ FRC (13)	2.41	2.62	2.80	1.11	1.41	1.76	1.58	1.87	1.68
75	Minimum Debt Service Coverage (14)	N/A	N/A	N/A	1.50	1.50	1.50	1.50	1.50	1.50
76										
77	Average 5/8" Meter Bill ($/month) (15)	$28.63	$30.81	$32.88	$34.40	$37.26	$40.35	$43.70	$47.32	$47.32
78	Increase		$2.19	$2.06	$1.53	$2.86	$3.09	$3.35	$3.63	$0.00

P 23

Scenario 1: 30% FRC Payback, Level Rates, No Target
County of Kauai
Department of Water
Financial Planning Analysis and Water Rate Study
Historical and Projected Operating Revenues and Revenue Requirements
Fiscal Years Ending June 30

Historical			Estimated	Budget	Projected			
2008	2009	2010	2011	2012	2013	2014	2015	2016

Notes:
(5) See Table 6 for details.
(6) Misc. Operating Expenses consists of the difference between the proposed budget and the projected historical expenses, and serves to make the projection consistent with the budget.
(7) Adjustments made to reduce O&M expenditures due to staff vacancies, capitalized expenses, and to reflect the historical trend of reduced budgetary expenditure levels.
(8) Equals Operating Income less SRF loan proceeds.
(9) See Table 8 for details.
(10) FRC Debt Service Payback per DOW, 5/19/11.
(11) Per FY 2012 Annual Budget (Budget Summary FYE 2012.xls). Projected expenses based on average of FY 08-12.
(12) Ending Balance Target based on 25% of Revenues
(13) Equals Funds Available for Debt Service divided by Total Debt Service.
(14) Target for planning purposes.
(15) Based on a 5/8" meter using 7,500 gallons per month.

Scenario 2: 40% FRC Payback, Level Rates, No Target

County of Kauai
Department of Water
Financial Planning Analysis and Water Rate Study

Historical and Projected Operating Revenues and Revenue Requirements
Fiscal Years Ending June 30

		Historical			Estimated	Budget	Projected			
		2008	2009	2010	2011	2012	2013	2014	2015	2016
1	**REVENUES**									
2	Water Utility Fund Beginning Balance	$18,707,779	$15,215,397	$9,011,095	$14,362,450	$11,936,900	$2,743,300	$1,887,400	$576,400	$769,400
3										
4	Revenue Under Existing Rates:									
5	Operating Revenues (1)									
6	Water Sales	$13,223,896	$13,433,062	$14,272,311	$15,426,305	$15,637,051	$15,809,058	$15,982,958	$16,158,770	$16,336,517
7	Service Charge	2,769,917	3,009,416	3,087,800	3,046,100	3,684,000	3,724,524	3,765,494	3,806,914	3,848,790
8	Total Operating Revenues (2)	$15,993,813	$15,770,435	$17,360,111	$18,472,405	$19,321,051	$19,533,582	$19,748,451	$19,965,684	$20,185,307
9										
10	Other Income (1)									
11	Miscellaneous Receipts	$116,619	$175,333	$149,855	$5,000	$112,000	$112,000	$112,000	$112,000	$112,000
12	Interest Earned	817,557	562,949	275,535	461,000	355,000	355,000	355,000	355,000	355,000
13	Fire Hydrant Svc. Charge	736,888	817,839	925,133	925,133	925,133	935,943	946,881	957,951	969,153
14	Other (3)	107,354	608,262	27,140	101,216	0	0	0	0	0
15	Other - SRF Loan (4)	488,549	59,081	14,713,074	3,843,000	0	1,935,400	2,449,000	2,500,000	3,500,000
16	BAB Subsidy	0	0	0	871,800	613,385	613,385	609,536	600,664	589,606
17	Grant - Drought Mitigation	n/a	n/a	n/a	n/a	126,500	0	0	0	0
18	Cost of Power Adjustment	1,007,308	1,325,366	1,470,700	1,289,110	1,383,517	1,295,200	1,295,200	1,295,200	1,295,200
19	Total Other Income	$3,274,275	$3,548,830	$17,561,437	$7,496,259	$3,515,535	$5,246,928	$5,767,618	$5,820,815	$6,820,958
20										
21	Total Revenue	$19,268,088	$19,319,265	$34,921,548	$25,968,664	$22,836,585	$24,780,510	$25,516,069	$25,786,500	$27,006,265
22										
23	Additional Revenue Required									

24	Year	% of Water Sales Revenue	Months Effective		2011	2012	2013	2014	2015	2016
25										
26	FY 2012	7.8%	6			$753,500	$1,523,600	$1,540,400	$1,557,300	$1,574,500
27	FY 2013	7.8%	12				1,642,500	1,660,500	1,678,800	1,697,300
28	FY 2014	7.8%	12					1,790,000	1,809,700	1,829,700
29	FY 2015	7.8%	12						1,950,900	1,972,400
30	FY 2016	0.0%	12							0
31	Total Additional Revenue Required				$0	$753,500	$3,166,100	$4,990,900	$6,996,700	$7,073,900
32										
33	Total Revenue				$25,968,664	$23,590,085	$27,946,610	$30,506,969	$32,783,200	$34,080,165

Notes:
(1) Projected Revenues revised to correspond to 02Budget Summary FYE 2012.xls. 2013-2016 projected at 1.1%
(2) Matches 2012 Budget, less FRC Payback and Cost of Power Adjustment (accounted for elsewhere).
(3) Includes grant funds for Waimea project in FY 2011.
(4) Includes SRF Loan proceeds and reimbursements.

#7 Pg 35

Scenario 2: 40% FRC Payback, Level Rates, No Target
County of Kauai
Department of Water
Financial Planning Analysis and Water Rate Study
Historical and Projected Operating Revenues and Revenue Requirements
Fiscal Years Ending June 30

		Historical			Estimated	Budget	Projected			
		2008	2009	2010	2011	2012	2013	2014	2015	2016
34	REVENUE REQUIREMENTS									
35	Operating Expenditures (5)									
36	Source of Supply	$2,499,838	$2,275,707	$2,245,072	$2,223,761	$3,008,611	$3,101,886	$3,198,160	$3,297,340	$3,399,526
37	Pumping	2,947,947	2,556,313	2,576,227	3,064,600	3,100,000	3,410,000	3,580,500	3,759,500	3,947,500
38	Water Treatment Plant	1,675,094	1,723,621	1,949,808	2,306,740	2,624,967	2,703,653	2,784,636	2,868,115	2,954,267
39	Transmission & Distribution	2,496,677	2,471,122	3,302,023	3,579,434	3,389,868	3,559,423	3,737,456	3,924,320	4,120,545
40	Customer Services	520,281	610,600	762,749	730,664	875,681	901,744	928,690	956,343	984,879
41	Administrative & Engineering	2,782,432	2,475,297	2,513,490	3,038,246	3,260,122	3,364,931	3,473,317	3,585,660	3,702,159
42	Manager's Office	0	0	0	0	0	0	0	0	0
43	County Service Charge	736,888	817,839	925,133	833,500	925,133	934,400	943,700	953,100	962,600
44	Vehicles	184,373	207,307	183,874	201,310	275,600	280,100	284,600	289,200	293,900
45	Other Operating Expenses	359,215	415,079	417,380	481,679	551,400	557,600	563,900	570,200	576,600
46	Misc. Operating Expenses (6)	0	0	0	0	1,298,603	1,337,600	1,377,700	1,419,000	1,461,600
47	* Adjustments (7)	(102,147)	(177,896)	(1,429,025)	(393,013)	(2,000,000)	(2,000,000)	(2,000,000)	(2,000,000)	(2,000,000)
48	Total Operating Expenditures	$14,100,598	$13,374,990	$13,446,732	$16,066,921	$17,309,984	$18,151,337	$18,872,660	$19,622,778	$20,403,576
49										
50	Operating Income	$5,167,490	$5,944,275	$21,474,816	$9,901,743	$6,280,101	$9,795,272	$11,634,309	$13,160,422	$13,676,589
51	Funds Available for Debt Service (8)	4,678,941	5,885,194	6,761,742	6,058,743	6,153,601	7,859,872	9,185,309	10,660,422	10,176,589
52										
53	Debt Service Requirement									
51	Existing Debt Service (9)	$1,943,760	$2,248,716	$2,417,456	$5,738,944	$6,198,994	$6,154,672	$7,962,963	$7,735,836	$7,868,983
52	Proposed Debt Service (9)	0	0	0	0	320,000	462,400	642,600	826,600	1,084,100
53	Debt Service Paid by FRC (10)	0	0	0	(284,622)	(2,281,203)	(2,260,361)	(2,982,053)	(3,018,771)	(3,000,808)
54	Total Debt Service Requirement	$1,943,760	$2,248,716	$2,417,456	$5,454,322	$4,237,792	$4,356,612	$5,623,509	$5,543,665	$5,952,275
55										
56	Capital Costs Charged to Operations									
57	Equipment (110)	$412,887	$451,949	$110,884	$465,529	$1,122,700	$512,800	$512,800	$512,800	$512,800
58	Property & Supply (11)	677,438	463,447	423,994	1,005,524	984,500	711,000	711,000	711,000	711,000
59	SRF Financed Capital (11)	2,185,874	4,781,289	5,410,800	3,843,000	0	1,935,400	2,449,000	2,500,000	3,500,000
60	Cash Financed Capital	3,439,913	4,203,176	7,592,391	1,558,884	7,928,682	1,935,400	2,449,000	2,500,000	3,500,000
62	Total Capital Costs Charged to Ops	$6,716,112	$9,899,861	$13,538,069	$6,872,937	$10,035,882	$5,094,600	$6,121,800	$6,223,800	$8,223,800
63										
64	Transfer to Emergency Reserve Fund	$0	$0	$0	$0	$1,200,000	$1,200,000	$1,200,000	$1,200,000	$0
65										
66	Total Revenue Requirements	$22,760,470	$25,523,567	$29,402,257	$28,394,180	$32,783,658	$28,802,549	$31,817,969	$32,590,243	$34,579,651
67										
68	Revenue Surplus/Deficiency	($3,492,382)	($6,204,302)	$5,519,291	($2,425,516)	($9,193,572)	($855,939)	($1,311,000)	$192,957	($499,485)
69										
70	Water Utility Fund Ending Balance	$15,215,397	$9,011,095	$14,362,450	$11,936,934	$2,743,328	$1,887,361	$576,400	$769,357	$269,915
71	Emergency Reserve Fund Balance	N/A	N/A	N/A	N/A	$1,200,000	$2,400,000	$3,600,000	$4,800,000	$4,800,000
72	Total Ending Balance	$15,215,397	$9,011,095	$14,362,450	$11,936,934	$3,943,328	$4,287,361	$4,176,400	$5,569,357	$5,069,915
73	Ending Balance Target (12)				$4,618,101	$4,830,263	$4,883,396	$4,937,113	$4,991,421	$5,046,327
74										
75	Debt Service Coverage w/ FRC (13)	2.41	2.62	2.80	2.78	2.45	1.80	1.63	1.92	1.71
76	Minimum Debt Service Coverage (14)	N/A	N/A	N/A	1.50	1.50	1.50	1.50	1.50	1.50
77										
78	Average 5/8" Meter Bill ($/month) (15)	$28.63	$30.81	$32.88	$34.40	$37.08	$39.98	$43.09	$46.46	$46.46
79	Increase		$2.19	$2.06	$1.53	$2.68	$2.89	$3.12	$3.36	$0.00

Scenario 2: 40% FRC Payback, Level Rates, No Target
County of Kauai
Department of Water
Financial Planning Analysis and Water Rate Study
Historical and Projected Operating Revenues and Revenue Requirements
Fiscal Years Ending June 30

Historical			Estimated	Budget	Projected			
2008	2009	2010	2011	2012	2013	2014	2015	2016

Notes:
(5) See Table 6 for details.
(6) Misc. Operating Expenses consists of the difference between the proposed budget and the projected historical expenses, and serves to make the projection consistent with the budget.
(7) Adjustments made to reduce O&M expenditures due to staff vacancies, capitalized expenses, and to reflect the historical trend of reduced budgetary expenditure levels.
(8) Equals Operating Income less SRF loan proceeds.
(9) See Table 8 for details.
(10) FRC Debt Service Payback per DOW, 3/23/11.
(11) Per FY 2012 Annual Budget (Budget Summary FYE 2012.xls). Projected expenses based on average of FY 08-12.
(12) Ending Balance Target based on 25% of Revenues
(13) Equals Funds Available for Debt Service divided by Total Debt Service.
(14) Target for planning purposes.
(15) Based on a 5/8" meter using 7,500 gallons per month.

Scenario 3: 30% FRC Payback, Uneven Rates, Meet Targets
County of Kauai
Department of Water
Financial Planning Analysis and Water Rate Study
Historical and Projected Operating Revenues and Revenue Requirements
Fiscal Years Ending June 30

		Historical			Estimated	Budget	Projected			
		2008	2009	2010	2011	2012	2013	2014	2015	2016
1	**REVENUES**									
2	Water Utility Fund Beginning Balance	$18,707,779	$15,215,397	$9,011,095	$14,362,450	$11,936,900	$3,635,500	$3,135,000	$1,337,100	$210,300
3										
4	Revenue Under Existing Rates:									
5	Operating Revenues (1)									
6	Water Sales	$13,223,896	$13,433,062	$14,272,311	$15,426,305	$15,637,051	$15,809,058	$15,982,958	$16,158,770	$16,336,517
7	Service Charge	2,769,917	3,009,416	3,087,800	3,046,100	3,684,000	3,724,524	3,765,494	3,806,914	3,848,790
8	Total Operating Revenues (2)	$15,993,813	$15,770,435	$17,360,111	$18,472,405	$19,321,051	$19,533,582	$19,748,451	$19,965,684	$20,185,307
9										
10	Other Income (1)									
11	Miscellaneous Receipts	$116,619	$175,333	$149,855	$5,000	$112,000	$112,000	$112,000	$112,000	$112,000
12	Interest Earned	817,557	562,949	275,535	461,000	355,000	355,000	355,000	355,000	355,000
13	Fire Hydrant Svc. Charge	736,888	817,839	925,133	925,133	925,133	935,943	946,881	957,951	969,153
14	Other (3)	107,354	608,262	27,140	101,216	0	0	0	0	0
15	Other - SRF Loan (4)	488,549	59,081	14,713,074	3,843,000	0	1,935,400	2,449,000	2,500,000	3,500,000
16	BAB Subsidy	0	0	0	871,800	715,616	715,616	711,125	700,775	687,873
17	Grant - Drought Mitigation	n/a	n/a	n/a	n/a	126,500	0	0	0	0
18	Cost of Power Adjustment	1,007,308	1,325,366	1,470,700	1,289,110	1,383,517	1,295,200	1,295,200	1,295,200	1,295,200
19	Total Other Income	$3,274,275	$3,548,830	$17,561,437	$7,496,259	$3,617,766	$5,349,158	$5,869,207	$5,920,926	$6,919,226
20										
21	Total Revenue	$19,268,088	$19,319,265	$34,921,548	$25,968,664	$22,938,816	$24,882,741	$25,617,658	$25,886,610	$27,104,533
22										
23	Additional Revenue Required									
24	% of Water									
25	Year / Sales Revenue / Months Effective				2011	2012	2013	2014	2015	2016
26	FY 2012 19.0% 6					$1,835,500	$3,711,400	$3,752,200	$3,793,500	$3,835,200
27	FY 2013 0.0% 12						0	0	0	0
28	FY 2014 4.8% 12							1,128,000	1,140,400	1,153,000
29	FY 2015 4.5% 12								1,120,500	1,132,800
30	FY 2016 7.2% 12									1,894,100
31	Total Additional Revenue Required	$0	$0	$0	$0	$1,835,500	$3,711,400	$4,880,200	$6,054,400	$8,015,100
32										
33	Total Revenue	$19,268,088	$19,319,265	$34,921,548	$25,968,664	$24,774,316	$28,594,141	$30,497,858	$31,941,010	$35,119,633

Notes:
(1) Projected Revenues revised to correspond to 02Budget Summary FYE 2012.xls. 2013-2016 projected at 1.1%
(2) Matches 2012 Budget, less FRC Payback and Cost of Power Adjustment (accounted for elsewhere).
(3) Includes grant funds for Waimea project in FY 2011.
(4) Includes SRF Loan proceeds and reimbursements.

#8
38

11-01012-1000[illegible]

Scenario 3: 30% FRC Payback, Uneven Rates, Meet Targets
County of Kauai
Department of Water
Financial Planning Analysis and Water Rate Study
Historical and Projected Operating Revenues and Revenue Requirements
Fiscal Years Ending June 30

		Historical			Estimated	Budget	Projected			
		2008	2009	2010	2011	2012	2013	2014	2015	2016
34	**REVENUE REQUIREMENTS**									
35	Operating Expenditures (5)									
36	Source of Supply	$2,499,838	$2,275,707	$2,245,072	$2,223,761	$3,008,611	$3,101,886	$3,198,160	$3,297,340	$3,399,526
37	Pumping	2,947,947	2,556,313	2,576,227	3,064,600	3,100,000	3,410,000	3,580,500	3,759,500	3,947,500
38	Water Treatment Plant	1,675,094	1,723,621	1,949,808	2,306,740	2,624,967	2,703,653	2,784,636	2,868,115	2,954,267
39	Transmission & Distribution	2,496,677	2,471,122	3,302,023	3,579,434	3,389,868	3,559,423	3,737,456	3,924,320	4,120,545
40	Customer Services	520,281	610,600	762,749	730,664	875,681	901,744	928,690	956,343	984,879
41	Administrative & Engineering	2,782,432	2,475,297	2,513,490	3,038,246	3,260,122	3,364,931	3,473,317	3,585,660	3,702,159
42	Manager's Office	0	0	0	0	0	0	0	0	0
43	County Service Charge	736,888	817,839	925,133	833,500	925,133	934,400	943,700	953,100	962,600
44	Vehicles	184,373	207,307	183,874	201,310	275,600	280,100	284,600	289,200	293,900
45	Other Operating Expenses	359,215	415,079	417,380	481,679	551,400	557,600	563,900	570,200	576,600
46	Misc. Operating Expenses (6)	0	0	0	0	1,298,603	1,337,600	1,377,700	1,419,000	1,461,600
47	Adjustments (7)	(102,147)	(177,896)	(1,429,025)	(393,013)	(2,000,000)	(2,000,000)	(2,000,000)	(2,000,000)	(2,000,000)
48	Total Operating Expenditures	$14,100,598	$13,374,990	$13,446,732	$16,066,921	$17,309,984	$18,151,337	$18,872,660	$19,622,778	$20,403,576
49										
50	Operating Income	$5,167,490	$5,944,275	$21,474,816	$9,901,743	$7,464,332	$10,442,803	$11,625,199	$12,318,233	$14,716,057
51	Funds Available for Debt Service (8)	4,678,941	5,885,194	6,761,742	6,058,743	7,337,832	8,507,403	9,176,199	9,818,233	11,216,057
52										
53	Debt Service Requirement									
51	Existing Debt Service (9)	$1,943,760	$2,248,716	$2,417,456	$5,738,944	$6,198,994	$6,154,572	$7,962,963	$7,735,836	$7,868,983
52	Proposed Debt Service (9)	0	0	0	0	320,000	462,400	642,600	826,600	1,084,100
53	Debt Service Paid by FRC (10)	0	0	0	(284,622)	(1,989,115)	(1,968,273)	(2,504,298)	(2,541,241)	(2,523,043)
54	Total Debt Service Requirement	$1,943,760	$2,248,716	$2,417,456	$5,454,322	$4,529,880	$4,648,700	$6,101,265	$6,021,196	$6,430,039
55										
56	Capital Costs Charged to Operations									
57	Equipment (11)	$412,887	$451,949	$110,884	$465,529	$1,122,700	$512,800	$512,800	$512,800	$512,800
58	Property & Supply (11)	677,438	463,447	423,994	1,005,524	984,500	711,000	711,000	711,000	711,000
59	SRF Financed Capital (11)	2,185,874	4,781,289	5,410,800	3,843,000	0	1,935,400	2,449,000	2,500,000	3,500,000
60	Cash Financed Capital	3,439,913	4,203,176	7,592,391	1,558,884	7,928,682	1,935,400	2,449,000	2,500,000	3,500,000
62	Total Capital Costs Charged to Ops	$6,716,112	$9,899,861	$13,538,069	$6,872,937	$10,035,882	$5,094,600	$6,121,800	$6,223,800	$8,223,800
63										
64	Transfer to Emergency Reserve Fund	$0	$0	$0	$0	$1,200,000	$1,200,000	$1,200,000	$1,200,000	$0
65										
66	Total Revenue Requirements	$22,760,470	$25,523,567	$29,402,257	$28,394,180	$33,075,746	$29,094,637	$32,295,724	$33,067,773	$35,057,415
67										
68	Revenue Surplus/Deficiency	($3,492,382)	($6,204,302)	$5,519,291	($2,425,516)	($8,301,430)	($500,496)	($1,797,866)	($1,126,763)	$62,218
69										
70	Water Utility Fund Ending Balance	$15,215,397	$9,011,095	$14,362,450	$11,936,934	$3,635,470	$3,135,004	$1,337,134	$210,337	$272,518
71	Emergency Reserve Fund Balance	N/A	N/A	N/A	N/A	$1,200,000	$2,400,000	$3,600,000	$4,800,000	$4,800,000
72	Total Ending Balance	$15,215,397	$9,011,095	$14,362,450	$11,936,934	$4,835,470	$5,535,004	$4,937,134	$5,010,337	$5,072,518
73	Ending Balance Target (12)				$4,618,101	$4,830,263	$4,883,396	$4,937,113	$4,991,421	$5,046,327
74										
75	Debt Service Coverage w/ FRC (13)	2.41	2.62	2.80		1.62	1.83	1.50	1.63	1.74
76	Minimum Debt Service Coverage (14)	N/A	N/A	N/A	1.50	1.50	1.50	1.50	1.50	1.50
77										
78	Average 5/8" Meter Bill ($/month) (15)	$28.63	$30.81	$32.88	$34.40	$40.94	$40.94	$42.90	$44.83	$48.06
79	Increase		$2.19	$2.06	$1.53	$6.54	$0.00	$1.96	$1.93	$3.23

Scenario 3: 30% FRC Payback, Uneven Rates, Meet Targets
County of Kauai
Department of Water
Financial Planning Analysis and Water Rate Study
Historical and Projected Operating Revenues and Revenue Requirements
Fiscal Years Ending June 30

Historical			Estimated	Budget	Projected			
2008	2009	2010	2011	2012	2013	2014	2015	2016

Notes:
(5) See Table 6 for details.
(6) Misc. Operating Expenses consists of the difference between the proposed budget and the projected historical expenses, and serves to make the projection consistent with the budget.
(7) Adjustments made to reduce O&M expenditures due to staff vacancies, capitalized expenses, and to reflect the historical trend of reduced budgetary expenditure levels.
(8) Equals Operating Income less SRF loan proceeds.
(9) See Table 8 for details.
(10) FRC Debt Service Payback per DOW, 3/23/11.
(11) Per FY 2012 Annual Budget (Budget Summary FYE 2012.xls). Projected expenses based on average of FY 08-12.
(12) Ending Balance Target based on 25% of Revenues
(13) Equals Funds Available for Debt Service divided by Total Debt Service.
(14) Target for planning purposes.
(15) Based on a 5/8" meter using 7,500 gallons per month.

Scenario 4: 30% FRC Payback, Level Rates, Meet Targets, Deferred CIP

County of Kauai
Department of Water
Financial Planning Analysis and Water Rate Study

Historical and Projected Operating Revenues and Revenue Requirements
Fiscal Years Ending June 30

		Historical			Estimated	Budget	Projected			
		2008	2009	2010	2011	2012	2013	2014	2015	2016
1	REVENUES									
2	Water Utility Fund Beginning Balance	$18,707,779	$15,215,397	$9,011,095	$14,362,450	$11,936,900	$3,782,500	$2,863,200	$1,383,200	$1,500,100
3										
4	Revenue Under Existing Rates:									
5	Operating Revenues (1)									
6	Water Sales	$13,223,896	$13,433,062	$14,272,311	$15,426,305	$15,637,051	$15,809,058	$15,982,958	$16,158,770	$16,336,517
7	Service Charge	2,769,917	3,009,416	3,087,800	3,046,100	3,684,000	3,724,524	3,765,494	3,806,914	3,848,790
8	Total Operating Revenues (2)	$15,993,813	$15,770,435	$17,360,111	$18,472,405	$19,321,051	$19,533,582	$19,748,451	$19,965,684	$20,185,307
9										
10	Other Income (1)									
11	Miscellaneous Receipts	$116,619	$175,333	$149,855	$5,000	$112,000	$112,000	$112,000	$112,000	$112,000
12	Interest Earned	817,557	562,949	275,535	461,000	355,000	355,000	355,000	355,000	355,000
13	Fire Hydrant Svc. Charge	736,888	817,839	925,133	925,133	925,133	935,943	946,881	957,951	969,153
14	Other (3)	107,354	608,262	27,140	101,216	0	0	0	0	0
15	Other - SRF Loan (4)	488,549	59,081	14,713,074	3,843,000	0	1,935,400	2,449,000	2,500,000	4,100,000
16	BAB Subsidy	0	0	0	871,800	715,616	715,616	711,125	700,775	687,873
17	Grant - Drought Mitigation	n/a	n/a	n/a	n/a	126,500	0	0	0	0
18	Cost of Power Adjustment	1,007,308	1,325,366	1,470,700	1,289,110	1,383,517	1,295,200	1,295,200	1,295,200	1,295,200
19	Total Other Income	$3,274,275	$3,548,830	$17,561,437	$7,496,259	$3,617,766	$5,349,158	$5,869,207	$5,920,926	$7,519,226
20										
21	Total Revenue	$19,268,088	$19,319,265	$34,921,548	$25,968,664	$22,938,816	$24,882,741	$25,617,658	$25,886,610	$27,704,533
22										
23	Additional Revenue Required									
24	% of Water	Months								
25	Year Sales Revenue	Effective			2011	2012	2013	2014	2015	2016
26	FY 2012 8.1%	6				$782,500	$1,582,200	$1,599,600	$1,617,200	$1,635,000
27	FY 2013 8.1%	12					1,710,400	1,729,200	1,748,200	1,767,400
28	FY 2014 8.1%	12						1,869,300	1,889,800	1,910,600
29	FY 2015 8.1%	12							2,042,900	2,065,400
30	FY 2016 0.0%	12								0
31	Total Additional Revenue Required		$0	$0	$0	$0	$782,500	$3,292,600	$5,198,100	$7,298,100	$7,378,400
32										
33	Total Revenue		$19,268,088	$19,319,265	$34,921,548	$25,968,664	$23,721,316	$28,175,341	$30,815,758	$33,184,710	$35,082,933

Notes:
(1) Projected Revenues revised to correspond to 02Budget Summary FYE 2012.xls. 2013-2016 projected at 1.1%
(2) Matches 2012 Budget, less FRC Payback and Cost of Power Adjustment (accounted for elsewhere).
(3) Includes grant funds for Waimea project in FY 2011.
(4) Includes SRF Loan proceeds and reimbursements.

#9
P41

Scenario 4: 30% FRC Payback, Level Rates, Meet Targets, Deferred CIP
County of Kauai
Department of Water
Financial Planning Analysis and Water Rate Study
Historical and Projected Operating Revenues and Revenue Requirements
Fiscal Years Ending June 30

		Historical			Estimated	Budget	Projected			
		2008	2009	2010	2011	2012	2013	2014	2015	2016
34	**REVENUE REQUIREMENTS**									
35	Operating Expenditures (5)									
36	Source of Supply	$2,499,838	$2,275,707	$2,245,072	$2,223,761	$3,008,611	$3,101,886	$3,198,160	$3,297,340	$3,399,526
37	Pumping	2,947,947	2,556,313	2,576,227	3,064,600	3,100,000	3,410,000	3,580,500	3,759,500	3,947,500
38	Water Treatment Plant	1,675,094	1,723,621	1,949,808	2,306,740	2,624,967	2,703,653	2,784,636	2,868,115	2,954,267
39	Transmission & Distribution	2,496,677	2,471,122	3,302,023	3,579,434	3,389,868	3,559,423	3,737,456	3,924,320	4,120,545
40	Customer Services	520,281	610,600	762,749	730,664	875,681	901,744	928,690	956,343	984,879
41	Administrative & Engineering	2,782,432	2,475,297	2,513,490	3,038,246	3,260,122	3,364,931	3,473,317	3,585,660	3,702,159
42	Manager's Office	0	0	0	0	0	0	0	0	0
43	County Service Charge	736,888	817,839	925,133	833,500	925,133	934,400	943,700	953,100	962,600
44	Vehicles	184,373	207,307	183,874	201,310	275,600	280,100	284,600	289,200	293,900
45	Other Operating Expenses	359,215	415,079	417,380	481,679	551,400	557,600	563,900	570,200	576,600
46	Misc. Operating Expenses (6)	0	0	0	0	1,298,603	1,337,600	1,377,700	1,419,000	1,461,600
47	Adjustments (7)	(102,147)	(177,896)	(1,429,025)	(393,013)	(2,000,000)	(2,000,000)	(2,000,000)	(2,000,000)	(2,000,000)
48	Total Operating Expenditures	$14,100,598	$13,374,990	$13,446,732	$16,066,921	$17,309,984	$18,151,337	$18,872,660	$19,622,778	$20,403,576
49										
50	Operating Income	$5,167,490	$5,944,275	$21,474,816	$9,901,743	$6,411,332	$10,024,003	$11,943,099	$13,561,933	$14,679,357
51	Funds Available for Debt Service (8)	4,678,941	5,885,194	6,761,742	6,058,743	6,284,832	6,088,603	9,494,099	11,061,933	10,579,357
52										
53	Debt Service Requirement									
51	Existing Debt Service (9)	$1,943,760	$2,248,716	$2,417,456	$5,738,944	$6,198,994	$6,154,572	$7,962,963	$7,735,836	$7,868,983
52	Proposed Debt Service (9)	0	0	0	0	320,000	462,400	642,600	826,600	1,128,300
53	Debt Service Paid by FRC (10)	0	0	0	(284,622)	(1,989,115)	(1,968,273)	(2,504,298)	(2,541,241)	(2,523,043)
54	Total Debt Service Requirement	$1,943,760	$2,248,716	$2,417,456	$5,454,322	$4,529,880	$4,648,700	$6,101,265	$6,021,196	$6,474,239
55										
56	Capital Costs Charged to Operations									
57	Equipment (11)	$412,887	$451,949	$110,884	$465,529	$1,122,700	$512,800	$512,800	$512,800	$512,800
58	Property & Supply (11)	677,438	463,447	423,994	1,005,524	984,500	711,000	711,000	711,000	711,000
59	SRF Financed Capital (11)	2,185,874	4,781,289	5,410,800	3,843,000	0	1,935,400	2,449,000	2,500,000	4,100,000
60	Cash Financed Capital	3,439,913	4,203,176	7,592,391	1,558,884	6,728,682	1,935,400	2,449,000	2,500,000	4,100,000
62	Total Capital Costs Charged to Ops	$6,716,112	$9,899,861	$13,538,069	$6,872,937	$8,835,882	$5,094,600	$6,121,800	$6,223,800	$9,423,800
63										
64	Transfer to Emergency Reserve Fund	$0	$0	$0	$0	$1,200,000	$1,200,000	$1,200,000	$1,200,000	$0
65										
66	Total Revenue Requirements	$22,760,470	$25,523,567	$29,402,257	$28,394,180	$31,875,746	$29,094,637	$32,295,724	$33,067,773	$36,301,615
67										
68	Revenue Surplus/Deficiency	($3,492,382)	($6,204,302)	$5,519,291	($2,425,516)	($8,154,430)	($919,296)	($1,479,966)	$116,937	($1,218,682)
69										
70	Water Utility Fund Ending Balance	$15,215,397	$9,011,095	$14,362,450	$11,936,934	$3,782,470	$2,863,204	$1,383,234	$1,500,137	$281,418
71	Emergency Reserve Fund Balance	N/A	N/A	N/A	N/A	$1,200,000	$2,400,000	$3,600,000	$4,800,000	$4,800,000
72	Total Ending Balance	$15,215,397	$9,011,095	$14,362,450	$11,936,934	$4,982,470	$5,263,204	$4,983,234	$6,300,137	$5,081,418
73	Ending Balance Target (12)				$4,618,101	$4,830,263	$4,883,396	$4,937,113	$4,991,421	$5,046,327
74										
75	Debt Service Coverage w/ FRC (13)	2.41	2.62	2.80	[redacted]	[redacted]	1.74	1.56	1.84	1.63
76	Minimum Debt Service Coverage (14)	N/A	N/A	N/A	1.50	1.50	1.50	1.50	1.50	1.50
77										
78	Average 5/8" Meter Bill ($/month) (15)	$28.63	$30.81	$32.88	$34.40	$37.19	$40.20	$43.45	$46.97	$46.97
79	Increase		$2.19	$2.06	$1.53	$2.79	$3.01	$3.26	$3.52	$0.00

Scenario 4: 30% FRC Payback, Level Rates, Meet Targets, Deferred CIP
County of Kauai
Department of Water
Financial Planning Analysis and Water Rate Study
Historical and Projected Operating Revenues and Revenue Requirements
Fiscal Years Ending June 30

Historical			Estimated	Budget	Projected			
2008	2009	2010	2011	2012	2013	2014	2015	2016

Notes:
(5) See Table 6 for details.
(6) Misc. Operating Expenses consists of the difference between the proposed budget and the projected historical expenses, and serves to make the projection consistent with the budget.
(7) Adjustments made to reduce O&M expenditures due to staff vacancies, capitalized expenses, and to reflect the historical trend of reduced budgetary expenditure levels.
(8) Equals Operating Income less SRF loan proceeds.
(9) See Table 8 for details.
(10) FRC Debt Service Payback per DOW, 3/23/11.
(11) Per FY 2012 Annual Budget (Budget Summary FYE 2012.xls). Projected expenses based on average of FY 08-12.
(12) Ending Balance Target based on 25% of Revenues
(13) Equals Funds Available for Debt Service divided by Total Debt Service.
(14) Target for planning purposes.
(15) Based on a 5/8" meter using 7,500 gallons per month.

Scenario 6: Current FRC Payback, Level Rates, No Target

County of Kauai
Department of Water
Financial Planning Analysis and Water Rate Study
Historical and Projected Operating Revenues and Revenue Requirements
Fiscal Years Ending June 30

		Historical			Estimated	Budget	Projected			
		2008	2009	2010	2011	2012	2013	2014	2015	2016
1	**REVENUES**									
2	Water Utility Fund Beginning Balance	$18,707,779	$15,215,397	$9,011,095	$14,362,450	$11,936,900	$2,882,000	$3,214,300	$2,257,100	$3,911,800
3										
4	Revenue Under Existing Rates:									
5	Operating Revenues (1)									
6	Water Sales	$13,223,896	$13,433,062	$14,272,311	$15,426,305	$15,637,051	$15,809,058	$15,982,958	$16,158,770	$16,336,517
7	Service Charge	2,769,917	3,009,416	3,087,800	3,046,100	3,684,000	3,724,524	3,765,494	3,806,914	3,848,790
8	Total Operating Revenues (2)	$15,993,813	$15,770,435	$17,360,111	$18,472,405	$19,321,051	$19,533,582	$19,748,451	$19,965,684	$20,185,307
9										
10	Other Income (1)									
11	Miscellaneous Receipts	$116,619	$175,333	$149,855	$5,000	$112,000	$112,000	$112,000	$112,000	$112,000
12	Interest Earned	817,557	562,949	275,535	461,000	355,000	355,000	355,000	355,000	355,000
13	Fire Hydrant Svc. Charge	736,888	817,839	925,133	925,133	925,133	935,943	946,881	957,951	969,153
14*	Other (3)	107,354	608,262	27,140	101,216	0	0	0	0	0
15	Other - SRF Loan (4)	488,549	59,081	14,713,074	3,843,000	0	1,935,400	2,449,000	2,500,000	3,500,000
16	BAB Subsidy	0	0	0	871,800	715,616	715,616	711,125	700,775	687,873
17	Grant - Drought Mitigation	n/a	n/a	n/a	n/a	126,500	0	0	0	0
18	Cost of Power Adjustment	1,007,308	1,325,366	1,470,700	1,289,110	1,383,517	1,295,200	1,295,200	1,295,200	1,295,200
19	Total Other Income	$3,274,275	$3,548,830	$17,561,437	$7,496,259	$3,617,766	$5,349,158	$5,869,207	$5,920,926	$6,919,226
20										
21	Total Revenue	$19,268,088	$19,319,265	$34,921,548	$25,968,664	$22,938,816	$24,882,741	$25,617,658	$25,886,610	$27,104,533
22										
23	Additional Revenue Required									

24		% of Water	Months						
25	Year	Sales Revenue	Effective	2011	2012	2013	2014	2015	2016
26	FY 2012	11.2%	6		$1,082,000	$2,187,800	$2,211,800	$2,236,200	$2,260,800
27	FY 2013	11.2%	12			2,432,800	2,459,500	2,486,600	2,514,000
28	FY 2014	11.2%	12				2,735,000	2,765,100	2,795,500
29	FY 2015	11.2%	12					3,074,800	3,108,600
30	FY 2016	0.0%	12						0
31	Total Additional Revenue Required			$0	$1,082,000	$4,620,600	$7,406,300	$10,562,700	$10,678,900
32									
33	Total Revenue			$25,968,664	$24,020,816	$29,503,341	$33,023,958	$36,449,310	$37,783,433

Notes:
(1) Projected Revenues revised to correspond to 02Budget Summary FYE 2012.xls. 2013-2016 projected at 1.1%
(2) Matches 2012 Budget, less FRC Payback and Cost of Power Adjustment (accounted for elsewhere).
(3) Includes grant funds for Waimea project in FY 2011.
(4) Includes SRF Loan proceeds and reimbursements.

#10 >44

Scenario 6: Current FRC Payback, Level Rates, No Target
County of Kauai
Department of Water
Financial Planning Analysis and Water Rate Study

Historical and Projected Operating Revenues and Revenue Requirements
Fiscal Years Ending June 30

		Historical			Estimated	Budget	Projected			
		2008	2009	2010	2011	2012	2013	2014	2015	2016
34	**REVENUE REQUIREMENTS**									
35	Operating Expenditures (5)									
36	Source of Supply	$2,499,838	$2,275,707	$2,245,072	$2,223,761	$3,008,611	$3,101,886	$3,198,160	$3,297,340	$3,399,526
37	Pumping	2,947,947	2,556,313	2,576,227	3,064,600	3,100,000	3,410,000	3,580,500	3,759,500	3,947,500
38	Water Treatment Plant	1,675,094	1,723,621	1,949,808	2,306,740	2,624,967	2,703,653	2,784,636	2,868,115	2,954,267
39	Transmission & Distribution	2,496,677	2,471,122	3,302,023	3,579,434	3,389,868	3,559,423	3,737,456	3,924,320	4,120,545
40	Customer Services	520,281	610,600	762,749	730,664	875,681	901,744	928,690	956,343	984,879
41	Administrative & Engineering	2,782,432	2,475,297	2,513,490	3,038,246	3,260,122	3,364,931	3,473,317	3,585,660	3,702,159
42	Manager's Office	0	0	0	0	0	0	0	0	0
43	County Service Charge	736,888	817,839	925,133	833,500	925,133	934,400	943,700	953,100	962,600
44	Vehicles	184,373	207,307	183,874	201,310	275,600	280,100	284,600	289,200	293,900
45	Other Operating Expenses	359,215	415,079	417,380	481,679	551,400	557,600	563,900	570,200	576,600
46	Misc. Operating Expenses (6)	0	0	0	0	1,298,603	1,337,600	1,377,700	1,419,000	1,461,600
47	Adjustments (7)	(102,147)	(177,896)	(1,429,025)	(393,013)	(2,000,000)	(2,000,000)	(2,000,000)	(2,000,000)	(2,000,000)
48	Total Operating Expenditures	$14,100,598	$13,374,990	$13,446,732	$16,066,921	$17,309,984	$18,151,337	$18,872,660	$19,622,778	$20,403,576
49										
50	Operating Income	$5,167,490	$5,944,275	$21,474,816	$9,901,743	$6,710,832	$11,352,003	$14,151,299	$16,826,533	$17,379,857
51	Funds Available for Debt Service (8)	4,678,941	5,885,194	6,761,742	6,058,743	6,584,332	9,416,603	11,702,299	14,326,533	13,879,857
52										
53	Debt Service Requirement									
51	Existing Debt Service (9)	$1,943,760	$2,248,716	$2,417,456	$5,738,944	$6,198,994	$6,154,572	$7,962,963	$7,735,836	$7,868,983
52	Proposed Debt Service (9)	0	0	0	0	320,000	462,400	642,600	826,600	1,084,100
53	Debt Service Paid by FRC (10)	0	0	0	(284,622)	(1,989,115)	(1,891,892)	(818,868)	(814,432)	(808,903)
54	Total Debt Service Requirement	$1,943,760	$2,248,716	$2,417,456	$5,454,322	$4,529,880	$4,725,080	$7,786,694	$7,748,004	$8,144,180
55										
56	Capital Costs Charged to Operations									
57	Equipment (11)	$412,887	$451,949	$110,884	$465,529	$1,122,700	$512,800	$512,800	$512,800	$512,800
58	Property & Supply (11)	677,438	463,447	423,994	1,005,524	984,500	711,000	711,000	711,000	711,000
59	SRF Financed Capital (11)	2,185,874	4,781,289	5,410,800	3,843,000	0	1,935,400	2,449,000	2,500,000	3,500,000
60	Cash Financed Capital	3,439,913	4,203,176	7,592,391	1,558,884	7,928,682	1,935,400	2,449,000	2,500,000	3,500,000
62	Total Capital Costs Charged to Ops	$6,716,112	$9,899,861	$13,538,069	$6,872,937	$10,035,882	$5,094,600	$6,121,800	$6,223,800	$8,223,800
63										
64	Transfer to Emergency Reserve Fund	$0	$0	$0	$0	$1,200,000	$1,200,000	$1,200,000	$1,200,000	$0
65										
66	Total Revenue Requirements	$22,760,470	$25,523,567	$29,402,257	$28,394,180	$33,075,746	$29,171,017	$33,981,154	$34,794,582	$36,771,556
67										
68	Revenue Surplus/Deficiency	($3,492,382)	($6,204,302)	$5,519,291	($2,425,516)	($9,054,930)	$332,323	($957,196)	$1,654,729	$1,011,877
69										
70	Water Utility Fund Ending Balance	$15,215,397	$9,011,095	$14,362,450	$11,936,934	$2,881,970	$3,214,323	$2,257,104	$3,911,829	$4,923,677
71	Emergency Reserve Fund Balance	N/A	N/A	N/A	N/A	$1,200,000	$2,400,000	$3,600,000	$4,800,000	$4,800,000
72	Total Ending Balance	$15,215,397	$9,011,095	$14,362,450	$11,936,934	$4,081,970	$5,614,323	$5,857,104	$8,711,829	$9,723,677
73	Ending Balance Target (12)				$4,618,101	$4,830,263	$4,883,396	$4,937,113	$4,991,421	$5,046,327
74										
75	Debt Service Coverage w/ FRC (13)	2.41	2.62	2.80			1.99	1.50	1.85	1.70
76	Minimum Debt Service Coverage (14)	N/A	N/A	N/A	1.50	1.50	1.50	1.50	1.50	1.50
77										
78	Average 5/8" Meter Bill ($/month) (15)	$35.00	$37.75	$40.50	$44.40	$49.37	$54.90	$61.05	$67.89	$67.89
79	Increase		$2.75	$2.75	$3.90	$4.97	$5.53	$6.15	$6.84	$0.00

P45

Scenario 6: Current FRC Payback, Level Rates, No Target
County of Kaual
Department of Water
Financial Planning Analysis and Water Rate Study
Historical and Projected Operating Revenues and Revenue Requirements
Fiscal Years Ending June 30

Historical			Estimated	Budget	Projected			
2008	2009	2010	2011	2012	2013	2014	2015	2016

Notes:
(5) See Table 6 for details.
(6) Misc. Operating Expenses consists of the difference between the proposed budget and the projected historical expenses, and serves to make the projection consistent with the budget.
(7) Adjustments made to reduce O&M expenditures due to staff vacancies, capitalized expenses, and to reflect the historical trend of reduced budgetary expenditure levels.
(8) Equals Operating Income less SRF loan proceeds.
(9) See Table 8 for details.
(10) FRC Debt Service Payback per DOW, 3/23/11.
(11) Per FY 2012 Annual Budget (Budget Summary FYE 2012.xls). Projected expenses based on average of FY 08-12.
(12) Ending Balance Target based on 25% of Revenues
(13) Equals Funds Available for Debt Service divided by Total Debt Service.
(14) Target for planning purposes.
(15) Based on a 5/8" meter using 10,000 gallons per month.

Scenario 5: No FRC Payback, Level Rates, No Target

County of Kauai
Department of Water
Financial Planning Analysis and Water Rate Study
Historical and Projected Operating Revenues and Revenue Requirements
Fiscal Years Ending June 30

		Historical			Estimated	Budget	Projected			
		2008	2009	2010	2011	2012	2013	2014	2015	2016
1	**REVENUES**									
2	Water Utility Fund Beginning Balance	$18,707,779	$15,215,397	$9,011,095	$14,362,450	$11,975,500	$601,300	($561,000)	($114,500)	$3,666,500
3										
4	Revenue Under Existing Rates:									
5	Operating Revenues (1)									
6	Water Sales	$13,223,896	$13,433,062	$14,272,311	n/a	$16,643,743	$16,826,824	$17,011,919	$17,199,050	$17,388,240
7	Service Charge	2,769,917	3,009,416	3,087,800	n/a	3,684,000	3,724,524	3,765,494	3,806,914	3,848,790
8	Leak Rebate (2)	0	0	0	0	(406,555)	(406,555)	(406,555)	(406,555)	(406,555)
9	Total Operating Revenues	$15,993,813	$15,770,435	$17,360,111	$18,472,405	$19,158,250	$19,368,991	$19,582,050	$19,797,453	$20,015,225
10										
11	Other Income (1)									
12	Miscellaneous Receipts	$116,619	$175,333	$149,855	$5,000	$112,000	$112,000	$112,000	$112,000	$112,000
13	Interest Earned	817,557	562,949	275,535	461,000	355,000	355,000	355,000	355,000	355,000
14	Fire Hydrant Svc. Charge	736,888	817,839	925,133	925,133	925,133	935,943	946,881	957,951	969,153
15	Other (3)	107,354	608,262	27,140	101,216	0	0	0	0	0
16	Other - SRF Loan (4)	488,549	59,081	14,713,074	3,843,000	0	3,185,600	2,449,000	2,500,000	3,500,000
17	BAB Subsidy	0	0	0	871,800	613,385	613,385	613,385	613,385	613,385
18	Cost of Power Adjustment	1,007,308	1,325,366	1,470,700	1,289,110	1,383,517	1,295,200	1,295,200	1,295,200	1,295,200
19	Total Other Income	$3,274,275	$3,548,830	$17,561,437	$7,496,259	$3,389,035	$6,497,128	$5,771,466	$5,833,536	$6,844,737
20										
21	Total Revenue	$19,268,088	$19,319,265	$34,921,548	$25,968,664	$22,547,285	$25,866,119	$25,353,516	$25,630,988	$26,859,962
22										
23	Additional Revenue Required									
24		% of Water	Months							
25	Year	Sales Revenue	Effective		2011	2012	2013	2014	2015	2016
26	FY 2012	13.0%	6			$1,245,300	$2,518,000	$2,545,700	$2,573,700	$2,602,000
27	FY 2013	13.0%	12				2,845,300	2,876,600	2,908,200	2,940,200
28	FY 2014	13.0%	12					3,250,600	3,286,300	3,322,500
29	FY 2015	13.0%	12						3,713,500	3,754,400
30	FY 2016	0.0%	12							0
31	Total Additional Revenue Required				$0	$1,245,300	$5,363,300	$8,672,900	$12,481,700	$12,619,100
32										
33	Total Revenue				$25,968,664	$23,792,585	$31,229,419	$34,026,416	$38,112,688	$39,479,062

Notes:
(1) Projected Revenues revised to correspond to 02Budget Summary FYE 2012.xls. 2013-2016 projected at 1.1%
(2) Placeholder
(3) Includes grant funds for Waimea project in FY 2011.
(4) Includes SRF Loan proceeds and reimbursements.

#11 Pg 47

$56.69
$6.52

Scenario 5: No FRC Payback, Level Rates, No Target
County of Kauai
Department of Water
Financial Planning Analysis and Water Rate Study
Historical and Projected Operating Revenues and Revenue Requirements
Fiscal Years Ending June 30

		Historical			Estimated	Budget	Projected			
		2008	2009	2010	2011	2012	2013	2014	2015	2016
34	**REVENUE REQUIREMENTS**									
35	Operating Expenditures (5)									
36	Source of Supply	$2,499,838	$2,275,707	$2,245,072	$2,223,761	$3,008,611	$3,101,886	$3,198,160	$3,297,340	$3,399,526
37	Pumping	2,947,947	2,556,313	2,576,227	3,064,600	3,100,000	3,410,000	3,580,500	3,759,500	3,947,500
38	Water Treatment Plant	1,675,094	1,723,621	1,949,808	2,306,740	2,624,967	2,703,653	2,784,636	2,868,115	2,954,267
39	Transmission & Distribution	2,496,677	2,471,122	3,302,023	3,579,434	3,389,868	3,559,423	3,737,456	3,924,320	4,120,545
40	Customer Services	520,281	610,600	762,749	730,664	875,681	901,744	928,690	956,343	984,879
41	Administrative & Engineering	2,782,432	2,475,297	2,513,490	3,038,246	3,248,822	3,353,231	3,461,317	3,573,260	3,689,359
42	Manager's Office	0	0	0	0	0	0	0	0	0
43	County Service Charge	736,888	817,839	925,133	833,500	925,133	934,400	943,700	953,100	962,600
44	Vehicles	184,373	207,307	183,874	201,310	275,600	280,100	284,600	289,200	293,900
45	Other Operating Expenses	359,215	415,079	417,380	481,679	551,400	557,600	563,900	570,200	576,600
46	Adjustments (6)	(102,147)	(177,896)	(1,429,025)	(966,957)	(696,099)	(2,000,000)	(2,000,000)	(2,000,000)	(2,000,000)
47	Total Operating Expenditures	$14,100,598	$13,374,990	$13,446,732	$15,492,977	$17,303,983	$16,802,037	$17,482,960	$18,191,378	$18,929,176
48										
49	Operating Income	$5,167,490	$5,944,275	$21,474,816	$10,475,687	$6,488,602	$14,427,381	$16,543,457	$19,921,311	$20,549,886
50	Funds Available for Debt Service (7)	4,678,941	5,885,194	6,761,742	6,632,687	6,488,602	11,241,781	14,094,457	17,421,311	17,049,886
51										
52	Debt Service Requirement									
50	Existing Debt Service (8)	$1,943,760	$2,248,716	$2,496,309	$5,738,947	$6,518,998	$6,539,283	$8,339,587	$8,096,959	$7,868,983
51	Proposed Debt Service (8)	0	0	0	0	0	234,400	414,600	598,600	856,100
52	Debt Service Paid by FRC (9)	0	0	0	(284,622)	0	0	0	0	0
53	Total Debt Service Requirement	$1,943,760	$2,248,716	$2,496,309	$5,454,325	$6,518,998	$6,773,683	$8,754,187	$8,695,559	$8,725,083
54										
55	Capital Costs Charged to Operations									
56	Equipment (10)	$412,887	$451,949	$215,969	$465,529	$1,122,700	$533,800	$533,800	$533,800	$533,800
57	Property & Supply (10)	677,438	463,447	423,994	1,005,524	984,500	711,000	711,000	711,000	711,000
58	SRF Financed Capital (10)	2,185,874	4,781,289	5,410,800	3,843,000	0	3,185,600	2,449,000	2,500,000	3,500,000
59	Cash Financed Capital	3,439,913	4,203,176	7,592,391	2,094,257	8,036,607	3,185,600	2,449,000	2,500,000	3,500,000
60	Adjustment (11)	0	0	0	0	0	0	0	0	0
61	Total Capital Costs Charged to Ops	$6,716,112	$9,899,861	$13,643,154	$7,408,310	$10,143,807	$7,616,000	$6,142,800	$6,244,800	$8,244,800
62										
63	Transfer to Emergency Reserve Fund	$0	$0	$0	$0	$1,200,000	$1,200,000	$1,200,000	$1,200,000	$0
64										
65	Total Revenue Requirements	$22,760,470	$25,523,567	$29,586,195	$28,355,612	$35,166,788	$32,391,721	$33,579,946	$34,331,737	$35,899,059
66										
67	Revenue Surplus/Deficiency	($3,492,382)	($6,204,302)	$5,335,353	($2,386,948)	($11,374,203)	($1,162,302)	$446,470	$3,780,952	$3,580,003
68										
69	Water Utility Fund Ending Balance	$15,215,397	$9,011,095	$14,362,450	$11,975,502	$601,297	($561,002)	($114,530)	$3,666,452	$7,246,503
70	Emergency Reserve Fund Balance	N/A	N/A	N/A	N/A	$1,200,000	$2,400,000	$3,600,000	$4,800,000	$4,800,000
71	Total Ending Balance	$15,215,397	$9,011,095	$14,362,450	$11,975,502	$1,801,297	$1,838,998	$3,485,470	$8,466,452	$12,046,503
72	Ending Balance Target (11)				$4,618,101	$4,789,563	$4,842,248	$4,895,512	$4,949,363	$5,003,806
73										
74	Debt Service Coverage w/ FRC (12)	2.41	2.62	2.71	2.22	1.00	1.66	1.61	2.00	1.95
75	Minimum Debt Service Coverage (13)	N/A	N/A	N/A	1.50	1.50	1.50	1.50	1.50	1.50
76										
77	Average Residential Bill ($/month) (14)	$35.00	$37.75	$40.50	$44.40	$50.17	$56.69	$64.06	$72.39	$72.39
78	Increase		$2.75	$2.75	$3.90	$5.77	$6.52	$7.37	$8.33	$0.00

Scenario 5: No FRC Payback, Level Rates, No Target
County of Kauai
Department of Water
Financial Planning Analysis and Water Rate Study
Historical and Projected Operating Revenues and Revenue Requirements
Fiscal Years Ending June 30

Historical			Estimated	Budget	Projected			
2008	2009	2010	2011	2012	2013	2014	2015	2016

Notes:
(5) See Table 6 for details.
(6) Adjustments made to reduce O&M expenditures due to staff vacancies, capitalized expenses, and to reflect the historical trend of reduced budgetary expenditure levels.
(7) Equals Operating Income less SRF loan proceeds.
(8) See Table 8 for details.
(9) FRC Debt Service Payback per DOW, 3/23/11.
(10) Per FY 2012 Annual Budget (Budget Summary FYE 2012.xls). Projected expenses based on average of FY 08-12.
(11) Ending Balance Target based on 25% of Revenues
(12) Equals Funds Available for Debt Service divided by Total Debt Service.
(13) Target for planning purposes.
(14) Based on a 5/8" meter using 10,000 gallons per month.

Scenario 6: Current FRC Payback, Level Rates, No Target
County of Kauai
Department of Water
Financial Planning Analysis and Water Rate Study
Historical and Projected Operating Revenues and Revenue Requirements
Fiscal Years Ending June 30

		Historical			Estimated	Budget	Projected			
		2008	2009	2010	2011	2012	2013	2014	2015	2016
1	**REVENUES**									
2	Water Utility Fund Beginning Balance	$18,707,779	$15,215,397	$9,011,095	$14,362,450	$11,936,900	$2,882,000	$3,214,300	$2,257,100	$3,911,800
3										
4	Revenue Under Existing Rates:									
5	Operating Revenues (1)									
6	Water Sales	$13,223,896	$13,433,062	$14,272,311	$15,426,305	$15,637,051	$15,809,058	$15,982,958	$16,158,770	$16,336,517
7	Service Charge	2,769,917	3,009,416	3,087,800	3,046,100	3,684,000	3,724,524	3,765,494	3,806,914	3,848,790
8	Total Operating Revenues (2)	$15,993,813	$15,770,435	$17,360,111	$18,472,405	$19,321,051	$19,533,582	$19,748,451	$19,965,684	$20,185,307
9										
10	Other Income (1)									
11	Miscellaneous Receipts	$116,619	$175,333	$149,855	$5,000	$112,000	$112,000	$112,000	$112,000	$112,000
12	Interest Earned	817,557	562,949	275,535	461,000	355,000	355,000	355,000	355,000	355,000
13	Fire Hydrant Svc. Charge	736,888	817,839	925,133	925,133	925,133	935,943	946,881	957,951	969,153
14	Other (3)	107,354	608,262	27,140	101,216	0	0	0	0	0
15	Other - SRF Loan (4)	488,549	59,081	14,713,074	3,843,000	0	1,935,400	2,449,000	2,500,000	3,500,000
16	BAB Subsidy	0	0	0	871,800	715,616	715,616	711,125	700,775	687,873
17	Grant - Drought Mitigation	n/a	n/a	n/a	n/a	126,500	0	0	0	0
18	Cost of Power Adjustment	1,007,308	1,325,366	1,470,700	1,289,110	1,383,517	1,295,200	1,295,200	1,295,200	1,295,200
19	Total Other Income	$3,274,275	$3,548,830	$17,561,437	$7,496,259	$3,617,766	$5,349,158	$5,869,207	$5,920,926	$6,919,226
20										
21	Total Revenue	$19,268,088	$19,319,265	$34,921,548	$25,968,664	$22,938,816	$24,882,741	$25,617,658	$25,886,610	$27,104,533
22										
23	Additional Revenue Required									
24		% of Water	Months							
25	Year	Sales Revenue	Effective		2011	2012	2013	2014	2015	2016
26	FY 2012	11.2%	6							
27	FY 2013	11.2%	12			$1,082,000	$2,187,800	$2,211,800	$2,236,200	$2,260,800
28	FY 2014	11.2%	12				2,432,800	2,459,500	2,486,600	2,514,000
29	FY 2015	11.2%	12					2,735,000	2,765,100	2,795,500
30	FY 2016	0.0%	12						3,074,800	3,108,600
31	Total Additional Revenue Required			$0	$0	$0	$0	$1,082,000	$4,620,600	$7,406,300	$10,562,700	$10,678,900
32										
33	Total Revenue			$19,268,088	$19,319,265	$34,921,548	$25,968,664	$24,020,816	$29,503,341	$33,023,958	$36,449,310	$37,783,433

Notes:
(1) Projected Revenues revised to correspond to 02Budget Summary FYE 2012.xls. 2013-2016 projected at 1.1%
(2) Matches 2012 Budget, less FRC Payback and Cost of Power Adjustment (accounted for elsewhere).
(3) Includes grant funds for Waimea project in FY 2011.
(4) Includes SRF Loan proceeds and reimbursements.

#10 R

P 50

Scenario 6: Current FRC Payback, Level Rates, No Target
County of Kauai
Department of Water
Financial Planning Analysis and Water Rate Study
Historical and Projected Operating Revenues and Revenue Requirements
Fiscal Years Ending June 30

		Historical			Estimated	Budget	Projected			
		2008	2009	2010	2011	2012	2013	2014	2015	2016
34	**REVENUE REQUIREMENTS**									
35	Operating Expenditures (5)									
36	Source of Supply	$2,499,838	$2,275,707	$2,245,072	$2,223,761	$3,008,611	$3,101,886	$3,198,160	$3,297,340	$3,399,526
37	Pumping	2,947,947	2,556,313	2,576,227	3,064,600	3,100,000	3,410,000	3,580,500	3,759,500	3,947,500
38	Water Treatment Plant	1,675,094	1,723,621	1,949,808	2,306,740	2,624,967	2,703,653	2,784,636	2,868,115	2,954,267
39	Transmission & Distribution	2,496,677	2,471,122	3,302,023	3,579,434	3,389,868	3,559,423	3,737,456	3,924,320	4,120,545
40	Customer Services	520,281	610,600	762,749	730,664	875,681	901,744	928,690	956,343	984,879
41	Administrative & Engineering	2,782,432	2,475,297	2,513,490	3,038,246	3,260,122	3,364,931	3,473,317	3,585,660	3,702,159
42	Manager's Office	0	0	0	0	0	0	0	0	0
43	County Service Charge	736,888	817,839	925,133	833,500	925,133	934,400	943,700	953,100	962,600
44	Vehicles	184,373	207,307	183,874	201,310	275,600	280,100	284,600	289,200	293,900
45	Other Operating Expenses	359,215	415,079	417,380	481,679	551,400	557,600	563,900	570,200	576,600
46	Misc. Operating Expenses (6)	0	0	0	0	1,298,603	1,337,600	1,377,700	1,419,000	1,461,600
47	Adjustments (7)	(102,147)	(177,896)	(1,429,025)	(393,013)	(2,000,000)	(2,000,000)	(2,000,000)	(2,000,000)	(2,000,000)
48	Total Operating Expenditures	$14,100,598	$13,374,990	$13,446,732	$16,066,921	$17,309,984	$18,151,337	$18,872,660	$19,622,778	$20,403,576
49										
50	Operating Income	$5,167,490	$5,944,275	$21,474,816	$9,901,743	$6,710,832	$11,352,003	$14,151,299	$16,826,533	$17,379,857
51	Funds Available for Debt Service (8)	4,678,941	5,885,194	6,761,742	6,058,743	6,584,332	9,416,603	11,702,299	14,326,533	13,879,857
52										
53	Debt Service Requirement									
51	Existing Debt Service (9)	$1,943,760	$2,248,716	$2,417,456	$5,738,944	$6,198,994	$6,154,572	$7,962,963	$7,735,836	$7,868,983
52	Proposed Debt Service (9)	0	0	0	0	320,000	462,400	642,600	826,600	1,084,100
53	Debt Service Paid by FRC (10)	0	0	0	(284,622)	(1,989,115)	(1,891,892)	(818,868)	(814,432)	(808,903)
54	Total Debt Service Requirement	$1,943,760	$2,248,716	$2,417,456	$5,454,322	$4,529,880	$4,725,080	$7,786,694	$7,748,004	$8,144,180
55										
56	Capital Costs Charged to Operations									
57	Equipment (11)	$412,887	$451,949	$110,884	$465,529	$1,122,700	$512,800	$512,800	$512,800	$512,800
58	Property & Supply (11)	677,438	463,447	423,994	1,005,524	984,500	711,000	711,000	711,000	711,000
59	SRF Financed Capital (11)	2,185,874	4,781,289	5,410,800	3,843,000	0	1,935,400	2,449,000	2,500,000	3,500,000
60	Cash Financed Capital	3,439,913	4,203,176	7,592,391	1,558,884	7,928,682	1,935,400	2,449,000	2,500,000	3,500,000
62	Total Capital Costs Charged to Ops	$6,716,112	$9,899,861	$13,538,069	$6,872,937	$10,035,882	$5,094,600	$6,121,800	$6,223,800	$8,223,800
63										
64	Transfer to Emergency Reserve Fund	$0	$0	$0	$0	$1,200,000	$1,200,000	$1,200,000	$1,200,000	$0
65										
66	Total Revenue Requirements	$22,760,470	$25,523,567	$29,402,257	$28,394,180	$33,075,746	$29,171,017	$33,981,154	$34,794,582	$36,771,556
67										
68	Revenue Surplus/Deficiency	($3,492,382)	($6,204,302)	$5,519,291	($2,425,516)	($9,054,930)	$332,323	($957,196)	$1,654,729	$1,011,877
69										
70	Water Utility Fund Ending Balance	$15,215,397	$9,011,095	$14,362,450	$11,936,934	$2,881,970	$3,214,323	$2,257,104	$3,911,829	$4,923,677
71	Emergency Reserve Fund Balance	N/A	N/A	N/A	N/A	$1,200,000	$2,400,000	$3,600,000	$4,800,000	$4,800,000
72	Total Ending Balance	$15,215,397	$9,011,095	$14,362,450	$11,936,934	$4,081,970	$5,614,323	$5,857,104	$8,711,829	$9,723,677
73	Ending Balance Target (12)				$4,618,101	$4,830,263	$4,883,396	$4,937,113	$4,991,421	$5,046,327
74										
75	Debt Service Coverage w/ FRC (13)	2.41	2.62	2.80	[illegible]	[illegible]	1.99	1.50	1.85	1.70
76	Minimum Debt Service Coverage (14)	N/A	N/A	N/A	1.50	1.50	1.50	1.50	1.50	1.50
77										
78	Average 5/8" Meter Bill ($/month) (15)	$28.63	$30.81	$32.88	$34.40	$38.25	$42.54	$47.30	$52.60	$52.60
79	Increase		$2.19	$2.06	$1.53	$3.85	$4.28	$4.76	$5.30	$0.00

#10 R p 51

Scenario 6: Current FRC Payback, Level Rates, No Target
County of Kauai
Department of Water
Financial Planning Analysis and Water Rate Study

Historical and Projected Operating Revenues and Revenue Requirements
Fiscal Years Ending June 30

Historical			Estimated	Budget	Projected			
2008	2009	2010	2011	2012	2013	2014	2015	2016

Notes:
(5) See Table 6 for details.
(6) Misc. Operating Expenses consists of the difference between the proposed budget and the projected historical expenses, and serves to make the projection consistent with the budget.
(7) Adjustments made to reduce O&M expenditures due to staff vacancies, capitalized expenses, and to reflect the historical trend of reduced budgetary expenditure levels.
(8) Equals Operating Income less SRF loan proceeds.
(9) See Table 8 for details.
(10) FRC Debt Service Payback per DOW, 3/23/11.
(11) Per FY 2012 Annual Budget (Budget Summary FYE 2012.xls). Projected expenses based on average of FY 08-12.
(12) Ending Balance Target based on 25% of Revenues
(13) Equals Funds Available for Debt Service divided by Total Debt Service.
(14) Target for planning purposes.
(15) Based on a 5/8" meter using 7,500 gallons per month.

County of Kauai
Department of Water
Financial Planning Analysis and Water Rate Study

Historical and Projected Operating Revenues and Revenue Requirements
Fiscal Years Ending June 30

		Historical			Estimated	Budget	Projected			
		2008	2009	2010	2011	2012	2013	2014	2015	2016
1	**REVENUES**									
2	Water Utility Fund Beginning Balance	$18,707,779	$15,215,397	$9,011,095	$14,362,450	$11,975,500	$601,300	($561,000)	($114,500)	$3,666,500
3										
4	Revenue Under Existing Rates:									
5	Operating Revenues (1)									
6	Water Sales	$13,223,896	$13,433,062	$14,272,311	n/a	$16,643,743	$16,826,824	$17,011,919	$17,199,050	$17,388,240
7	Service Charge	2,769,917	3,009,416	3,087,800	n/a	3,684,000	3,724,524	3,765,494	3,806,914	3,848,790
8	Leak Rebate (2)	0	0	0	0	(406,555)	(406,555)	(406,555)	(406,555)	(406,555)
9	Total Operating Revenues	$15,993,813	$15,770,435	$17,360,111	$18,472,405	$19,158,250	$19,368,991	$19,582,050	$19,797,453	$20,015,225
10										
11	Other Income (1)									
12	Miscellaneous Receipts	$116,619	$175,333	$149,855	$5,000	$112,000	$112,000	$112,000	$112,000	$112,000
13	Interest Earned	817,557	562,949	275,535	461,000	355,000	355,000	355,000	355,000	355,000
14	Fire Hydrant Svc. Charge	736,888	817,839	925,133	925,133	925,133	935,943	946,881	957,951	969,153
15	Other (3)	107,354	608,262	27,140	101,216	0	0	0	0	0
16	Other - SRF Loan (4)	488,549	59,081	14,713,074	3,843,000	0	3,185,600	2,449,000	2,500,000	3,500,000
17	BAB Subsidy	0	0	0	871,800	613,385	613,385	613,385	613,385	613,385
18	Cost of Power Adjustment	1,007,308	1,325,366	1,470,700	1,289,110	1,383,517	1,295,200	1,295,200	1,295,200	1,295,200
19	Total Other Income	$3,274,275	$3,548,830	$17,561,437	$7,496,259	$3,389,035	$6,497,128	$5,771,466	$5,833,536	$6,844,737
20										
21	Total Revenue	$19,268,088	$19,319,265	$34,921,548	$25,968,664	$22,547,285	$25,866,119	$25,353,516	$25,630,988	$26,859,962
22										
23	Additional Revenue Required									
24		% of Water	,Months							
25	Year	Sales Revenue	Effective		2011	2012	2013	2014	2015	2016
26	FY 2012	13.0%	6							
27	FY 2013	13.0%	12			$1,245,300	$2,518,000	$2,545,700	$2,573,700	$2,602,000
28	FY 2014	13.0%	12				2,845,300	2,876,600	2,908,200	2,940,200
29	FY 2015	13.0%	12					3,250,600	3,286,300	3,322,500
30	FY 2016	0.0%	12						3,713,500	3,754,400
31	Total Additional Revenue Required									0
		$0	$0	$0	$0	$1,245,300	$5,363,300	$8,672,900	$12,481,700	$12,619,100
32										
33	Total Revenue	$19,268,088	$19,319,265	$34,921,548	$25,968,664	$23,792,585	$31,229,419	$34,026,416	$38,112,688	$39,479,062

Notes:
(1) Projected Revenues revised to correspond to 02Budget Summary FYE 2012.xls. 2013-2016 projected at 1.1%
(2) Placeholder
(3) Includes grant funds for Waimea project in FY 2011.
(4) Includes SRF Loan proceeds and reimbursements.

#11 R

P 53

County of Kauai
Department of Water
Financial Planning Analysis and Water Rate Study

Historical and Projected Operating Revenues and Revenue Requirements
Fiscal Years Ending June 30

	Historical			Estimated	Budget	Projected			
	2008	2009	2010	2011	2012	2013	2014	2015	2016
REVENUE REQUIREMENTS									
Operating Expenditures (5)									
Source of Supply	$2,499,838	$2,275,707	$2,245,072	$2,223,761	$3,008,611	$3,101,886	$3,198,160	$3,297,340	$3,399,526
Pumping	2,947,947	2,556,313	2,576,227	3,064,600	3,100,000	3,410,000	3,580,500	3,759,500	3,947,500
Water Treatment Plant	1,675,094	1,723,621	1,949,808	2,306,740	2,624,967	2,703,653	2,784,636	2,868,115	2,954,267
Transmission & Distribution	2,496,677	2,471,122	3,302,023	3,579,434	3,389,868	3,559,423	3,737,456	3,924,320	4,120,545
Customer Services	520,281	610,600	762,749	730,664	875,681	901,744	928,690	956,343	984,879
Administrative & Engineering	2,782,432	2,475,297	2,513,490	3,038,246	3,248,822	3,353,231	3,461,317	3,573,260	3,689,359
Manager's Office	0	0	0	0	0	0	0	0	0
County Service Charge	736,888	817,839	925,133	833,500	925,133	934,400	943,700	953,100	962,600
Vehicles	184,373	207,307	183,874	201,310	275,600	280,100	284,600	289,200	293,900
Other Operating Expenses	359,215	415,079	417,380	481,679	551,400	557,600	563,900	570,200	576,600
Adjustments (6)	(102,147)	(177,896)	(1,429,025)	(966,957)	(696,099)	(2,000,000)	(2,000,000)	(2,000,000)	(2,000,000)
Total Operating Expenditures	$14,100,598	$13,374,990	$13,446,732	$15,492,977	$17,303,983	$16,802,037	$17,482,960	$18,191,378	$18,929,176
Operating Income	$5,167,490	$5,944,275	$21,474,816	$10,475,687	$6,488,602	$14,427,381	$16,543,457	$19,921,311	$20,549,886
Funds Available for Debt Service (7)	4,678,941	5,885,194	6,761,742	6,632,687	6,488,602	11,241,781	14,094,457	17,421,311	17,049,886
Debt Service Requirement									
Existing Debt Service (8)	$1,943,760	$2,248,716	$2,496,309	$5,738,947	$6,518,998	$6,539,283	$8,339,587	$8,096,959	$7,868,983
Proposed Debt Service (8)	0	0	0	0	0	234,400	414,600	598,600	856,100
Debt Service Paid by FRC (9)	0	0	0	(284,622)	0	0	0	0	0
Total Debt Service Requirement	$1,943,760	$2,248,716	$2,496,309	$5,454,325	$6,518,998	$6,773,683	$8,754,187	$8,695,559	$8,725,083
Capital Costs Charged to Operations									
Equipment (10)	$412,887	$451,949	$215,969	$465,529	$1,122,700	$533,800	$533,800	$533,800	$533,800
Property & Supply (10)	677,438	463,447	423,994	1,005,524	984,500	711,000	711,000	711,000	711,000
SRF Financed Capital (10)	2,185,874	4,781,289	5,410,800	3,843,000	0	3,185,600	2,449,000	2,500,000	3,500,000
Cash Financed Capital	3,439,913	4,203,176	7,592,391	2,094,257	8,036,607	3,185,600	2,449,000	2,500,000	3,500,000
Adjustment (11)	0	0	0	0	0	0	0	0	0
Total Capital Costs Charged to Ops	$6,716,112	$9,899,861	$13,643,154	$7,408,310	$10,143,807	$7,616,000	$6,142,800	$6,244,800	$8,244,800
Transfer to Emergency Reserve Fund	$0	$0	$0	$0	$1,200,000	$1,200,000	$1,200,000	$1,200,000	$0
Total Revenue Requirements	$22,760,470	$25,523,567	$29,586,195	$28,355,612	$35,166,788	$32,391,721	$33,579,946	$34,331,737	$35,899,059
Revenue Surplus/Deficiency	($3,492,382)	($6,204,302)	$5,335,353	($2,386,948)	($11,374,203)	($1,162,302)	$446,470	$3,780,952	$3,580,003
Water Utility Fund Ending Balance	$15,215,397	$9,011,095	$14,362,450	$11,975,502	$601,297	($561,002)	($114,530)	$3,666,452	$7,246,503
Emergency Reserve Fund Balance	N/A	N/A	N/A	N/A	$1,200,000	$2,400,000	$3,600,000	$4,800,000	$4,800,000
Total Ending Balance	$15,215,397	$9,011,095	$14,362,450	$11,975,502	$1,801,297	$1,838,998	$3,485,470	$8,466,452	$12,046,503
Ending Balance Target (11)				$4,618,101	$4,789,563	$4,842,248	$4,895,512	$4,949,363	$5,003,806
Debt Service Coverage w/ FRC (12)	2.41	2.62	2.71	1.22	1.00	1.66	1.61	2.00	1.95
Minimum Debt Service Coverage (13)	N/A	N/A	N/A	1.50	1.50	1.50	1.50	1.50	1.50
Average Residential Bill ($/month) (14)	$28.63	$30.81	$32.88	$34.40	$38.87	$43.93	$49.64	$56.09	$56.09
Increase		$2.19	$2.06	$1.53	$4.47	$5.05	$5.71	$6.45	$0.00

Scenario 5: No FRC Payback, Level Rates, No Target
County of Kauai
Department of Water
Financial Planning Analysis and Water Rate Study
Historical and Projected Operating Revenues and Revenue Requirements
Fiscal Years Ending June 30

Historical			Estimated	Budget	Projected			
2008	2009	2010	2011	2012	2013	2014	2015	2016

Notes:
(5) See Table 6 for details.
(6) Adjustments made to reduce O&M expenditures due to staff vacancies, capitalized expenses, and to reflect the historical trend of reduced budgetary expenditure levels.
(7) Equals Operating Income less SRF loan proceeds.
(8) See Table 8 for details..
(9) FRC Debt Service Payback per DOW, 3/23/11.
(10) Per FY 2012 Annual Budget (Budget Summary FYE 2012.xls). Projected expenses based on average of FY 08-12.
(11) Ending Balance Target based on 25% of Revenues
(12) Equals Funds Available for Debt Service divided by Total Debt Service.
(13) Target for planning purposes.
(14) Based on a 5/8" meter using 7,500 gallons per month.

#11 R p 55

Line(s) on Table 9

OPTION NO.	DESCRIPTION OF OPTION	# days or % of rev for Emergency Fund coverage	RATES				RESERVE FUND/TARGET				DEBT SERVICE / COVERAGE						CRP PROJECTS SPLIT FUNDING						
			LEVEL RATES	pg/ln	% RATE INCREASE OVER 5 YEARS	pg/ln	End of 5 yr Reserve FUND (Millions)	pg/ln	End of 5 yr Reserve Target (Millions)	pg/ln	End 5 yrs DEBT COVERAGE w/FRC paid as noted	pg/ln	FRC CIP SRF/2005 Bnd debt	pg/ln	% of BAB DEBT SERVICE PAID BY FRC	pg/ln	5 yr FRC Funded debt (in millions)	Total 2012-2016 pg/ln	Total loan* funded CRP OVER 5 Yrs in Millions	pg/ln	Total cash funded CRP OVER 5 Yrs in Millions	pg/ln	TOTAL CRP OVER 5 YRS (in millions)
1	Ist draft	90/O&M	no	17/23-27	32.50%	17/23-27	4.670	18/62	4.643	18/64	1.55	18/64	0	0	0%		0		0.000		21.911	18/55	21.911
2	2nd draft	90/O&M	no	20/26-29	16.80%	20/26-29	6.610	21/66	4.643	21/68	1.73	21/70	100%	21/52	50%	21/52	15.560	21/52	15.356	21/58	17.386	21/59	32.742
3	0% BAB FRC payments	18/O&M	no	23/26-30	35.60%	23/26-30	0.944	24/67	0.944	24/67	1.69	24/70	100%	24/52	0%	24/52	9.894	24/52	12.321	24/58	20.357	24/59	32.678
4	40% BAB FRC payments	90/O&M	no	26/26-30	22.50%	26/26-30	4.000	27/63	4.000	27/63	1.50	27/71	100%	27/52	40%	27/52	13.543	27/52	17.904	27/58	13.402	27/59	31.306
5	40% BAB FRC payments	90/O&M	no	29/26-30	27.60%	29/26-30	4.000	30/63	4.000	30/63	1.83	30/71	100%	30/52	40%	30/52	13.543	30/52	11.635	30/58	19.671	30/59	31.306
6	30% FRC paybackw/leveled rates no target	25% Rev	yes	32/26-30	33.20%	32/26-30	5.175	33/71	5.046	33/72	1.68	33/74	100%	33/53	30%	33/52	11.526	33/53	10.384	33/59	18.313	33/60	28.697
7	40% FRC payback on BABA with leveled rates no target.	25% Rev	yes	35/26-30	31.20%	35/26-30	5.070	36/72	5.046	36/73	1.71	36/75	100%	36/53	40%	36/52	13.543	36/53	10.384	36/59	18.313	36/60	28.697
8	30% FRC payback on BAB w/out leveled rates meeting coverage	25% Rev	no	38/26-30	35.50%	38/26-30	5.073	39/72	5.046	39/73	1.74	39/75	100%	39/53	30%	39/52	11.526	33/53	10.384	39/59	18.313	39/60	28.697
9	30% FRC payback on BAB w/level rates meets coverage target delaying CIP 2 yrs	25% Rev	yes	41/26-30	32.40%	41/26-30	5.081	42/72	5.046	42/73	1.63	42/75	100%	42/53	30%	42/52	11.526	42/53	10.984	42/59	17.713	42/60	28.697
10	Current FRC rate, no target	25% Rev	yes	44/26-30	44.80%	44/26-30	9.724	45/72	5.046	45/73	1.70	45/75	43%	45/53	0	45/52	6.323	45/53	10.384	45/59	18.304	45/60	28.688
11	No FRC payback, level rates, No target	25% Rev	yes	47/26-30	52.00%	47/26-30	12.047	48/71	5.004	48/72	**1.95	48/75	0%	48/53	0	48/52	0.000	48/52	11.635	48/58	19.671	48/60	31.306

Recommended

* Does not include BAB

** Debt coverage in 2012 is 1.0 so rate required to get 1.0 is carried through to provide level rate

If the Board wanted to consider the rates in the above senario additional cash funded CRP would be added while reducing SRF loans to prevent cash buildup.

Line(s) on Table 9

Line(s) on Table 9

OPTIONS	DESCRIPTION OF OPTION	# days or % of rev for Emergency Fund coverage	Annual Emergency FD Contribution	FUNDING	CRP PROJECTS (IN MILLIONS)						CASH & LOAN FUNDED TOTALS	OPTIONS	RATES								% RATE INCREASE OVER 5 YEARS
					2012	2013	2014	2015	2016	SUB-TOTAL			LEVEL RATES		2011	2012	2013	2014	2015	2016	
6	30% FRC paybackw/leveled rates no target (5/8 meter, 7,500 gal)	25% Rev	1.2M	LOAN	0.000	1.935	2.449	2.500	3.500	10.384	28.697	6	yes	Ave Bill	34.40	37.26	40.35	43.70	47.32	47.32	33.20%
			2012-2015	CASH	7.929	1.935	2.449	2.500	3.500	18.313				RATE		8.30%	8.30%	8.30%	8.30%		
														Increase	1.53	2.86	3.09	3.35	3.63	0.00	
7	40% FRC payback on BABA with leveled rates no target. (5/8 meter, 7,500 gal)	25% Rev	1.2M	LOAN	0.000	1.935	2.449	2.500	3.500	10.384	28.697	7	yes	Ave Bill	34.40	37.08	39.98	43.09	46.46	46.46	31.20%
			2012-2015	CASH	7.929	1.935	2.449	2.500	3.500	18.313				RATE		7.80%	7.80%	7.80%	7.80%		
														Increase	1.53	2.68	2.89	3.12	3.36	0.00	
8	30% FRC payback on BAB w/out leveled rates meeting coverage (5/8 meter, 7,500 gal)	25% Rev	1.2M	LOAN	0.000	1.935	2.449	2.500	3.500	10.384	28.697	8	no	Ave Bill	34.40	40.94	40.94	42.90	44.83	48.06	35.50%
			2012-2015	CASH	7.929	1.935	2.449	2.500	3.500	18.313				RATE		19.00%	0.00%	4.80%	4.50%	7.20%	
														Increase	1.53	6.54	0.00	1.96	1.93	3.23	
9	30% FRC payback on BAB w/leveled rates, meets coverage target, deferring CIP (5/8 meter, 7,500 gal) DEFER 1.2 M	25% Rev	1.2M	LOAN	0.000	1.935	2.449	2.500	4.100	10.984	28.697	9	yes	Ave Bill	34.40	37.19	40.20	43.45	46.97	46.97	32.40%
			2012-2015	CASH	6.729	1.935	2.449	2.500	4.100	17.713				RATE		8.10%	8.10%	8.10%	8.10%		
														Increase	1.53	2.79	3.01	3.26	3.52	0.00	
10	Current FRC rate, no target (5/8 meter, 10,000 gal)	25% Rev	1.2M	LOAN	0.000	1.935	2.449	2.500	3.500	10.384	28.697	10	yes	Ave Bill	44.40	49.37	54.90	61.05	67.89	67.89	44.80%
			2012-2015	CASH	7.929	1.935	2.449	2.500	3.500	18.313				RATE		11.20%	11.20%	11.20%	11.20%		
														Increase	3.90	4.97	5.53	6.15	6.84	0.00	
10 REVISED	Current FRC rate, no target (5/8 meter, 7,500 gal)	25% Rev	1.2M	LOAN	0.000	1.935	2.449	2.500	3.500	10.384	28.697	10 REVISED	yes	Ave Bill	34.40	38.25	42.54	47.30	52.60	52.60	44.80%
			2012-2015	CASH	7.929	1.935	2.449	2.500	3.500	18.313				RATE		11.20%	11.20%	11.20%	11.20%		
														Increase	1.53	3.85	4.28	4.76	5.30	0.00	
11	No FRC payback, level rates, No target (5/8 meter, 10,000 gal)	25% Rev	1.2M	LOAN	0.000	3.186	2.449	2.500	3.500	11.635	31.306	11	yes	Ave Bill	44.40	50.17	56.69	64.06	72.39	72.39	52.00%
			2012-2015	CASH	8.037	3.186	2.449	2.500	3.500	19.671				RATE		13.00%	13.00%	13.00%	13.00%		
														Increase	3.90	5.77	6.52	7.37	8.33	0.00	
11 REVISED	No FRC payback, level rates, No target (5/8 meter, 7,500 gal)	25% Rev	1.2M	LOAN	0.000	3.186	2.449	2.500	3.500	11.635	31.306	11 REVISED	yes	Ave Bill	34.40	38.87	43.93	49.64	56.09	56.09	52.00%
			2012-2015	CASH	8.037	3.186	2.449	2.500	3.500	19.671				RATE		13.00%	13.00%	13.00%	13.00%		
														Increase	1.53	4.47	5.05	5.71	6.45	0.00	

Option 9: 30% FRC Payback, Lev[illegible]s, Meet Targets, Deferred CIP
County [illegible]ual
Department of Water
Financial Planning Analysis and Water Rate Study

Historical and Projected Operating Revenues and Revenue Requirements
Fiscal Years Ending June 30

		Historical			Estimated	Budget	Projected			
		2008	2009	2010	2011	2012	2013	2014	2015	2016
1	**REVENUES**									
2	Water Utility Fund Beginning Balance	$18,707,779	$15,215,397	$9,011,095	$14,362,450	$11,936,900	$4,823,200	$4,163,700	$2,966,700	$3,403,000
3										
4	Revenue Under Existing Rates:									
5	Operating Revenues (1)									
6	Water Sales	$13,223,896	$13,433,062	$14,272,311	$15,426,305	$15,637,051	$15,809,058	$15,982,958	$16,158,770	$16,336,517
7	Service Charge	2,769,917	3,009,416	3,087,800	3,046,100	3,684,000	3,724,524	3,765,494	3,806,914	3,848,790
8	Total Operating Revenues (2)	$15,993,813	$15,770,435	$17,360,111	$18,472,405	$19,321,051	$19,533,582	$19,748,451	$19,965,684	$20,185,307
9										
10	Other Income (1)									
11	Miscellaneous Receipts	$116,619	$175,333	$149,855	$5,000	$112,000	$112,000	$112,000	$112,000	$112,000
12	Interest Earned	817,557	562,949	275,535	461,000	355,000	355,000	355,000	355,000	355,000
13	Fire Hydrant Svc. Charge	738,888	817,839	925,133	925,133	925,133	935,943	946,881	957,951	969,153
14	Other (3)	107,354	608,262	27,140	101,216	0	0	0	0	0
15	Other - SRF Loan (4)	488,549	59,081	14,713,074	3,843,000	0	1,935,400	2,449,000	2,500,000	4,500,000
16	BAB Subsidy	0	0	0	871,800	715,616	715,616	711,125	700,775	687,873
17	Grant - Drought Mitigation	n/a	n/a	n/a	n/a	126,500	0	0	0	0
18	Cost of Power Adjustment	1,007,308	1,325,366	1,470,700	1,269,110	1,383,517	1,295,200	1,295,200	1,295,200	1,295,200
19	Total Other Income	$3,274,275	$3,548,830	$17,561,437	$7,496,259	$3,617,766	$5,349,158	$5,869,207	$5,920,926	$7,919,226
20										
21	Total Revenue	$19,268,088	$19,319,265	$34,921,548	$25,968,664	$22,938,816	$24,882,741	$25,617,658	$25,886,610	$28,104,533
22										
23	Additional Revenue Required									
24		% of Water	Months							
25	Year	Sales Revenue	Effective		2011	2012	2013	2014	2015	2016
26	FY 2012	8.6%	6			$830,800	$1,679,900	$1,698,400	$1,717,000	$1,735,900
27	FY 2013	8.6%	12				1,824,400	1,844,400	1,864,700	1,885,200
28	FY 2014	8.6%	12					2,003,000	2,025,100	2,047,400
29	FY 2015	8.6%	12						2,199,200	2,223,400
30	FY 2016	0.0%	12							0
31	Total Additional Revenue Required			$0	$0	$830,800	$3,504,300	$5,545,800	$7,806,000	$7,891,900
32										
33	Total Revenue			$19,268,088	$19,319,265	$34,921,548	$25,968,664	$23,769,616	$28,387,041	$31,163,458	$33,692,610	$35,996,433

Notes:
(1) Projected Revenues revised to correspond to 02Budget Summary FYE 2012.xls. 2013-2016 projected at 1.1%
(2) Matches 2012 Budget, less FRC Payback and Cost of Power Adjustment (accounted for elsewhere).
(3) Includes grant funds for Waimea project in FY 2011.
(4) Includes SRF Loan proceeds and reimbursements.

9A

P. 56

Option 9: 30% FRC Payback, Level Rates, Meet Targets, Deferred CIP
County of Kauai
Department of Water
Financial Planning Analysis and Water Rate Study

Historical and Projected Operating Revenues and Revenue Requirements
Fiscal Years Ending June 30

		Historical			Estimated	Budget	Projected			
		2008	2009	2010	2011	2012	2013	2014	2015	2016
34	**REVENUE REQUIREMENTS**									
35	Operating Expenditures (5)									
36	Source of Supply	$2,499,838	$2,275,707	$2,245,072	$2,223,761	$3,008,611	$3,101,886	$3,198,160	$3,297,340	$3,399,526
37	Pumping	2,947,947	2,556,313	2,576,227	3,064,600	3,100,000	3,410,000	3,580,500	3,759,500	3,947,500
38	Water Treatment Plant	1,675,094	1,723,621	1,949,808	2,306,740	2,624,967	2,703,653	2,784,636	2,868,115	2,954,267
39	Transmission & Distribution	2,496,677	2,471,122	3,302,023	3,579,434	3,389,868	3,559,423	3,737,456	3,924,320	4,120,545
40	Customer Services	520,281	610,600	762,749	730,664	875,681	901,744	928,690	956,343	984,879
41	Administrative & Engineering	2,782,432	2,475,297	2,513,490	3,038,246	3,260,122	3,364,931	3,473,317	3,585,660	3,702,159
42	Manager's Office	0	0	0	0	0	0	0	0	0
43	County Service Charge	736,888	817,839	925,133	833,500	925,133	934,400	943,700	953,100	962,600
44	Vehicles	184,373	207,307	183,874	201,310	275,600	280,100	284,600	289,200	293,900
45	Other Operating Expenses	359,215	415,079	417,380	481,679	551,400	557,600	563,900	570,200	576,600
46	Misc. Operating Expenses (6)	0	0	0	0	1,298,603	1,337,600	1,377,700	1,419,000	1,461,600
47	Adjustments (7)	(102,147)	(177,896)	(1,429,025)	(393,013)	(2,000,000)	(2,000,000)	(2,000,000)	(2,000,000)	(2,000,000)
48	Total Operating Expenditures	$14,100,598	$13,374,990	$13,446,732	$16,066,921	$17,309,984	$18,151,337	$18,872,680	$19,622,778	$20,403,576
49										
50	Operating Income	$5,167,490	$5,944,275	$21,474,816	$9,901,743	$6,459,632	$10,235,703	$12,290,799	$14,089,833	$15,592,857
51	Funds Available for Debt Service (8)	4,678,941	5,885,194	6,761,742	6,058,743	6,333,132	8,300,303	9,841,799	11,569,833	11,092,857
52										
53	Debt Service Requirement									
54	Existing Debt Service (9)	$1,943,760	$2,248,716	$2,417,456	$5,738,944	$6,198,994	$6,154,572	$7,962,963	$7,735,836	$7,868,983
55	Proposed Debt Service (9)	0	0	0	0	320,000	462,400	642,600	826,600	1,157,700
56	Debt Service Paid by FRC (10)	0	0	0	(284,622)	(1,989,115)	(1,968,273)	(2,504,298)	(2,541,241)	(2,523,043)
57	Total Debt Service Requirement	$1,943,760	$2,248,716	$2,417,456	$5,454,322	$4,529,880	$4,648,700	$6,101,265	$6,021,196	$6,503,639
58										
59	Capital Costs Charged to Operations									
60	Equipment (11)	$412,887	$451,949	$110,884	$465,529	$1,122,700	$512,800	$512,800	$512,800	$512,800
61	Property & Supply (11)	677,438	463,447	423,994	1,005,524	984,500	711,000	711,000	711,000	711,000
62	SRF Financed Capital (11)	2,185,874	4,781,289	5,410,800	3,843,000	0	1,935,400	2,449,000	2,500,000	4,500,000
63	Cash Financed Capital	3,439,913	4,203,176	7,592,391	1,558,884	5,928,682	1,935,400	2,449,000	2,500,000	4,500,000
64	Total Capital Costs Charged to Ops	$6,716,112	$9,899,861	$13,538,069	$6,872,937	$8,035,882	$5,094,600	$6,121,800	$6,223,800	$10,223,800
65										
66	Transfer to Emergency Reserve Fund	$0	$0	$0	$0	$1,007,593	$1,151,894	$1,264,713	$1,388,584	$1,403,860
67										
68	Total Revenue Requirements	$22,760,470	$25,523,567	$29,402,257	$28,394,180	$30,883,338	$29,046,531	$32,360,437	$33,256,358	$38,534,876
69										
70	Revenue Surplus/Deficiency	($3,492,382)	($6,204,302)	$5,519,291	($2,425,516)	($7,113,722)	($659,491)	($1,196,978)	$436,253	($2,538,443)
71										
72	Water Utility Fund Ending Balance	$15,215,397	$9,011,095	$14,362,450	$11,936,934	$4,823,178	$4,163,709	$2,966,722	$3,402,953	$864,557
73	Emergency Reserve Fund Balance	N/A	N/A	N/A	N/A	$1,007,593	$2,159,487	$3,424,199	$4,812,783	$6,216,644
74	Total Ending Balance (12)	$15,215,397	$9,011,095	$14,362,450	$11,936,934	$5,830,770	$6,323,196	$6,390,921	$8,215,736	$7,081,201
75	Ending Balance Target (13)				$4,618,101	$5,037,963	$5,759,471	$6,323,563	$6,942,921	$7,019,302
76										
77	Debt Service Coverage w/ FRC (14)	2.41	2.62	2.80	[illegible]	1.40	1.79	1.61	1.92	1.71
78	Minimum Debt Service Coverage (15)	N/A	N/A	N/A	1.50	1.50	1.50	1.50	1.50	1.50
79										
80	Average 5/8" Meter Bill ($/month) (16)	$35.00	$37.75	$40.50	$44.40	$48.22	$52.37	$56.87	$61.76	$61.76
81	Increase		$2.75	$2.75	$3.90	$3.82	$4.15	$4.50	$4.89	$0.00

Option 9: 30% FRC Payback, Lev[illegible]s, Meet Targets, Deferred CIP
County [illegible]ual
Department of Water
Financial Planning Analysis and Water Rate Study
Historical and Projected Operating Revenues and Revenue Requirements
Fiscal Years Ending June 30

Historical			Estimated	Budget	Projected			
2008	2009	2010	2011	2012	2013	2014	2015	2016

Notes:
(5) See Table 6 for details.
(6) Misc. Operating Expenses consists of the difference between the proposed budget and the projected historical expenses, and serves to make the projection consistent with the budget.
(7) Adjustments made to reduce O&M expenditures due to staff vacancies, capitalized expenses, and to reflect the historical trend of reduced budgetary expenditure levels.
(8) Equals Operating Income less SRF loan proceeds.
(9) See Table 8 for details.
(10) FRC Debt Service Payback per DOW, 3/23/11.
(11) Per FY 2012 Annual Budget (Budget Summary FYE 2012.xls). Projected expenses based on average of FY 08-12.
(12) Total Ending Balance is summed only so that it may be compared to the Ending Balance Target.
(13) Ending Balance Target based on 25% of Revenues
(14) Equals Funds Available for Debt Service divided by Total Debt Service.
(15) Target for planning purposes.
(16) Based on a 5/8" meter using 10,000 gallons per month. The value shown for FY2012 is the average bill after the rate increase occurs.

Option 9: 30% FRC Payback, Level Rates, Meet Targets, Standard CIP
County of Kauai
Department of Water
Financial Planning Analysis and Water Rate Study

Historical and Projected Operating Revenues and Revenue Requirements
Fiscal Years Ending June 30

		Historical			Estimated	Budget	Projected			
		2008	2009	2010	2011	2012	2013	2014	2015	2016
1	**REVENUES**									
2	Water Utility Fund Beginning Balance	$18,707,779	$15,215,397	$9,011,095	$14,362,450	$11,936,900	$2,859,800	$2,361,700	$1,431,300	$2,258,400
3										
4	Revenue Under Existing Rates:									
5	Operating Revenues (1)									
6	Water Sales	$13,223,896	$13,433,062	$14,272,311	$15,426,305	$15,637,051	$15,809,058	$15,982,958	$16,158,770	$16,336,517
7	Service Charge	2,769,917	3,009,416	3,087,800	3,046,100	3,684,000	3,724,524	3,765,494	3,806,914	3,848,790
8	Total Operating Revenues (2)	$15,993,813	$15,770,435	$17,360,111	$18,472,405	$19,321,051	$19,533,582	$19,748,451	$19,965,684	$20,185,307
9										
10	Other Income (1)									
11	Miscellaneous Receipts	$116,619	$175,333	$149,855	$5,000	$112,000	$112,000	$112,000	$112,000	$112,000
12	Interest Earned	817,557	562,949	275,535	461,000	355,000	355,000	355,000	355,000	355,000
13	Fire Hydrant Svc. Charge	736,888	817,839	925,133	925,133	925,133	935,943	946,881	957,951	969,153
14	Other (3)	107,354	608,262	27,140	101,216	0	0	0	0	0
15	Other - SRF Loan (4)	488,549	59,081	14,713,074	3,843,000	0	1,935,400	2,449,000	2,500,000	3,500,000
16	BAB Subsidy	0	0	0	871,800	715,616	715,616	711,125	700,775	687,873
17	Grant - Drought Mitigation	n/a	n/a	n/a	n/a	126,500	0	0	0	0
18	Cost of Power Adjustment	1,007,308	1,325,366	1,470,700	1,289,110	1,383,517	1,295,200	1,295,200	1,295,200	1,295,200
19	Total Other Income	$3,274,275	$3,548,830	$17,561,437	$7,496,259	$3,617,766	$5,349,158	$5,869,207	$5,920,926	$6,919,226
20										
21	Total Revenue	$19,268,088	$19,319,265	$34,921,548	$25,968,664	$22,938,816	$24,882,741	$25,617,658	$25,886,610	$27,104,533
22										
23	Additional Revenue Required									
24	% of Water	Months								
25	Year Sales Revenue	Effective			2011	2012	2013	2014	2015	2016
26	FY 2012 9.0%	6				$869,400	$1,758,000	$1,777,400	$1,796,900	$1,816,700
27	FY 2013 9.0%	12					1,916,200	1,937,300	1,958,600	1,980,200
28	FY 2014 9.0%	12						2,111,700	2,134,900	2,158,400
29	FY 2015 9.0%	12							2,327,000	2,352,700
30	FY 2016 0.0%	12								0
31	Total Additional Revenue Required		$0	$0	$0	$0	$869,400	$3,674,200	$5,826,400	$8,217,400	$8,308,000
32										
33	Total Revenue		$19,268,088	$19,319,265	$34,921,548	$25,968,664	$23,808,216	$28,556,941	$31,444,058	$34,104,010	$35,412,533

Notes:
(1) Projected Revenues revised to correspond to 02Budget Summary FYE 2012.xls. 2013-2016 projected at 1.1%
(2) Matches 2012 Budget, less FRC Payback and Cost of Power Adjustment (accounted for elsewhere).
(3) Includes grant funds for Waimea project in FY 2011.
(4) Includes SRF Loan proceeds and reimbursements.

98

P.59

Option 9: 30% FRC Payback, Level , Meet Targets, Standard CIP
County of Kauai
Department of Water
Financial Planning Analysis and Water Rate Study

Historical and Projected Operating Revenues and Revenue Requirements
Fiscal Years Ending June 30

		Historical			Estimated	Budget	Projected			
		2008	2009	2010	2011	2012	2013	2014	2015	2016
34	**REVENUE REQUIREMENTS**									
35	Operating Expenditures (5)									
36	Source of Supply	$2,499,838	$2,275,707	$2,245,072	$2,223,761	$3,008,611	$3,101,886	$3,198,160	$3,297,340	$3,399,526
37	Pumping	2,947,947	2,556,313	2,576,227	3,064,600	3,100,000	3,410,000	3,580,500	3,759,500	3,947,500
38	Water Treatment Plant	1,675,094	1,723,621	1,949,808	2,306,740	2,624,967	2,703,653	2,784,636	2,868,115	2,954,267
39	Transmission & Distribution	2,496,677	2,471,122	3,302,023	3,579,434	3,389,868	3,559,423	3,737,456	3,924,320	4,120,545
40	Customer Services	520,281	610,600	762,749	730,664	875,681	901,744	928,690	956,343	984,879
41	Administrative & Engineering	2,782,432	2,475,297	2,513,490	3,038,246	3,260,122	3,364,931	3,473,317	3,585,660	3,702,159
42	Manager's Office	0	0	0	0	0	0	0	0	0
43	County Service Charge	736,888	817,839	925,133	833,500	925,133	934,400	943,700	953,100	962,600
44	Vehicles	184,373	207,307	183,874	201,310	275,600	280,100	284,600	289,200	293,900
45	Other Operating Expenses	359,215	415,079	417,380	481,679	551,400	557,600	563,900	570,200	576,600
46	Misc. Operating Expenses (6)	0	0	0	0	1,298,603	1,337,600	1,377,700	1,419,000	1,461,600
47	Adjustments (7)	(102,147)	(177,896)	(1,429,025)	(393,013)	(2,000,000)	(2,000,000)	(2,000,000)	(2,000,000)	(2,000,000)
48	Total Operating Expenditures	$14,100,598	$13,374,990	$13,446,732	$16,066,921	$17,309,984	$18,151,337	$18,872,660	$19,622,778	$20,403,576
49										
50	Operating Income	$5,167,490	$5,944,275	$21,474,816	$9,901,743	$6,498,232	$10,405,603	$12,571,399	$14,481,233	$15,008,957
51	Funds Available for Debt Service (8)	4,678,941	5,885,194	6,761,742	6,058,743	6,371,732	8,470,203	10,122,399	11,981,233	11,508,957
52										
53	Debt Service Requirement									
54	Existing Debt Service (9)	$1,943,760	$2,248,716	$2,417,456	$5,738,944	$6,198,994	$6,154,572	$7,962,963	$7,735,836	$7,868,983
55	Proposed Debt Service (9)	0	0	0	0	320,000	462,400	642,600	826,600	1,084,100
56	Debt Service Paid by FRC (10)	0	0	0	(284,622)	(1,989,115)	(1,968,273)	(2,504,298)	(2,541,241)	(2,523,043)
57	Total Debt Service Requirement	$1,943,760	$2,248,716	$2,417,456	$5,454,322	$4,529,880	$4,648,700	$6,101,265	$6,021,196	$6,430,039
58										
59	Capital Costs Charged to Operations									
60	Equipment (11)	$412,887	$451,949	$110,884	$465,529	$1,122,700	$512,800	$512,800	$512,800	$512,800
61	Property & Supply (11)	677,438	463,447	423,994	1,005,524	984,500	711,000	711,000	711,000	711,000
62	SRF Financed Capital (11)	2,185,874	4,781,289	5,410,800	3,843,000	0	1,935,400	2,449,000	2,500,000	3,500,000
63	Cash Financed Capital	3,439,913	4,203,176	7,592,391	1,558,884	7,928,682	1,935,400	2,449,000	2,500,000	3,500,000
64	Total Capital Costs Charged to Ops	$6,716,112	$9,899,861	$13,538,089	$6,872,937	$10,035,882	$5,094,600	$6,121,800	$6,223,800	$8,223,800
65										
66	Transfer to Emergency Reserve Fund	$0	$0	$0	$0	$1,009,523	$1,160,389	$1,278,743	$1,409,154	$1,424,665
67										
68	Total Revenue Requirements	$22,760,470	$25,523,567	$29,402,257	$28,394,180	$32,885,268	$29,055,026	$32,374,467	$33,276,928	$36,482,081
69										
70	Revenue Surplus/Deficiency	($3,492,382)	($6,204,302)	$5,519,291	($2,425,516)	($9,077,052)	($498,086)	($930,408)	$827,083	($1,069,548)
71										
72	Water Utility Fund Ending Balance	$15,215,397	$9,011,095	$14,362,450	$11,936,934	$2,859,848	$2,361,714	$1,431,292	$2,258,383	$1,188,852
73	Emergency Reserve Fund Balance	N/A	N/A	N/A	N/A	$1,009,523	$2,169,912	$3,448,654	$4,857,808	$6,282,474
74	Total Ending Balance (12)	$15,215,397	$9,011,095	$14,362,450	$11,936,934	$3,869,370	$4,531,626	$4,879,946	$7,116,191	$7,471,326
75	Ending Balance Target (13)				$4,618,101	$5,047,613	$5,801,946	$6,393,713	$7,045,771	$7,123,327
76										
77	Debt Service Coverage w/ FRC (14)	2.41	2.62	2.80	1.11	1.41	1.82	1.66	1.99	1.79
78	Minimum Debt Service Coverage (15)	N/A	N/A	N/A	1.50	1.50	1.50	1.50	1.50	1.50
79										
80	Average 5/8" Meter Bill ($/month) (16)	$35.00	$37.75	$40.50	$44.40	$48.40	$52.75	$57.50	$62.67	$62.67
81	Increase		$2.75	$2.75	$3.90	$4.00	$4.36	$4.75	$5.17	$0.00

Option 9: 30% FRC Payback, Level Rates, Meet Targets, Standard CIP
County of Kauai
Department of Water
Financial Planning Analysis and Water Rate Study

Historical and Projected Operating Revenues and Revenue Requirements
Fiscal Years Ending June 30

Historical			Estimated	Budget	Projected			
2008	2009	2010	2011	2012	2013	2014	2015	2016

Notes:
(5) See Table 6 for details.
(6) Misc. Operating Expenses consists of the difference between the proposed budget and the projected historical expenses, and serves to make the projection consistent with the budget.
(7) Adjustments made to reduce O&M expenditures due to staff vacancies, capitalized expenses, and to reflect the historical trend of reduced budgetary expenditure levels.
(8) Equals Operating Income less SRF loan proceeds.
(9) See Table 8 for details.
(10) FRC Debt Service Payback per DOW, 3/23/11.
(11) Per FY 2012 Annual Budget (Budget Summary FYE 2012.xls). Projected expenses based on average of FY 08-12.
(12) Total Ending Balance is summed only so that it may be compared to the Ending Balance Target.
(13) Ending Balance Target based on 25% of Revenues
(14) Equals Funds Available for Debt Service divided by Total Debt Service.
(15) Target for planning purposes.
(16) Based on a 5/8" meter using 10,000 gallons per month. The value shown for FY2012 is the average bill after the rate increase occurs.

Option 9: 30% FRC Payback, Leve[illegible], Meet Targets, Reduced CIP
County o[illegible]auai
Department of Water
Financial Planning Analysis and Water Rate Study

Historical and Projected Operating Revenues and Revenue Requirements
Fiscal Years Ending June 30

		Historical			Estimated	Budget	Projected			
		2008	2009	2010	2011	2012	2013	2014	2015	2016
1	**REVENUES**									
2	Water Utility Fund Beginning Balance	$18,707,779	$15,215,397	$9,011,095	$14,362,450	$11,936,900	$4,823,200	$4,163,700	$2,966,700	$3,403,000
3										
4	Revenue Under Existing Rates:									
5	Operating Revenues (1)									
6	Water Sales	$13,223,896	$13,433,062	$14,272,311	$15,426,305	$15,637,051	$15,809,058	$15,982,958	$16,158,770	$16,336,517
7	Service Charge	2,769,917	3,009,416	3,087,800	3,046,100	3,684,000	3,724,524	3,765,494	3,806,914	3,848,790
8	Total Operating Revenues (2)	$15,993,813	$15,770,435	$17,360,111	$18,472,405	$19,321,051	$19,533,582	$19,748,451	$19,965,684	$20,185,307
9										
10	Other Income (1)									
11	Miscellaneous Receipts	$116,619	$175,333	$149,855	$5,000	$112,000	$112,000	$112,000	$112,000	$112,000
12	Interest Earned	817,557	562,949	275,535	461,000	355,000	355,000	355,000	355,000	355,000
13	Fire Hydrant Svc. Charge	736,868	817,839	925,133	925,133	925,133	935,943	946,881	957,951	969,153
14	Other (3)	107,354	608,262	27,140	101,216	0	0	0	0	0
15	Other - SRF Loan (4)	488,549	59,081	14,713,074	3,843,000	0	1,935,400	2,449,000	2,500,000	3,500,000
16	BAB Subsidy	0	0	0	871,800	715,616	715,616	711,125	700,775	687,873
17	Grant - Drought Mitigation	n/a	n/a	n/a	n/a	126,500	0	0	0	0
18	Cost of Power Adjustment	1,007,308	1,325,366	1,470,700	1,289,110	1,383,617	1,295,200	1,295,200	1,295,200	1,295,200
19	Total Other Income	$3,274,275	$3,548,830	$17,561,437	$7,496,259	$3,617,766	$5,349,158	$5,869,207	$5,920,926	$6,919,226
20										
21	Total Revenue	$19,268,088	$19,319,265	$34,921,548	$25,968,664	$22,938,816	$24,882,741	$25,617,658	$25,886,610	$27,104,533
22										
23	Additional Revenue Required									
24	% of Water	Months			2011	2012	2013	2014	2015	2016
25	Year Sales Revenue	Effective								
26	FY 2012 8.6%	6				$830,800	$1,679,900	$1,698,400	$1,717,000	$1,735,900
27	FY 2013 8.6%	12					1,824,400	1,844,400	1,864,700	1,885,200
28	FY 2014 8.6%	12						2,003,000	2,025,100	2,047,400
29	FY 2015 8.6%	12							2,199,200	2,223,400
30	FY 2016 0.0%	12								0
31	Total Additional Revenue Required		$0	$0	$0	$0	$830,800	$3,504,300	$5,545,800	$7,806,000	$7,891,900
32										
33	Total Revenue		$19,268,088	$19,319,265	$34,921,548	$25,968,664	$23,769,616	$28,387,041	$31,163,458	$33,692,610	$34,996,433

Notes:
(1) Projected Revenues revised to correspond to 02Budget Summary FYE 2012.xls. 2013-2016 projected at 1.1%
(2) Matches 2012 Budget, less FRC Payback and Cost of Power Adjustment (accounted for elsewhere).
(3) Includes grant funds for Waimea project in FY 2011.
(4) Includes SRF Loan proceeds and reimbursements.

9c

p. 62

Option 9: 30% FRC Payback, Level Rates, Meet Targets, Reduced CIP
County of Kauai
Department of Water
Financial Planning Analysis and Water Rate Study

Historical and Projected Operating Revenues and Revenue Requirements
Fiscal Years Ending June 30

		Historical			Estimated	Budget	Projected			
		2008	2009	2010	2011	2012	2013	2014	2015	2016
34	**REVENUE REQUIREMENTS**									
35	Operating Expenditures (5)									
36	Source of Supply	$2,499,838	$2,275,707	$2,245,072	$2,223,761	$3,008,611	$3,101,886	$3,198,160	$3,297,340	$3,399,526
37	Pumping	2,947,947	2,556,313	2,576,227	3,064,600	3,100,000	3,410,000	3,580,500	3,759,500	3,947,500
38	Water Treatment Plant	1,675,094	1,723,621	1,949,808	2,306,740	2,624,967	2,703,653	2,784,636	2,868,115	2,954,267
39	Transmission & Distribution	2,496,677	2,471,122	3,302,023	3,579,434	3,389,868	3,559,423	3,737,456	3,924,320	4,120,545
40	Customer Services	520,281	610,600	762,749	730,664	875,681	901,744	928,690	956,343	984,879
41	Administrative & Engineering	2,782,432	2,475,297	2,513,490	3,038,246	3,260,122	3,364,931	3,473,317	3,585,660	3,702,159
42	Manager's Office	0	0	0	0	0	0	0	0	0
43	County Service Charge	736,888	817,839	925,133	833,500	925,133	934,400	943,700	953,100	962,600
44	Vehicles	184,373	207,307	183,874	201,310	275,600	280,100	284,600	289,200	293,900
45	Other Operating Expenses	359,215	415,079	417,380	481,679	551,400	557,600	563,900	570,200	576,600
46	Misc. Operating Expenses (6)	0	0	0	0	1,298,603	1,337,600	1,377,700	1,419,000	1,461,600
47	Adjustments (7)	(102,147)	(177,896)	(1,429,025)	(393,013)	(2,000,000)	(2,000,000)	(2,000,000)	(2,000,000)	(2,000,000)
48	Total Operating Expenditures	$14,100,598	$13,374,990	$13,446,732	$16,066,921	$17,309,984	$18,151,337	$18,872,660	$19,622,778	$20,403,576
49										
50	Operating Income	$5,167,490	$5,944,275	$21,474,816	$9,901,743	$6,459,632	$10,235,703	$12,290,799	$14,069,833	$14,592,857
51	Funds Available for Debt Service (8)	4,678,941	5,885,194	6,761,742	6,058,743	6,333,132	8,300,303	9,841,799	11,569,833	11,092,857
52										
53	Debt Service Requirement									
54	Existing Debt Service (9)	$1,943,760	$2,248,716	$2,417,456	$5,738,944	$6,198,994	$6,154,572	$7,962,963	$7,735,836	$7,868,983
55	Proposed Debt Service (9)	0	0	0	0	320,000	462,400	642,600	826,600	1,084,100
56	Debt Service Paid by FRC (10)	0	0	0	(284,622)	(1,989,115)	(1,968,273)	(2,504,298)	(2,541,241)	(2,523,043)
57	Total Debt Service Requirement	$1,943,760	$2,248,716	$2,417,456	$5,454,322	$4,529,880	$4,648,700	$6,101,265	$6,021,196	$6,430,039
58										
59	Capital Costs Charged to Operations									
60	Equipment (11)	$412,887	$451,949	$110,884	$465,529	$1,122,700	$512,800	$512,800	$512,800	$512,800
61	Property & Supply (11)	677,438	463,447	423,994	1,005,524	984,500	711,000	711,000	711,000	711,000
62	SRF Financed Capital (11)	2,185,874	4,781,289	5,410,800	3,843,000	0	1,935,400	2,449,000	2,500,000	3,500,000
63	Cash Financed Capital	3,439,913	4,203,176	7,592,391	1,558,884	5,928,682	1,935,400	2,449,000	2,500,000	3,500,000
64	Total Capital Costs Charged to Ops	$6,716,112	$9,899,861	$13,538,069	$6,872,937	$8,035,882	$5,094,600	$6,121,800	$6,223,800	$8,223,800
65										
66	Transfer to Emergency Reserve Fund	$0	$0	$0	$0	$1,007,593	$1,151,894	$1,264,713	$1,388,584	$1,403,860
67										
68	Total Revenue Requirements	$22,760,470	$25,523,567	$29,402,257	$28,394,180	$30,883,338	$29,046,531	$32,360,437	$33,256,358	$36,461,276
69										
70	Revenue Surplus/Deficiency	($3,492,382)	($6,204,302)	$5,519,291	($2,425,516)	($7,113,722)	($659,491)	($1,196,978)	$436,253	($1,464,843)
71										
72	Water Utility Fund Ending Balance	$15,215,397	$9,011,095	$14,362,450	$11,936,934	$4,823,178	$4,163,709	$2,966,722	$3,402,953	$1,938,157
73	Emergency Reserve Fund Balance	N/A	N/A	N/A	N/A	$1,007,593	$2,159,487	$3,424,199	$4,812,783	$6,216,644
74	Total Ending Balance (12)	$15,215,397	$9,011,095	$14,362,450	$11,936,934	$5,830,770	$6,323,196	$6,390,921	$8,215,736	$8,154,801
75	Ending Balance Target (13)				$4,618,101	$5,037,963	$5,759,471	$6,323,563	$6,942,921	$7,019,302
76										
77	Debt Service Coverage w/ FRC (14)	2.41	2.62	2.80	[illegible]	[illegible]	1.79	1.61	1.92	1.73
78	Minimum Debt Service Coverage (15)	N/A	N/A	N/A	1.50	1.50	1.50	1.50	1.50	1.50
79										
80	Average 5/8" Meter Bill ($/month) (16)	$35.00	$37.75	$40.50	$44.40	$48.22	$52.37	$56.87	$61.76	$61.76
81	Increase		$2.75	$2.75	$3.90	$3.82	$4.15	$4.50	$4.89	$0.00

9c

P. 62

Option 9: 30% FRC Payback, Level , Meet Targets, Reduced CIP
County ial
Department of Water
Financial Planning Analysis and Water Rate Study

Historical and Projected Operating Revenues and Revenue Requirements
Fiscal Years Ending June 30

Historical			Estimated	Budget	Projected			
2008	2009	2010	2011	2012	2013	2014	2015	2016

Notes:
(5) See Table 6 for details.
(6) Misc. Operating Expenses consists of the difference between the proposed budget and the projected historical expenses, and serves to make the projection consistent with the budget.
(7) Adjustments made to reduce O&M expenditures due to staff vacancies, capitalized expenses, and to reflect the historical trend of reduced budgetary expenditure levels.
(8) Equals Operating Income less SRF loan proceeds.
(9) See Table 8 for details.
(10) FRC Debt Service Payback per DOW, 3/23/11.
(11) Per FY 2012 Annual Budget (Budget Summary FYE 2012.xls). Projected expenses based on average of FY 08-12.
(12) Total Ending Balance is summed only so that it may be compared to the Ending Balance Target.
(13) Ending Balance Target based on 25% of Revenues
(14) Equals Funds Available for Debt Service divided by Total Debt Service.
(15) Target for planning purposes.
(16) Based on a 5/8" meter using 10,000 gallons per month. The value shown for FY2012 is the average bill after the rate increase occurs.

9c

p. 64

Option 10: Current FRC Payback, Level Rates, No Target, Deferred CIP
County of Kauai
Department of Water
Financial Planning Analysis and Water Rate Study

Historical and Projected Operating Revenues and Revenue Requirements
Fiscal Years Ending June 30

		Historical			Estimated	Budget	Projected			
		2008	2009	2010	2011	2012	2013	2014	2015	2016
1	**REVENUES**									
2	Water Utility Fund Beginning Balance	$18,707,779	$15,215,397	$9,011,095	$14,362,450	$11,936,900	$5,061,800	$5,386,400	$4,271,500	$5,599,800
3										
4	Revenue Under Existing Rates:									
5	Operating Revenues (1)									
6	Water Sales	$13,223,896	$13,433,062	$14,272,311	$15,426,305	$15,637,051	$15,809,058	$15,982,958	$16,158,770	$16,336,517
7	Service Charge	2,769,917	3,009,416	3,087,800	3,046,100	3,684,000	3,724,524	3,765,494	3,806,914	3,848,790
8	Total Operating Revenues (2)	$15,993,813	$15,770,435	$17,360,111	$18,472,405	$19,321,051	$19,533,582	$19,748,451	$19,965,684	$20,185,307
9										
10	Other Income (1)									
11	Miscellaneous Receipts	$116,619	$175,333	$149,855	$5,000	$112,000	$112,000	$112,000	$112,000	$112,000
12	Interest Earned	817,557	562,949	275,535	461,000	355,000	355,000	355,000	355,000	355,000
13	Fire Hydrant Svc. Charge	736,888	817,839	925,133	925,133	925,133	935,943	946,861	957,951	969,153
14	Other (3)	107,354	608,262	27,140	101,216	0	0	0	0	0
15	Other - SRF Loan (4)	488,549	59,081	14,713,074	3,843,000	0	1,935,400	2,449,000	2,500,000	4,500,000
16	BAB Subsidy	0	0	0	871,800	715,616	715,616	711,125	700,775	687,873
17	Grant - Drought Mitigation	n/a	n/a	n/a	n/a	126,500	0	0	0	0
18	Cost of Power Adjustment	1,007,308	1,325,366	1,470,700	1,289,110	1,383,517	1,295,200	1,295,200	1,295,200	1,295,200
19	Total Other Income	$3,274,275	$3,548,830	$17,561,437	$7,496,259	$3,617,766	$5,349,158	$5,869,207	$5,920,926	$7,919,226
20										
21	Total Revenue	$19,268,088	$19,319,265	$34,921,548	$25,968,664	$22,938,816	$24,882,741	$25,617,658	$25,886,610	$28,104,533
22										
23	Additional Revenue Required									
24					2011	2012	2013	2014	2015	2016
25	Year / % of Water Sales Revenue / Months Effective									
26	FY 2012 11.2% 6					$1,082,000	$2,187,800	$2,211,800	$2,236,200	$2,260,800
27	FY 2013 11.2% 12						2,432,800	2,459,500	2,486,600	2,514,000
28	FY 2014 11.2% 12							2,735,000	2,765,100	2,795,500
29	FY 2015 11.2% 12								3,074,800	3,108,600
30	FY 2016 0.0% 12									0
31	Total Additional Revenue Required	$0	$0	$0	$0	$1,082,000	$4,620,600	$7,406,300	$10,562,700	$10,678,900
32										
33	Total Revenue	$19,268,088	$19,319,265	$34,921,548	$25,968,664	$24,020,816	$29,503,341	$33,023,958	$36,449,310	$38,783,433

Notes:
(1) Projected Revenues revised to correspond to 02Budget Summary FYE 2012.xls. 2013-2016 projected at 1.1%
(2) Matches 2012 Budget, less FRC Payback and Cost of Power Adjustment (accounted for elsewhere).
(3) Includes grant funds for Waimea project in FY 2011.
(4) Includes SRF Loan proceeds and reimbursements.

10A

P. 65

Option 10: Current FRC Payback, L[illegible]ates, No Target, Deferred CIP
County o[illegible]al
Department of Water
Financial Planning Analysis and Water Rate Study

Historical and Projected Operating Revenues and Revenue Requirements
Fiscal Years Ending June 30

		Historical			Estimated	Budget	Projected			
		2008	2009	2010	2011	2012	2013	2014	2015	2016
34	**REVENUE REQUIREMENTS**									
35	Operating Expenditures (5)									
36	Source of Supply	$2,499,838	$2,275,707	$2,245,072	$2,223,761	$3,008,611	$3,101,886	$3,198,160	$3,297,340	$3,399,526
37	Pumping	2,947,947	2,556,313	2,576,227	3,064,600	3,100,000	3,410,000	3,580,500	3,759,500	3,947,500
38	Water Treatment Plant	1,675,094	1,723,621	1,949,808	2,306,740	2,624,967	2,703,653	2,784,636	2,868,115	2,954,267
39	Transmission & Distribution	2,496,677	2,471,122	3,302,023	3,579,434	3,389,868	3,559,423	3,737,456	3,924,320	4,120,545
40	Customer Services	520,281	610,600	762,749	730,664	875,681	901,744	928,690	956,343	984,879
41	Administrative & Engineering	2,782,432	2,475,297	2,513,490	3,038,246	3,260,122	3,364,931	3,473,317	3,585,660	3,702,159
42	Manager's Office	0	0	0	0	0	0	0	0	0
43	County Service Charge	736,888	817,839	925,133	833,500	925,133	934,400	943,700	953,100	962,600
44	Vehicles	184,373	207,307	183,874	201,310	275,600	280,100	284,600	289,200	293,900
45	Other Operating Expenses	359,215	415,079	417,380	481,679	551,400	557,600	563,900	570,200	576,600
46	Misc. Operating Expenses (6)	0	0	0	0	1,298,603	1,337,600	1,377,700	1,419,000	1,461,600
47	Adjustments (7)	(102,147)	(177,896)	(1,429,025)	(393,013)	(2,000,000)	(2,000,000)	(2,000,000)	(2,000,000)	(2,000,000)
48	Total Operating Expenditures	$14,100,598	$13,374,990	$13,446,732	$16,066,921	$17,309,984	$18,151,337	$18,872,660	$19,622,778	$20,403,576
49										
50	Operating Income	$5,167,490	$5,944,275	$21,474,816	$9,901,743	$6,710,832	$11,352,003	$14,151,299	$16,826,533	$18,379,857
51	Funds Available for Debt Service (8)	4,678,941	5,885,194	6,761,742	6,058,743	6,584,332	9,416,603	11,702,299	14,326,533	13,879,857
52										
53	Debt Service Requirement									
54	Existing Debt Service (9)	$1,943,760	$2,248,716	$2,417,456	$5,738,944	$6,198,994	$6,154,572	$7,962,963	$7,735,836	$7,868,983
55	Proposed Debt Service (9)	0	0	0	0	320,000	462,400	642,600	826,600	1,157,700
56	Debt Service Paid by FRC (10)	0	0	0	(284,622)	(1,989,115)	(1,891,892)	(818,868)	(814,432)	(808,903)
57	Total Debt Service Requirement	$1,943,760	$2,248,716	$2,417,456	$5,454,322	$4,529,880	$4,725,080	$7,786,694	$7,748,004	$8,217,780
58										
59	Capital Costs Charged to Operations									
60	Equipment (11)	$412,887	$451,949	$110,884	$465,529	$1,122,700	$512,800	$512,800	$512,800	$512,800
61	Property & Supply (11)	677,438	463,447	423,994	1,005,524	984,500	711,000	711,000	711,000	711,000
62	SRF Financed Capital (11)	2,185,874	4,781,289	5,410,800	3,843,000	0	1,935,400	2,449,000	2,500,000	4,500,000
63	Cash Financed Capital	3,439,913	4,203,176	7,592,391	1,558,884	5,928,682	1,935,400	2,449,000	2,500,000	4,500,000
64	Total Capital Costs Charged to Ops	$6,716,112	$9,899,861	$13,538,069	$6,872,937	$8,035,882	$5,094,600	$6,121,800	$6,223,800	$10,223,800
65										
66	Transfer to Emergency Reserve Fund	$0	$0	$0	$0	$1,020,153	$1,207,709	$1,357,738	$1,526,419	$1,543,210
67										
68	Total Revenue Requirements	$22,760,470	$25,523,567	$29,402,257	$28,394,180	$30,895,898	$29,178,726	$34,138,892	$35,121,001	$40,388,366
69										
70	Revenue Surplus/Deficiency	($3,492,382)	($6,204,302)	$5,519,291	($2,425,516)	($6,875,082)	$324,614	($1,114,933)	$1,328,309	($1,604,934)
71										
72	Water Utility Fund Ending Balance	$15,215,397	$9,011,095	$14,362,450	$11,936,934	$5,061,818	$5,386,414	$4,271,467	$5,599,809	$3,994,866
73	Emergency Reserve Fund Balance	N/A	N/A	N/A	N/A	$1,020,153	$2,227,862	$3,585,599	$5,112,018	$6,655,229
74	Total Ending Balance (12)	$15,215,397	$9,011,095	$14,362,450	$11,936,934	$6,081,970	$7,614,276	$7,857,066	$10,711,828	$10,650,095
75	Ending Balance Target (13)				$4,618,101	$5,100,763	$6,038,546	$6,788,688	$7,632,096	$7,716,052
76										
77	Debt Service Coverage w/ FRC (14)	2.41	2.62	2.80	[illegible]	[illegible]	1.99	1.50	1.85	1.69
78	Minimum Debt Service Coverage (15)	N/A	N/A	N/A	1.50	1.50	1.50	1.50	1.50	1.50
79										
80	Average 5/8" Meter Bill ($/month) (16)	$35.00	$37.75	$40.50	$44.40	$49.37	$54.90	$61.05	$67.89	$67.89
81	Increase		$2.75	$2.75	$3.90	$4.97	$5.53	$6.15	$6.84	$0.00

Option 10: Current FRC Payback, Level Rates, No Target, Deferred CIP
County of Kauai
Department of Water
Financial Planning Analysis and Water Rate Study

Historical and Projected Operating Revenues and Revenue Requirements
Fiscal Years Ending June 30

Historical			Estimated	Budget	Projected			
2008	2009	2010	2011	2012	2013	2014	2015	2016

Notes:
(5) See Table 6 for details.
(6) Misc. Operating Expenses consists of the difference between the proposed budget and the projected historical expenses, and serves to make the projection consistent with the budget.
(7) Adjustments made to reduce O&M expenditures due to staff vacancies, capitalized expenses, and to reflect the historical trend of reduced budgetary expenditure levels.
(8) Equals Operating Income less SRF loan proceeds.
(9) See Table 8 for details.
(10) FRC Debt Service Payback per DOW, 3/23/11.
(11) Per FY 2012 Annual Budget (Budget Summary FYE 2012.xls). Projected expenses based on average of FY 08-12.
(12) Total Ending Balance is summed only so that it may be compared to the Ending Balance Target.
(13) Ending Balance Target based on 25% of Revenues
(14) Equals Funds Available for Debt Service divided by Total Debt Service.
(15) Target for planning purposes.
(16) Based on a 5/8" meter using 10,000 gallons per month. The value shown for FY2012 is the average bill after the rate increase occurs.

Option 10: Current FRC Pay[illegible]Level Rates, No Target
County [illegible]ual
Department of Water
Financial Planning Analysis and Water Rate Study

Historical and Projected Operating Revenues and Revenue Requirements
Fiscal Years Ending June 30

		Historical			Estimated	Budget	Projected			
		2008	2009	2010	2011	2012	2013	2014	2015	2016
1	**REVENUES**									
2	Water Utility Fund Beginning Balance	$18,707,779	$15,215,397	$9,011,095	$14,362,450	$11,936,900	$3,061,800	$3,386,400	$2,271,500	$3,599,800
3										
4	Revenue Under Existing Rates:									
5	Operating Revenues (1)									
6	Water Sales	$13,223,896	$13,433,062	$14,272,311	$15,426,305	$15,637,051	$15,809,058	$15,982,958	$16,158,770	$16,336,517
7	Service Charge	2,769,917	3,009,416	3,087,800	3,046,100	3,684,000	3,724,524	3,765,494	3,806,914	3,848,790
8	Total Operating Revenues (2)	$15,993,813	$15,770,435	$17,360,111	$18,472,405	$19,321,051	$19,533,582	$19,748,451	$19,965,684	$20,185,307
9										
10	Other Income (1)									
11	Miscellaneous Receipts	$116,619	$175,333	$149,855	$5,000	$112,000	$112,000	$112,000	$112,000	$112,000
12	Interest Earned	817,557	562,949	275,535	461,000	355,000	355,000	355,000	355,000	355,000
13	Fire Hydrant Svc. Charge	736,888	817,839	925,133	925,133	925,133	935,943	946,881	957,951	969,153
14	Other (3)	107,354	608,262	27,140	101,216	0	0	0	0	0
15	Other - SRF Loan (4)	488,549	59,081	14,713,074	3,843,000	0	1,935,400	2,449,000	2,500,000	3,500,000
16	BAB Subsidy	0	0	0	871,800	715,616	715,616	711,125	700,775	687,873
17	Grant - Drought Mitigation	n/a	n/a	n/a	n/a	126,500	0	0	0	0
18	Cost of Power Adjustment	1,007,308	1,325,366	1,470,700	1,289,110	1,383,517	1,295,200	1,295,200	1,295,200	1,295,200
19	Total Other Income	$3,274,275	$3,548,830	$17,561,437	$7,496,259	$3,617,766	$5,349,158	$5,869,207	$5,920,926	$6,919,226
20										
21	Total Revenue	$19,268,088	$19,319,265	$34,921,548	$25,968,664	$22,938,816	$24,882,741	$25,617,658	$25,886,610	$27,104,533
22										
23	Additional Revenue Required									
24					2011	2012	2013	2014	2015	2016
25	Year / % of Water Sales Revenue / Months Effective									
26	FY 2012 11.2% 6					$1,082,000	$2,187,800	$2,211,800	$2,236,200	$2,260,800
27	FY 2013 11.2% 12						2,432,800	2,459,500	2,486,600	2,514,000
28	FY 2014 11.2% 12							2,735,000	2,765,100	2,795,500
29	FY 2015 11.2% 12								3,074,800	3,108,600
30	FY 2016 0.0% 12									0
31	Total Additional Revenue Required	$0	$0	$0	$0	$1,082,000	$4,620,600	$7,406,300	$10,562,700	$10,678,900
32										
33	Total Revenue	$19,268,088	$19,319,265	$34,921,548	$25,968,664	$24,020,816	$29,503,341	$33,023,958	$36,449,310	$37,783,433

Notes:
(1) Projected Revenues revised to correspond to 02Budget Summary FYE 2012.xls. 2013-2016 projected at 1.1%
(2) Matches 2012 Budget, less FRC Payback and Cost of Power Adjustment (accounted for elsewhere).
(3) Includes grant funds for Waimea project in FY 2011.
(4) Includes SRF Loan proceeds and reimbursements.

10B

p. 68

Option 10: Current FRC Payback, Level Rates, No Target
County of Kauai
Department of Water
Financial Planning Analysis and Water Rate Study

Historical and Projected Operating Revenues and Revenue Requirements
Fiscal Years Ending June 30

		Historical			Estimated	Budget	Projected			
		2008	2009	2010	2011	2012	2013	2014	2015	2016
34	**REVENUE REQUIREMENTS**									
35	Operating Expenditures (5)									
36	Source of Supply	$2,499,838	$2,275,707	$2,245,072	$2,223,761	$3,008,611	$3,101,886	$3,198,160	$3,297,340	$3,399,526
37	Pumping	2,947,947	2,556,313	2,576,227	3,064,600	3,100,000	3,410,000	3,580,500	3,759,500	3,947,500
38	Water Treatment Plant	1,675,094	1,723,621	1,949,808	2,306,740	2,624,967	2,703,653	2,784,636	2,868,115	2,954,267
39	Transmission & Distribution	2,496,677	2,471,122	3,302,023	3,579,434	3,389,868	3,559,423	3,737,456	3,924,320	4,120,545
40	Customer Services	520,281	610,600	762,749	730,664	875,681	901,744	928,690	956,343	984,879
41	Administrative & Engineering	2,782,432	2,475,297	2,513,490	3,038,246	3,260,122	3,364,931	3,473,317	3,585,660	3,702,159
42	Manager's Office	0	0	0	0	0	0	0	0	0
43	County Service Charge	736,888	817,839	925,133	833,500	925,133	934,400	943,700	953,100	962,600
44	Vehicles	184,373	207,307	183,874	201,310	275,600	280,100	284,600	289,200	293,900
45	Other Operating Expenses	359,215	415,079	417,380	481,679	551,400	557,600	563,900	570,200	576,600
46	Misc. Operating Expenses (6)	0	0	0	0	1,298,603	1,337,600	1,377,700	1,419,000	1,461,600
47	Adjustments (7)	(102,147)	(177,896)	(1,429,025)	(393,013)	(2,000,000)	(2,000,000)	(2,000,000)	(2,000,000)	(2,000,000)
48	Total Operating Expenditures	$14,100,598	$13,374,990	$13,446,732	$16,066,921	$17,309,984	$18,151,337	$18,872,660	$19,622,778	$20,403,576
49										
50	Operating Income	$5,167,490	$5,944,275	$21,474,816	$9,901,743	$8,710,832	$11,352,003	$14,151,299	$16,826,533	$17,379,857
51	Funds Available for Debt Service (8)	4,678,941	5,885,194	6,761,742	6,058,743	6,584,332	9,416,603	11,702,299	14,326,533	13,879,857
52										
53	Debt Service Requirement									
54	Existing Debt Service (9)	$1,943,760	$2,248,716	$2,417,456	$5,738,944	$6,198,994	$6,154,572	$7,962,963	$7,735,836	$7,868,983
55	Proposed Debt Service (9)	0	0	0	0	320,000	462,400	642,600	826,600	1,084,100
56	Debt Service Paid by FRC (10)	0	0	0	(284,622)	(1,989,115)	(1,891,892)	(818,868)	(814,432)	(808,903)
57	Total Debt Service Requirement	$1,943,760	$2,248,716	$2,417,456	$5,454,322	$4,529,880	$4,725,080	$7,786,694	$7,748,004	$8,144,180
58										
59	Capital Costs Charged to Operations									
60	Equipment (11)	$412,687	$451,949	$110,884	$465,529	$1,122,700	$512,800	$512,800	$512,800	$512,800
61	Property & Supply (11)	677,438	463,447	423,994	1,005,524	984,500	711,000	711,000	711,000	711,000
62	SRF Financed Capital (11)	2,185,874	4,781,289	5,410,800	3,843,000	0	1,935,400	2,449,000	2,500,000	3,500,000
63	Cash Financed Capital	3,439,913	4,203,176	7,592,391	1,558,884	7,928,682	1,935,400	2,449,000	2,500,000	3,500,000
64	Total Capital Costs Charged to Ops	$6,716,112	$9,899,861	$13,538,069	$6,872,937	$10,035,882	$5,094,600	$6,121,800	$6,223,800	$8,223,800
65										
66	Transfer to Emergency Reserve Fund	$0	$0	$0	$0	$1,020,153	$1,207,709	$1,357,738	$1,526,419	$1,543,210
67										
68	Total Revenue Requirements	$22,760,470	$25,523,567	$29,402,257	$28,394,180	$32,895,898	$29,178,726	$34,138,892	$35,121,001	$38,314,766
69										
70	Revenue Surplus/Deficiency	($3,492,382)	($6,204,302)	$5,519,291	($2,425,516)	($8,875,082)	$324,614	($1,114,933)	$1,328,309	($531,334)
71										
72	Water Utility Fund Ending Balance	$15,215,397	$9,011,095	$14,362,450	$11,936,934	$3,061,818	$3,386,414	$2,271,467	$3,599,809	$3,068,466
73	Emergency Reserve Fund Balance	N/A	N/A	N/A	N/A	$1,020,153	$2,227,862	$3,585,599	$5,112,018	$6,655,229
74	Total Ending Balance (12)	$15,215,397	$9,011,095	$14,362,450	$11,936,934	[illegible]	[illegible]	[illegible]	$8,711,828	$9,723,695
75	Ending Balance Target (13)				$4,618,101	$5,100,763	$6,038,546	$6,788,688	$7,632,096	$7,716,052
76										
77	Debt Service Coverage w/ FRC (14)	2.41	2.62	2.80	[illegible]	[illegible]	1.99	1.50	1.85	1.70
78	Minimum Debt Service Coverage (15)	N/A	N/A	N/A	1.50	1.50	1.50	1.50	1.50	1.50
79										
80	Average 5/8" Meter Bill ($/month) (16)	$35.00	$37.75	$40.50	$44.40	$49.37	$54.90	$61.05	$67.89	$67.89
81	Increase		$2.75	$2.75	$3.90	$4.97	$5.53	$6.15	$6.84	$0.00

Option 10: Current FRC Pa[illegible] Level Rates, No Target
County [illegible]ual
Department of Water
Financial Planning Analysis and Water Rate Study

Historical and Projected Operating Revenues and Revenue Requirements
Fiscal Years Ending June 30

Historical			Estimated	Budget	Projected			
2008	2009	2010	2011	2012	2013	2014	2015	2016

Notes:
(5) See Table 6 for details.
(6) Misc. Operating Expenses consists of the difference between the proposed budget and the projected historical expenses, and serves to make the projection consistent with the budget.
(7) Adjustments made to reduce O&M expenditures due to staff vacancies, capitalized expenses, and to reflect the historical trend of reduced budgetary expenditure levels.
(8) Equals Operating Income less SRF loan proceeds.
(9) See Table 8 for details.
(10) FRC Debt Service Payback per DOW, 3/23/11.
(11) Per FY 2012 Annual Budget (Budget Summary FYE 2012.xls). Projected expenses based on average of FY 08-12.
(12) Total Ending Balance is summed only so that it may be compared to the Ending Balance Target.
(13) Ending Balance Target based on 25% of Revenues
(14) Equals Funds Available for Debt Service divided by Total Debt Service.
(15) Target for planning purposes.
(16) Based on a 5/8" meter using 10,000 gallons per month. The value shown for FY2012 is the average bill after the rate increase occurs.

Option 10: Current FRC Payback, Level Rates, No Target, Reduced CIP
County of Kauai
Department of Water
Financial Planning Analysis and Water Rate Study

Historical and Projected Operating Revenues and Revenue Requirements
Fiscal Years Ending June 30

		Historical			Estimated	Budget	Projected			
		2008	2009	2010	2011	2012	2013	2014	2015	2016
1	**REVENUES**									
2	Water Utility Fund Beginning Balance	$18,707,779	$15,215,397	$9,011,095	$14,362,450	$11,936,900	$5,061,800	$5,386,400	$4,271,500	$5,599,800
3										
4	Revenue Under Existing Rates:									
5	Operating Revenues (1)									
6	Water Sales	$13,223,896	$13,433,062	$14,272,311	$15,426,305	$15,637,051	$15,809,058	$15,982,958	$16,158,770	$16,336,517
7	Service Charge	2,769,917	3,009,416	3,087,800	3,046,100	3,684,000	3,724,524	3,765,494	3,806,914	3,848,790
8	Total Operating Revenues (2)	$15,993,813	$15,770,435	$17,360,111	$18,472,405	$19,321,051	$19,533,582	$19,748,451	$19,965,684	$20,185,307
9										
10	Other Income (1)									
11	Miscellaneous Receipts	$116,619	$175,333	$149,855	$5,000	$112,000	$112,000	$112,000	$112,000	$112,000
12	Interest Earned	817,557	562,949	275,535	461,000	355,000	355,000	355,000	355,000	355,000
13	Fire Hydrant Svc. Charge	736,888	817,839	925,133	925,133	925,133	935,943	946,881	957,951	969,153
14	Other (3)	107,354	608,262	27,140	101,216	0	0	0	0	0
15	Other - SRF Loan (4)	488,549	59,081	14,713,074	3,843,000	0	1,935,400	2,449,000	2,500,000	3,500,000
16	BAB Subsidy	0	0	0	871,800	715,616	715,616	711,125	700,775	687,873
17	Grant - Drought Mitigation	n/a	n/a	n/a	n/a	126,500	0	0	0	0
18	Cost of Power Adjustment	1,007,308	1,325,366	1,470,700	1,289,110	1,383,517	1,295,200	1,295,200	1,295,200	1,295,200
19	Total Other Income	$3,274,275	$3,548,830	$17,561,437	$7,496,259	$3,617,766	$5,349,158	$5,869,207	$5,920,926	$6,919,226
20										
21	Total Revenue	$19,268,088	$19,319,265	$34,921,548	$25,968,664	$22,938,816	$24,882,741	$25,617,658	$25,886,610	$27,104,533
22										
23	Additional Revenue Required									
24		% of Water	Months							
25	Year	Sales Revenue	Effective		2011	2012	2013	2014	2015	2016
26	FY 2012	11.2%	6			$1,082,000	$2,187,800	$2,211,800	$2,236,200	$2,260,800
27	FY 2013	11.2%	12				2,432,800	2,459,500	2,486,600	2,514,000
28	FY 2014	11.2%	12					2,735,000	2,765,100	2,795,500
29	FY 2015	11.2%	12						3,074,800	3,108,600
30	FY 2016	0.0%	12							0
31	Total Additional Revenue Required			$0	$0	$1,082,000	$4,620,600	$7,406,300	$10,562,700	$10,678,900
32										
33	Total Revenue			$19,268,088	$19,319,265	$34,921,548	$25,968,664	$24,020,816	$29,503,341	$33,023,958	$36,449,310	$37,783,433

Notes:
(1) Projected Revenues revised to correspond to 02Budget Summary FYE 2012.xls. 2013-2016 projected at 1.1%
(2) Matches 2012 Budget, less FRC Payback and Cost of Power Adjustment (accounted for elsewhere).
(3) Includes grant funds for Waimea project in FY 2011.
(4) Includes SRF Loan proceeds and reimbursements.

10C

P-71

Option 10: Current FRC Payback, [illegible]tes, No Target, Reduced CIP
County [illegible]ual
Department of Water
Financial Planning Analysis and Water Rate Study

Historical and Projected Operating Revenues and Revenue Requirements
Fiscal Years Ending June 30

		Historical			Estimated	Budget	Projected			
		2008	2009	2010	2011	2012	2013	2014	2015	2016
34	**REVENUE REQUIREMENTS**									
35	Operating Expenditures (5)									
36	Source of Supply	$2,499,838	$2,275,707	$2,245,072	$2,223,761	$3,008,611	$3,101,886	$3,198,160	$3,297,340	$3,399,526
37	Pumping	2,947,947	2,556,313	2,576,227	3,064,600	3,100,000	3,410,000	3,580,500	3,759,500	3,947,500
38	Water Treatment Plant	1,675,094	1,723,621	1,949,808	2,306,740	2,624,967	2,703,653	2,784,636	2,868,115	2,954,267
39	Transmission & Distribution	2,496,677	2,471,122	3,302,023	3,579,434	3,389,868	3,559,423	3,737,456	3,924,320	4,120,545
40	Customer Services	520,281	610,600	762,749	730,664	875,681	901,744	928,690	956,343	984,879
41	Administrative & Engineering	2,782,432	2,475,297	2,513,490	3,038,246	3,260,122	3,364,931	3,473,317	3,585,660	3,702,159
42	Manager's Office	0	0	0	0	0	0	0	0	0
43	County Service Charge	736,888	817,839	925,133	833,500	925,133	934,400	943,700	953,100	962,600
44	Vehicles	184,373	207,307	183,874	201,310	275,600	280,100	284,600	289,200	293,900
45	Other Operating Expenses	359,215	415,079	417,380	481,679	551,400	557,600	563,900	570,200	576,600
46	Misc. Operating Expenses (6)	0	0	0	0	1,298,603	1,337,600	1,377,700	1,419,000	1,461,600
47	Adjustments (7)	(102,147)	(177,896)	(1,429,025)	(393,013)	(2,000,000)	(2,000,000)	(2,000,000)	(2,000,000)	(2,000,000)
48	Total Operating Expenditures	$14,100,598	$13,374,990	$13,446,732	$16,066,921	$17,309,984	$18,151,337	$18,872,660	$19,622,778	$20,403,576
49										
50	Operating Income	$5,167,490	$5,944,275	$21,474,816	$9,901,743	$6,710,832	$11,352,003	$14,151,299	$16,826,533	$17,379,857
51	Funds Available for Debt Service (8)	4,678,941	5,885,194	6,761,742	6,058,743	6,584,332	9,416,603	11,702,299	14,326,533	13,879,857
52										
53	Debt Service Requirement									
54	Existing Debt Service (9)	$1,943,760	$2,248,716	$2,417,456	$5,738,944	$6,198,994	$6,154,572	$7,962,963	$7,735,836	$7,868,983
55	Proposed Debt Service (9)	0	0	0	0	320,000	462,400	642,600	826,600	1,084,100
56	Debt Service Paid by FRC (10)	0	0	0	(284,622)	(1,989,115)	(1,891,892)	(818,868)	(814,432)	(808,903)
57	Total Debt Service Requirement	$1,943,760	$2,248,716	$2,417,456	$5,454,322	$4,529,880	$4,725,080	$7,786,694	$7,748,004	$8,144,180
58										
59	Capital Costs Charged to Operations									
60	Equipment (11)	$412,887	$451,949	$110,884	$465,529	$1,122,700	$512,800	$512,800	$512,800	$512,800
61	Property & Supply (11)	677,438	463,447	423,994	1,005,524	984,500	711,000	711,000	711,000	711,000
62	SRF Financed Capital (11)	2,185,874	4,781,289	5,410,800	3,843,000	0	1,935,400	2,449,000	2,500,000	3,500,000
63	Cash Financed Capital	3,439,913	4,203,176	7,592,391	1,558,884	5,928,682	1,935,400	2,449,000	2,500,000	3,500,000
64	Total Capital Costs Charged to Ops	$6,716,112	$9,899,861	$13,538,069	$6,872,937	$8,035,882	$5,094,600	$6,121,800	$6,223,800	$8,223,800
65										
66	Transfer to Emergency Reserve Fund	$0	$0	$0	$0	$1,020,153	$1,207,709	$1,357,738	$1,526,419	$1,543,210
67										
68	Total Revenue Requirements	$22,760,470	$25,523,567	$29,402,257	$28,394,180	$30,895,898	$29,178,726	$34,138,892	$35,121,001	$38,314,766
69										
70	Revenue Surplus/Deficiency	($3,492,382)	($6,204,302)	$5,519,291	($2,425,516)	($6,875,082)	$324,614	($1,114,933)	$1,328,309	($531,334)
71										
72	Water Utility Fund Ending Balance	$15,215,397	$9,011,095	$14,362,450	$11,936,934	$5,061,818	$5,386,414	$4,271,467	$5,599,809	$5,068,466
73	Emergency Reserve Fund Balance	N/A	N/A	N/A	N/A	$1,020,153	$2,227,862	$3,585,599	$5,112,018	$6,655,229
74	Total Ending Balance (12)	$15,215,397	$9,011,095	$14,362,450	$11,936,934	$6,081,970	$7,614,276	$7,857,066	$10,711,828	$11,723,695
75	Ending Balance Target (13)				$4,618,101	$5,100,763	$6,038,546	$6,788,688	$7,632,096	$7,716,052
76										
77	Debt Service Coverage w/ FRC (14)	2.41	2.62	2.80	[illegible]	[illegible]	1.99	1.50	1.85	1.70
78	Minimum Debt Service Coverage (15)	N/A	N/A	N/A	1.50	1.50	1.50	1.50	1.50	1.50
79										
80	Average 5/8" Meter Bill ($/month) (16)	$35.00	$37.75	$40.50	$44.40	$49.37	$54.90	$61.05	$67.89	$67.89
81	Increase		$2.75	$2.75	$3.90	$4.97	$5.53	$6.15	$6.84	$0.00

10C

P.72

Option 10: Current FRC Payback, Level Rates, No Target, Reduced CIP
County of Kauai
Department of Water
Financial Planning Analysis and Water Rate Study

Historical and Projected Operating Revenues and Revenue Requirements
Fiscal Years Ending June 30

Historical			Estimated	Budget	Projected			
2008	2009	2010	2011	2012	2013	2014	2015	2016

Notes:
(5) See Table 6 for details.
(6) Misc. Operating Expenses consists of the difference between the proposed budget and the projected historical expenses, and serves to make the projection consistent with the budget.
(7) Adjustments made to reduce O&M expenditures due to staff vacancies, capitalized expenses, and to reflect the historical trend of reduced budgetary expenditure levels.
(8) Equals Operating Income less SRF loan proceeds.
(9) See Table 8 for details.
(10) FRC Debt Service Payback per DOW, 3/23/11.
(11) Per FY 2012 Annual Budget (Budget Summary FYE 2012.xls). Projected expenses based on average of FY 08-12.
(12) Total Ending Balance is summed only so that it may be compared to the Ending Balance Target.
(13) Ending Balance Target based on 25% of Revenues
(14) Equals Funds Available for Debt Service divided by Total Debt Service.
(15) Target for planning purposes.
(16) Based on a 5/8" meter using 10,000 gallons per month. The value shown for FY2012 is the average bill after the rate increase occurs.

County of Kauai
Department of Water
Financial Planning Analysis and Water Rate Study

Historical and Projected Operating Revenues and Revenue Requirements
Fiscal Years Ending June 30

		Historical			Estimated	Budget	Projected			
		2008	2009	2010	2011	2012	2013	2014	2015	2016
1	**REVENUES**									
2	Water Utility Fund Beginning Balance	$18,707,779	$15,215,397	$9,011,095	$14,362,450	$11,936,900	$3,882,500	$2,963,200	$1,483,200	$1,600,100
3										
4	Revenue Under Existing Rates:									
5	Operating Revenues (1)									
6	Water Sales	$13,223,896	$13,433,062	$14,272,311	$15,426,305	$15,637,051	$15,809,058	$15,982,958	$16,158,770	$16,336,517
7	Service Charge	2,769,917	3,009,416	3,087,800	3,046,100	3,684,000	3,724,524	3,765,494	3,806,914	3,848,790
8	Total Operating Revenues (2)	$15,993,813	$15,770,435	$17,360,111	$18,472,405	$19,321,051	$19,533,582	$19,748,451	$19,965,684	$20,185,307
9										
10	Other Income (1)									
11	Miscellaneous Receipts	$116,619	$175,333	$149,855	$5,000	$112,000	$112,000	$112,000	$112,000	$112,000
12	Interest Earned	817,557	562,949	275,535	461,000	355,000	355,000	355,000	355,000	355,000
13	Fire Hydrant Svc. Charge	736,888	817,839	925,133	925,133	925,133	935,943	946,881	957,951	969,153
14	Other (3)	107,354	608,262	27,140	101,216	0	0	0	0	0
15	Other - SRF Loan (4)	488,549	59,081	14,713,074	3,843,000	0	1,935,400	2,449,000	2,500,000	4,150,000
16	BAB Subsidy	0	0	0	871,800	715,616	715,616	711,125	700,775	687,873
17	Grant - Drought Mitigation	n/a	n/a	n/a	n/a	126,500	0	0	0	0
18	Cost of Power Adjustment	1,007,308	1,325,366	1,470,700	1,289,110	1,383,517	1,295,200	1,295,200	1,295,200	1,295,200
19	Total Other Income	$3,274,275	$3,548,830	$17,561,437	$7,496,259	$3,617,766	$5,349,158	$5,869,207	$5,920,926	$7,569,226
20										
21	Total Revenue	$19,268,088	$19,319,265	$34,921,548	$25,968,664	$22,938,816	$24,882,741	$25,617,658	$25,886,610	$27,754,533
22										
23	Additional Revenue Required									

24	Year	% of Water Sales Revenue	Months Effective		2011	2012	2013	2014	2015	2016
25										
26	FY 2012	8.1%	6			$782,500	$1,582,200	$1,599,600	$1,617,200	$1,635,000
27	FY 2013	8.1%	12				1,710,400	1,729,200	1,748,200	1,767,400
28	FY 2014	8.1%	12					1,869,300	1,889,800	1,910,600
29	FY 2015	8.1%	12						2,042,900	2,065,400
30	FY 2016	0.0%	12							0
31	Total Additional Revenue Required				$0	$782,500	$3,292,600	$5,198,100	$7,298,100	$7,378,400
32										
33	Total Revenue				$25,968,664	$23,721,316	$28,175,341	$30,815,758	$33,184,710	$35,132,933

Notes:
(1) Projected Revenues revised to correspond to 02Budget Summary FYE 2012.xls. 2013-2016 projected at 1.1%
(2) Matches 2012 Budget, less FRC Payback and Cost of Power Adjustment (accounted for elsewhere).
(3) Includes grant funds for Walmea project in FY 2011.
(4) Includes SRF Loan proceeds and reimbursements.

9 p. 74

County of Kauai
Department of Water
Financial Planning Analysis and Water Rate Study

Historical and Projected Operating Revenues and Revenue Requirements
Fiscal Years Ending June 30

	Historical			Estimated	Budget	Projected			
	2008	2009	2010	2011	2012	2013	2014	2015	2016
REVENUE REQUIREMENTS									
Operating Expenditures (5)									
Source of Supply	$2,499,838	$2,275,707	$2,245,072	$2,223,761	$3,008,611	$3,101,886	$3,198,160	$3,297,340	$3,399,526
Pumping	2,947,947	2,556,313	2,576,227	3,064,600	3,100,000	3,410,000	3,580,500	3,759,500	3,947,500
Water Treatment Plant	1,675,094	1,723,621	1,949,808	2,306,740	2,624,967	2,703,653	2,784,636	2,868,115	2,954,267
Transmission & Distribution	2,496,677	2,471,122	3,302,023	3,579,434	3,389,868	3,559,423	3,737,456	3,924,320	4,120,545
Customer Services	520,281	610,600	762,749	730,664	875,681	901,744	928,690	956,343	984,879
Administrative & Engineering	2,782,432	2,475,297	2,513,490	3,038,246	3,260,122	3,364,931	3,473,317	3,585,660	3,702,159
Manager's Office	0	0	0	0	0	0	0	0	0
County Service Charge	736,888	817,839	925,133	833,500	925,133	934,400	943,700	953,100	962,600
Vehicles	184,373	207,307	183,874	201,310	275,600	280,100	284,600	289,200	293,900
Other Operating Expenses	359,215	415,079	417,380	481,679	551,400	557,600	563,900	570,200	576,600
Misc. Operating Expenses (6)	0	0	0	0	1,298,603	1,337,600	1,377,700	1,419,000	1,461,600
Adjustments (7)	(102,147)	(177,896)	(1,429,025)	(393,013)	(2,000,000)	(2,000,000)	(2,000,000)	(2,000,000)	(2,000,000)
Total Operating Expenditures	$14,100,598	$13,374,990	$13,446,732	$16,066,921	$17,309,984	$18,151,337	$18,872,660	$19,622,778	$20,403,576
Operating Income	$5,167,490	$5,944,275	$21,474,816	$9,901,743	$6,411,332	$10,024,003	$11,943,099	$13,561,933	$14,729,357
Funds Available for Debt Service (8)	4,678,941	5,885,194	6,761,742	6,058,743	6,284,832	8,088,603	9,494,099	11,061,933	10,579,357
Debt Service Requirement									
Existing Debt Service (9)	$1,943,760	$2,248,716	$2,417,456	$5,738,944	$6,198,994	$6,154,572	$7,962,963	$7,735,836	$7,868,983
Proposed Debt Service (9)	0	0	0	0	320,000	462,400	642,600	826,600	1,132,000
Debt Service Paid by FRC (10)	0	0	0	(284,622)	(1,989,115)	(1,968,273)	(2,504,298)	(2,541,241)	(2,523,043)
Total Debt Service Requirement	$1,943,760	$2,248,716	$2,417,456	$5,454,322	$4,529,880	$4,648,700	$6,101,265	$6,021,196	$6,477,939
Capital Costs Charged to Operations									
Equipment (11)	$412,887	$451,949	$110,884	$465,529	$1,122,700	$512,800	$512,800	$512,800	$512,800
Property & Supply (11)	677,438	463,447	423,994	1,005,524	984,500	711,000	711,000	711,000	711,000
SRF Financed Capital (11)	2,185,874	4,781,289	5,410,800	3,843,000	0	1,935,400	2,449,000	2,500,000	4,150,000
Cash Financed Capital	3,439,913	4,203,176	7,592,391	1,558,884	6,628,682	1,935,400	2,449,000	2,500,000	4,150,000
Total Capital Costs Charged to Ops	$6,716,112	$9,899,861	$13,538,069	$6,872,937	$8,735,882	$5,094,600	$6,121,800	$6,223,800	$9,523,800
Transfer to Emergency Reserve Fund	$0	$0	$0	$0	$1,200,000	$1,200,000	$1,200,000	$1,200,000	$0
Total Revenue Requirements	$22,760,470	$25,523,567	$29,402,257	$28,394,180	$31,775,746	$29,094,637	$32,295,724	$33,067,773	$36,405,315
Revenue Surplus/Deficiency	($3,492,382)	($6,204,302)	$5,519,291	($2,425,516)	($8,054,430)	($919,296)	($1,479,966)	$116,937	($1,272,382)
Water Utility Fund Ending Balance	$15,215,397	$9,011,095	$14,362,450	$11,936,934	$3,882,470	$2,963,204	$1,483,234	$1,600,137	$327,718
Emergency Reserve Fund Balance	N/A	N/A	N/A	N/A	$1,200,000	$2,400,000	$3,600,000	$4,800,000	$4,800,000
Total Ending Balance	$15,215,397	$9,011,095	$14,362,450	$11,936,934	$5,082,470	$5,363,204	$5,083,234	$6,400,137	$5,127,718
Ending Balance Target (12)				$4,016,730	$4,327,496	$4,537,834	$4,718,165	$4,905,694	$5,100,894
Debt Service Coverage w/ FRC (13)	2.41	2.62	2.80	[illegible]	[illegible]	1.74	1.56	1.84	1.63
Minimum Debt Service Coverage (14)	N/A	N/A	N/A	1.50	1.50	1.50	1.50	1.50	1.50
Average 5/8" Meter Bill ($/month) (15)	$35.00	$37.75	$40.50	$44.40	$48.00	$51.88	$56.09	$60.63	$60.63
Increase		$2.75	$2.75	$3.90	$3.60	$3.89	$4.20	$4.54	$0.00

Historical and Projected Operating Revenues and Revenue Requirements
Fiscal Years Ending June 30

Historical			Estimated	Budget	Projected			
2008	2009	2010	2011	2012	2013	2014	2015	2016

Notes:
(5) See Table 6 for details.
(6) Misc. Operating Expenses consists of the difference between the proposed budget and the projected historical expenses, and serves to make the projection consistent with the budget.
(7) Adjustments made to reduce O&M expenditures due to staff vacancies, capitalized expenses, and to reflect the historical trend of reduced budgetary expenditure levels.
(8) Equals Operating Income less SRF loan proceeds.
(9) See Table 8 for details.
(10) FRC Debt Service Payback per DOW, 3/23/11.
(11) Per FY 2012 Annual Budget (Budget Summary FYE 2012.xls). Projected expenses based on average of FY 08-12.
(12) Ending Balance Target based on 90 days of O&M
(13) Equals Funds Available for Debt Service divided by Total Debt Service.
(14) Target for planning purposes.
(15) Based on a 5/8" meter using 10,000 gallons per month.

9 p 76

County of Kauai
Departm[illegible] Water
Financial Planning Ana[illegible]nd Water Rate Study

Historical and Projected Operating Revenues and Revenue Requirements
Fiscal Years Ending June 30

		Historical			Estimated	Budget	Projected			
		2008	2009	2010	2011	2012	2013	2014	2015	2016
1	**REVENUES**									
2	Water Utility Fund Beginning Balance	$18,707,779	$15,215,397	$9,011,095	$14,362,450	$11,936,900	$4,823,200	$4,163,700	$2,966,700	$3,403,000
3										
4	Revenue Under Existing Rates:									
5	Operating Revenues (1)									
6	Water Sales	$13,223,896	$13,433,062	$14,272,311	$15,426,305	$15,637,051	$15,809,058	$15,982,958	$16,158,770	$16,336,517
7	Service Charge	2,769,917	3,009,416	3,087,800	3,046,100	3,684,000	3,724,524	3,765,494	3,806,914	3,848,790
8	Total Operating Revenues (2)	$15,993,813	$15,770,435	$17,360,111	$18,472,405	$19,321,051	$19,533,582	$19,748,451	$19,965,684	$20,185,307
9										
10	Other Income (1)									
11	Miscellaneous Receipts	$116,619	$175,333	$149,855	$5,000	$112,000	$112,000	$112,000	$112,000	$112,000
12	Interest Earned	817,557	562,949	275,535	461,000	355,000	355,000	355,000	355,000	355,000
13	Fire Hydrant Svc. Charge	736,888	817,839	925,133	925,133	925,133	935,943	946,881	957,951	969,153
14	Other (3)	107,354	608,262	27,140	101,216	0	0	0	0	0
15	Other - SRF Loan (4)	488,549	59,081	14,713,074	3,843,000	0	1,935,400	2,449,000	2,500,000	4,500,000
16	BAB Subsidy	0	0	0	871,800	715,616	715,616	711,125	700,775	687,873
17	Grant - Drought Mitigation	n/a	n/a	n/a	n/a	126,500	0	0	0	0
18	Cost of Power Adjustment	1,007,308	1,325,366	1,470,700	1,289,110	1,383,517	1,295,200	1,295,200	1,295,200	1,295,200
19	Total Other Income	$3,274,275	$3,548,830	$17,561,437	$7,496,259	$3,617,766	$5,349,158	$5,869,207	$5,920,926	$7,919,226
20										
21	Total Revenue	$19,268,088	$19,319,265	$34,921,548	$25,968,664	$22,938,816	$24,882,741	$25,617,658	$25,886,610	$28,104,533
22										
23	Additional Revenue Required									

24	Year	% of Water Sales Revenue	Months Effective		2011	2012	2013	2014	2015	2016
25										
26	FY 2012	8.6%	6			$830,800	$1,679,900	$1,698,400	$1,717,000	$1,735,900
27	FY 2013	8.6%	12				1,824,400	1,844,400	1,864,700	1,885,200
28	FY 2014	8.6%	12					2,003,000	2,025,100	2,047,400
29	FY 2015	8.6%	12						2,199,200	2,223,400
30	FY 2016	0.0%	12							0
31	Total Additional Revenue Required				$0	$830,800	$3,504,300	$5,545,800	$7,806,000	$7,891,900
32										
33	Total Revenue				$25,968,664	$23,769,616	$28,387,041	$31,163,458	$33,692,610	$35,996,433

Notes:
(1) Projected Revenues revised to correspond to 02Budget Summary FYE 2012.xls. 2013-2016 projected at 1.1%
(2) Matches 2012 Budget, less FRC Payback and Cost of Power Adjustment (accounted for elsewhere).
(3) Includes grant funds for Waimea project in FY 2011.
(4) Includes SRF Loan proceeds and reimbursements.

9A p. 77

County of Kauai
Department of Water
Financial Planning Analysis and Water Rate Study

Historical and Projected Operating Revenues and Revenue Requirements
Fiscal Years Ending June 30

	Historical			Estimated	Budget	Projected			
	2008	2009	2010	2011	2012	2013	2014	2015	2016
REVENUE REQUIREMENTS									
Operating Expenditures (5)									
Source of Supply	$2,499,838	$2,275,707	$2,245,072	$2,223,761	$3,008,611	$3,101,886	$3,198,160	$3,297,340	$3,399,526
Pumping	2,947,947	2,556,313	2,576,227	3,064,600	3,100,000	3,410,000	3,580,500	3,759,500	3,947,500
Water Treatment Plant	1,675,094	1,723,621	1,949,808	2,306,740	2,624,967	2,703,653	2,784,636	2,868,115	2,954,267
Transmission & Distribution	2,496,677	2,471,122	3,302,023	3,579,434	3,389,868	3,559,423	3,737,456	3,924,320	4,120,545
Customer Services	520,281	610,600	762,749	730,664	875,681	901,744	928,690	956,343	984,879
Administrative & Engineering	2,782,432	2,475,297	2,513,490	3,038,246	3,260,122	3,364,931	3,473,317	3,585,660	3,702,159
Manager's Office	0	0	0	0	0	0	0	0	0
County Service Charge	736,888	817,839	925,133	833,500	925,133	934,400	943,700	953,100	962,600
Vehicles	184,373	207,307	183,874	201,310	275,600	280,100	284,600	289,200	293,900
Other Operating Expenses	359,215	415,079	417,380	481,679	551,400	557,600	563,900	570,200	576,600
Misc. Operating Expenses (6)	0	0	0	0	1,298,603	1,337,600	1,377,700	1,419,000	1,461,600
Adjustments (7)	(102,147)	(177,896)	(1,429,025)	(393,013)	(2,000,000)	(2,000,000)	(2,000,000)	(2,000,000)	(2,000,000)
Total Operating Expenditures	$14,100,598	$13,374,990	$13,446,732	$16,066,921	$17,309,984	$18,151,337	$18,872,660	$19,622,778	$20,403,576
Operating Income	$5,167,490	$5,944,275	$21,474,816	$9,901,743	$6,459,632	$10,235,703	$12,290,799	$14,069,833	$15,592,857
Funds Available for Debt Service (8)	4,678,941	5,885,194	6,761,742	6,058,743	6,333,132	8,300,303	9,841,799	11,569,833	11,092,857
Debt Service Requirement									
Existing Debt Service (9)	$1,943,760	$2,248,716	$2,417,456	$5,738,944	$6,198,994	$6,154,572	$7,962,963	$7,735,836	$7,868,983
Proposed Debt Service (9)	0	0	0	0	320,000	462,400	642,600	826,600	1,157,700
Debt Service Paid by FRC (10)	0	0	0	(284,622)	(1,989,115)	(1,968,273)	(2,504,298)	(2,541,241)	(2,523,043)
Total Debt Service Requirement	$1,943,760	$2,248,716	$2,417,456	$5,454,322	$4,529,880	$4,648,700	$6,101,265	$6,021,196	$6,503,639
Capital Costs Charged to Operations									
Equipment (11)	$412,887	$451,949	$110,884	$465,529	$1,122,700	$512,800	$512,800	$512,800	$512,800
Property & Supply (11)	677,438	463,447	423,994	1,005,524	984,500	711,000	711,000	711,000	711,000
SRF Financed Capital (11)	2,185,874	4,781,289	5,410,800	3,843,000	0	1,935,400	2,449,000	2,500,000	4,500,000
Cash Financed Capital	3,439,913	4,203,176	7,592,391	1,558,884	5,928,682	1,935,400	2,449,000	2,500,000	4,500,000
Total Capital Costs Charged to Ops	$6,716,112	$9,899,861	$13,538,069	$6,872,937	$8,035,882	$5,094,600	$6,121,800	$6,223,800	$10,223,800
Transfer to Emergency Reserve Fund	$0	$0	$0	$0	$1,007,593	$1,151,894	$1,264,713	$1,388,584	$1,187,217
Total Revenue Requirements	$22,760,470	$25,523,567	$29,402,257	$28,394,180	$30,883,338	$29,046,531	$32,360,437	$33,256,358	$38,318,232
Revenue Surplus/Deficiency	($3,492,382)	($6,204,302)	$5,519,291	($2,425,516)	($7,113,722)	($659,491)	($1,196,978)	$436,253	($2,321,799)
Water Utility Fund Ending Balance	$15,215,397	$9,011,095	$14,362,450	$11,936,934	$4,823,178	$4,163,709	$2,966,722	$3,402,953	$1,081,201
Emergency Reserve Fund Balance	N/A	N/A	N/A	N/A	$1,007,593	$2,159,487	$3,424,199	$4,812,783	$6,000,000
Total Ending Balance (12)	$15,215,397	$9,011,095	$14,362,450	$11,936,934	$5,830,770	$6,323,196	$6,390,921	$8,215,736	$7,081,201
Ending Balance Target (13)				$4,618,101	$5,037,963	$5,759,471	$6,323,563	$6,942,921	$7,019,302
Debt Service Coverage w/ FRC (14)	2.41	2.62	2.80	[illegible]	[illegible]	1.79	1.61	1.92	1.71
Minimum Debt Service Coverage (15)	N/A	N/A	N/A	1.50	1.50	1.50	1.50	1.50	1.50
Average 5/8" Meter Bill ($/month) (16)	$35.00	$37.75	$40.50	$44.40	$48.22	$52.37	$56.87	$61.76	$61.76
Increase		$2.75	$2.75	$3.90	$3.82	$4.15	$4.50	$4.89	$0.00

9A p. 78

County of Kauai
Departm Water
Financial Planning Ana nd Water Rate Study

Historical and Projected Operating Revenues and Revenue Requirements
Fiscal Years Ending June 30

Historical			Estimated	Budget	Projected			
2008	2009	2010	2011	2012	2013	2014	2015	2016

Notes:
(5) See Table 6 for details.
(6) Misc. Operating Expenses consists of the difference between the proposed budget and the projected historical expenses, and serves to make the projection consistent with the budget.
(7) Adjustments made to reduce O&M expenditures due to staff vacancies, capitalized expenses, and to reflect the historical trend of reduced budgetary expenditure levels.
(8) Equals Operating Income less SRF loan proceeds.
(9) See Table 8 for details.
(10) FRC Debt Service Payback per DOW, 3/23/11.
(11) Per FY 2012 Annual Budget (Budget Summary FYE 2012.xls). Projected expenses based on average of FY 08-12.
(12) Total Ending Balance is summed only so that it may be compared to the Ending Balance Target.
(13) Ending Balance Target based on 25% of Revenues
(14) Equals Funds Available for Debt Service divided by Total Debt Service.
(15) Target for planning purposes.
(16) Based on a 5/8" meter using 10,000 gallons per month. The value shown for FY2012 is the average bill after the rate increase occurs.

9A P79

County of Kauai
Departm[illegible]f Water
Financial Planning An[illegible]and Water Rate Study

Historical and Projected Operating Revenues and Revenue Requirements
Fiscal Years Ending June 30

		Historical			Estimated	Budget	Projected			
		2008	2009	2010	2011	2012	2013	2014	2015	2016
1	**REVENUES**									
2	Water Utility Fund Beginning Balance	$18,707,779	$15,215,397	$9,011,095	$14,362,450	$11,936,900	$2,859,800	$2,361,700	$1,431,300	$2,258,400
3										
4	Revenue Under Existing Rates:									
5	Operating Revenues (1)									
6	Water Sales	$13,223,896	$13,433,062	$14,272,311	$15,426,305	$15,637,051	$15,809,058	$15,982,958	$16,158,770	$16,336,517
7	Service Charge	2,769,917	3,009,416	3,087,800	3,046,100	3,684,000	3,724,524	3,765,494	3,806,914	3,848,790
8	Total Operating Revenues (2)	$15,993,813	$15,770,435	$17,360,111	$18,472,405	$19,321,051	$19,533,582	$19,748,451	$19,965,684	$20,185,307
9										
10	Other Income (1)									
11	Miscellaneous Receipts	$116,619	$175,333	$149,855	$5,000	$112,000	$112,000	$112,000	$112,000	$112,000
12	Interest Earned	817,557	562,949	275,535	461,000	355,000	355,000	355,000	355,000	355,000
13	Fire Hydrant Svc. Charge	736,888	817,839	925,133	925,133	925,133	935,943	946,881	957,951	969,153
14	Other (3)	107,354	608,262	27,140	101,216	0	0	0	0	0
15	Other - SRF Loan (4)	488,549	59,081	14,713,074	3,843,000	0	1,935,400	2,449,000	2,500,000	3,500,000
16	BAB Subsidy	0	0	0	871,800	715,616	715,616	711,125	700,775	687,873
17	Grant - Drought Mitigation	n/a	n/a	n/a	n/a	126,500	0	0	0	0
18	Cost of Power Adjustment	1,007,308	1,325,366	1,470,700	1,289,110	1,383,517	1,295,200	1,295,200	1,295,200	1,295,200
19	Total Other Income	$3,274,275	$3,548,830	$17,561,437	$7,496,259	$3,617,766	$5,349,158	$5,869,207	$5,920,926	$6,919,226
20										
21	Total Revenue	$19,268,088	$19,319,265	$34,921,548	$25,968,664	$22,938,816	$24,882,741	$25,617,658	$25,886,610	$27,104,533
22										
23	Additional Revenue Required									
24			% of Water	Months						
25		Year	Sales Revenue	Effective	2011	2012	2013	2014	2015	2016
26		FY 2012	9.0%	6		$869,400	$1,758,000	$1,777,400	$1,796,900	$1,816,700
27		FY 2013	9.0%	12			1,916,200	1,937,300	1,958,600	1,980,200
28		FY 2014	9.0%	12				2,111,700	2,134,900	2,158,400
29		FY 2015	9.0%	12					2,327,000	2,352,700
30		FY 2016	0.0%	12						0
31	Total Additional Revenue Required				$0	$869,400	$3,674,200	$5,826,400	$8,217,400	$8,308,000
32										
33	Total Revenue	$19,268,088	$19,319,265	$34,921,548	$25,968,664	$23,808,216	$28,556,941	$31,444,058	$34,104,010	$35,412,533

Notes:
(1) Projected Revenues revised to correspond to 02Budget Summary FYE 2012.xls. 2013-2016 projected at 1.1%
(2) Matches 2012 Budget, less FRC Payback and Cost of Power Adjustment (accounted for elsewhere).
(3) Includes grant funds for Waimea project in FY 2011.
(4) Includes SRF Loan proceeds and reimbursements.

9B p. 80

Option 9: 30% FRC Payback, Level Rates, Meet Targets, Standard CIP

County of Kauai

Department of Water

Financial Planning Analysis and Water Rate Study

Historical and Projected Operating Revenues and Revenue Requirements

Fiscal Years Ending June 30

		Historical			Estimated	Budget	Projected			
		2008	2009	2010	2011	2012	2013	2014	2015	2016
34	**REVENUE REQUIREMENTS**									
35	Operating Expenditures (5)									
36	Source of Supply	$2,499,838	$2,275,707	$2,245,072	$2,223,761	$3,008,611	$3,101,886	$3,198,160	$3,297,340	$3,399,526
37	Pumping	2,947,947	2,556,313	2,576,227	3,064,600	3,100,000	3,410,000	3,580,500	3,759,500	3,947,500
38	Water Treatment Plant	1,675,094	1,723,621	1,949,808	2,306,740	2,624,967	2,703,653	2,784,636	2,868,115	2,954,267
39	Transmission & Distribution	2,496,677	2,471,122	3,302,023	3,579,434	3,389,868	3,559,423	3,737,456	3,924,320	4,120,545
40	Customer Services	520,281	610,600	762,749	730,664	875,681	901,744	928,690	956,343	984,879
41	Administrative & Engineering	2,782,432	2,475,297	2,513,490	3,038,246	3,260,122	3,364,931	3,473,317	3,585,660	3,702,159
42	Manager's Office	0	0	0	0	0	0	0	0	0
43	County Service Charge	736,888	817,839	925,133	833,500	925,133	934,400	943,700	953,100	962,600
44	Vehicles	184,373	207,307	183,874	201,310	275,600	280,100	284,600	289,200	293,900
45	Other Operating Expenses	359,215	415,079	417,380	481,679	551,400	557,600	563,900	570,200	576,600
46	Misc. Operating Expenses (6)	0	0	0	0	1,298,603	1,337,600	1,377,700	1,419,000	1,461,600
47	Adjustments (7)	(102,147)	(177,896)	(1,429,025)	(393,013)	(2,000,000)	(2,000,000)	(2,000,000)	(2,000,000)	(2,000,000)
48	Total Operating Expenditures	$14,100,598	$13,374,990	$13,446,732	$16,066,921	$17,309,984	$18,151,337	$18,872,660	$19,622,778	$20,403,576
49										
50	Operating Income	$5,167,490	$5,944,275	$21,474,816	$9,901,743	$6,498,232	$10,405,603	$12,571,399	$14,481,233	$15,008,957
51	Funds Available for Debt Service (8)	4,678,941	5,885,194	6,761,742	6,058,743	6,371,732	8,470,203	10,122,399	11,981,233	11,508,957
52										
53	Debt Service Requirement									
54	Existing Debt Service (9)	$1,943,760	$2,248,716	$2,417,456	$5,738,944	$6,198,994	$6,154,572	$7,962,963	$7,735,836	$7,868,983
55	Proposed Debt Service (9)	0	0	0	0	320,000	462,400	642,600	826,600	1,084,100
56	Debt Service Paid by FRC (10)	0	0	0	(284,622)	(1,989,115)	(1,968,273)	(2,504,298)	(2,541,241)	(2,523,043)
57	Total Debt Service Requirement	$1,943,760	$2,248,716	$2,417,456	$5,454,322	$4,529,880	$4,648,700	$6,101,265	$6,021,196	$6,430,039
58										
59	Capital Costs Charged to Operations									
60	Equipment (11)	$412,887	$451,949	$110,884	$465,529	$1,122,700	$512,800	$512,800	$512,800	$512,800
61	Property & Supply (11)	677,438	463,447	423,994	1,005,524	984,500	711,000	711,000	711,000	711,000
62	SRF Financed Capital (11)	2,185,874	4,781,289	5,410,800	3,843,000	0	1,935,400	2,449,000	2,500,000	3,500,000
63	Cash Financed Capital	3,439,913	4,203,176	7,592,391	1,558,884	7,928,682	1,935,400	2,449,000	2,500,000	3,500,000
64	Total Capital Costs Charged to Ops	$6,716,112	$9,899,861	$13,538,069	$6,872,937	$10,035,882	$5,094,600	$6,121,800	$6,223,800	$8,223,800
65										
66	Transfer to Emergency Reserve Fund	$0	$0	$0	$0	$1,009,523	$1,160,389	$1,278,743	$1,409,154	$1,142,192
67										
68	Total Revenue Requirements	$22,760,470	$25,523,567	$29,402,257	$28,394,180	$32,885,268	$29,055,026	$32,374,467	$33,276,928	$36,199,607
69										
70	Revenue Surplus/Deficiency	($3,492,382)	($6,204,302)	$5,519,291	($2,425,516)	($9,077,052)	($498,086)	($930,408)	$827,083	($787,074)
71										
72	Water Utility Fund Ending Balance	$15,215,397	$9,011,095	$14,362,450	$11,936,934	$2,859,848	$2,361,714	$1,431,292	$2,258,383	$1,471,326
73	Emergency Reserve Fund Balance	N/A	N/A	N/A	N/A	$1,009,523	$2,169,912	$3,448,654	$4,857,808	$6,000,000
74	Total Ending Balance (12)	$15,215,397	$9,011,095	$14,362,450	$11,936,934	[illegible]	[illegible]	[illegible]	$7,116,191	$7,471,326
75	Ending Balance Target (13)				$4,618,101	$5,047,613	$5,801,946	$6,393,713	$7,045,771	$7,123,327
76										
77	Debt Service Coverage w/ FRC (14)	2.41	2.62	2.80	[illegible]	[illegible]	1.82	1.66	1.99	1.79
78	Minimum Debt Service Coverage (15)	N/A	N/A	N/A	1.50	1.50	1.50	1.50	1.50	1.50
79										
80	Average 5/8" Meter Bill ($/month) (16)	$35.00	$37.75	$40.50	$44.40	$48.40	$52.75	$57.50	$62.67	$62.67
81	Increase		$2.75	$2.75	$3.90	$4.00	$4.36	$4.75	$5.17	$0.00

County of Kauai
Department of Water
Financial Planning Analysis and Water Rate Study

Historical and Projected Operating Revenues and Revenue Requirements
Fiscal Years Ending June 30

Historical			Estimated	Budget	Projected			
2008	2009	2010	2011	2012	2013	2014	2015	2016

Notes:
(5) See Table 6 for details.
(6) Misc. Operating Expenses consists of the difference between the proposed budget and the projected historical expenses, and serves to make the projection consistent with the budget.
(7) Adjustments made to reduce O&M expenditures due to staff vacancies, capitalized expenses, and to reflect the historical trend of reduced budgetary expenditure levels.
(8) Equals Operating Income less SRF loan proceeds.
(9) See Table 8 for details.
(10) FRC Debt Service Payback per DOW, 3/23/11.
(11) Per FY 2012 Annual Budget (Budget Summary FYE 2012.xls). Projected expenses based on average of FY 08-12.
(12) Total Ending Balance is summed only so that it may be compared to the Ending Balance Target.
(13) Ending Balance Target based on 25% of Revenues
(14) Equals Funds Available for Debt Service divided by Total Debt Service.
(15) Target for planning purposes.
(16) Based on a 5/8" meter using 10,000 gallons per month. The value shown for FY2012 is the average bill after the rate increase occurs.

9B p 82

County of Kauai
Departr f Water
Financial Planning An and Water Rate Study

Historical and Projected Operating Revenues and Revenue Requirements
Fiscal Years Ending June 30

		Historical			Estimated	Budget	Projected			
		2008	2009	2010	2011	2012	2013	2014	2015	2016
1	**REVENUES**									
2	Water Utility Fund Beginning Balance	$18,707,779	$15,215,397	$9,011,095	$14,362,450	$11,936,900	$4,823,200	$4,163,700	$2,966,700	$3,403,000
3										
4	Revenue Under Existing Rates:									
5	Operating Revenues (1)									
6	Water Sales	$13,223,896	$13,433,062	$14,272,311	$15,426,305	$15,637,051	$15,809,058	$15,982,958	$16,158,770	$16,336,517
7	Service Charge	2,769,917	3,009,416	3,087,800	3,046,100	3,684,000	3,724,524	3,765,494	3,806,914	3,848,790
8	Total Operating Revenues (2)	$15,993,813	$15,770,435	$17,360,111	$18,472,405	$19,321,051	$19,533,582	$19,748,451	$19,965,684	$20,185,307
9										
10	Other Income (1)									
11	Miscellaneous Receipts	$116,619	$175,333	$149,855	$5,000	$112,000	$112,000	$112,000	$112,000	$112,000
12	Interest Earned	817,557	562,949	275,535	461,000	355,000	355,000	355,000	355,000	355,000
13	Fire Hydrant Svc. Charge	736,888	817,839	925,133	925,133	925,133	935,943	946,881	957,951	969,153
14	Other (3)	107,354	608,262	27,140	101,216	0	0	0	0	0
15	Other - SRF Loan (4)	488,549	59,081	14,713,074	3,843,000	0	1,935,400	2,449,000	2,500,000	3,500,000
16	BAB Subsidy	0	0	0	871,800	715,616	715,616	711,125	700,775	687,873
17	Grant - Drought Mitigation	n/a	n/a	n/a	n/a	126,500	0	0	0	0
18	Cost of Power Adjustment	1,007,308	1,325,366	1,470,700	1,289,110	1,383,517	1,295,200	1,295,200	1,295,200	1,295,200
19	Total Other Income	$3,274,275	$3,548,830	$17,561,437	$7,496,259	$3,617,766	$5,349,158	$5,869,207	$5,920,926	$6,919,226
20										
21	Total Revenue	$19,268,088	$19,319,265	$34,921,548	$25,968,664	$22,938,816	$24,882,741	$25,617,658	$25,886,610	$27,104,533
22										
23	Additional Revenue Required									

24	Year	% of Water Sales Revenue	Months Effective	25			2011	2012	2013	2014	2015	2016
26	FY 2012	8.6%	6					$830,800	$1,679,900	$1,698,400	$1,717,000	$1,735,900
27	FY 2013	8.6%	12						1,824,400	1,844,400	1,864,700	1,885,200
28	FY 2014	8.6%	12							2,003,000	2,025,100	2,047,400
29	FY 2015	8.6%	12								2,199,200	2,223,400
30	FY 2016	0.0%	12									0
31	Total Additional Revenue Required						$0	$830,800	$3,504,300	$5,545,800	$7,806,000	$7,891,900
32												
33	Total Revenue						$25,968,664	$23,769,616	$28,387,041	$31,163,458	$33,692,610	$34,996,433

Notes:
(1) Projected Revenues revised to correspond to 02Budget Summary FYE 2012.xls. 2013-2016 projected at 1.1%
(2) Matches 2012 Budget, less FRC Payback and Cost of Power Adjustment (accounted for elsewhere).
(3) Includes grant funds for Waimea project in FY 2011.
(4) Includes SRF Loan proceeds and reimbursements.

9c p 83

Option 9: 30% FRC Payback, Level Rates, Meet Targets, Reduced CIP

County of Kauai

Department of Water

Financial Planning Analysis and Water Rate Study

Historical and Projected Operating Revenues and Revenue Requirements

Fiscal Years Ending June 30

		Historical			Estimated	Budget	Projected			
		2008	2009	2010	2011	2012	2013	2014	2015	2016
34	**REVENUE REQUIREMENTS**									
35	Operating Expenditures (5)									
36	Source of Supply	$2,499,838	$2,275,707	$2,245,072	$2,223,761	$3,008,611	$3,101,886	$3,198,160	$3,297,340	$3,399,526
37	Pumping	2,947,947	2,556,313	2,576,227	3,064,600	3,100,000	3,410,000	3,580,500	3,759,500	3,947,500
38	Water Treatment Plant	1,675,094	1,723,621	1,949,808	2,306,740	2,624,967	2,703,653	2,784,636	2,868,115	2,954,267
39	Transmission & Distribution	2,496,677	2,471,122	3,302,023	3,579,434	3,389,868	3,559,423	3,737,456	3,924,320	4,120,545
40	Customer Services	520,281	610,600	762,749	730,664	875,681	901,744	928,690	956,343	984,879
41	Administrative & Engineering	2,782,432	2,475,297	2,513,490	3,038,246	3,260,122	3,364,931	3,473,317	3,585,660	3,702,159
42	Manager's Office	0	0	0	0	0	0	0	0	0
43	County Service Charge	736,888	817,839	925,133	833,500	925,133	934,400	943,700	953,100	962,600
44	Vehicles	184,373	207,307	183,874	201,310	275,600	280,100	284,600	289,200	293,900
45	Other Operating Expenses	359,215	415,079	417,380	481,679	551,400	557,600	563,900	570,200	576,600
46	Misc. Operating Expenses (6)	0	0	0	0	1,298,603	1,337,600	1,377,700	1,419,000	1,461,600
47	Adjustments (7)	(102,147)	(177,896)	(1,429,025)	(393,013)	(2,000,000)	(2,000,000)	(2,000,000)	(2,000,000)	(2,000,000)
48	Total Operating Expenditures	$14,100,598	$13,374,990	$13,446,732	$16,066,921	$17,309,984	$18,151,337	$18,872,660	$19,622,778	$20,403,576
49										
50	Operating Income	$5,167,490	$5,944,275	$21,474,816	$9,901,743	$6,459,632	$10,235,703	$12,290,799	$14,069,833	$14,592,857
51	Funds Available for Debt Service (8)	4,678,941	5,885,194	6,761,742	6,058,743	6,333,132	8,300,303	9,841,799	11,569,833	11,092,857
52										
53	Debt Service Requirement									
54	Existing Debt Service (9)	$1,943,760	$2,248,716	$2,417,456	$5,738,944	$6,198,994	$6,154,572	$7,962,963	$7,735,836	$7,868,983
55	Proposed Debt Service (9)	0	0	0	0	320,000	462,400	642,600	826,600	1,084,100
56	Debt Service Paid by FRC (10)	0	0	0	(284,622)	(1,989,115)	(1,968,273)	(2,504,298)	(2,541,241)	(2,523,043)
57	Total Debt Service Requirement	$1,943,760	$2,248,716	$2,417,456	$5,454,322	$4,529,880	$4,648,700	$6,101,265	$6,021,196	$6,430,039
58										
59	Capital Costs Charged to Operations									
60	Equipment (11)	$412,887	$451,949	$110,884	$465,529	$1,122,700	$512,800	$512,800	$512,800	$512,800
61	Property & Supply (11)	677,438	463,447	423,994	1,005,524	984,500	711,000	711,000	711,000	711,000
62	SRF Financed Capital (11)	2,185,874	4,781,289	5,410,800	3,843,000	0	1,935,400	2,449,000	2,500,000	3,500,000
63	Cash Financed Capital	3,439,913	4,203,176	7,592,391	1,558,884	5,928,682	1,935,400	2,449,000	2,500,000	3,500,000
64	Total Capital Costs Charged to Ops	$6,716,112	$9,899,861	$13,538,069	$6,872,937	$8,035,882	$5,094,600	$6,121,800	$6,223,800	$8,223,800
65										
66	Transfer to Emergency Reserve Fund	$0	$0	$0	$0	$1,007,593	$1,151,894	$1,264,713	$1,388,584	$1,187,217
67										
68	Total Revenue Requirements	$22,760,470	$25,523,567	$29,402,257	$28,394,180	$30,883,338	$29,046,531	$32,360,437	$33,256,358	$36,244,632
69										
70	Revenue Surplus/Deficiency	($3,492,382)	($6,204,302)	$5,519,291	($2,425,516)	($7,113,722)	($659,491)	($1,196,978)	$436,253	($1,248,199)
71										
72	Water Utility Fund Ending Balance	$15,215,397	$9,011,095	$14,362,450	$11,936,934	$4,823,178	$4,163,709	$2,966,722	$3,402,953	$2,154,801
73	Emergency Reserve Fund Balance	N/A	N/A	N/A	N/A	$1,007,593	$2,159,487	$3,424,199	$4,812,783	$6,000,000
74	Total Ending Balance (12)	$15,215,397	$9,011,095	$14,362,450	$11,936,934	$5,830,770	$6,323,196	$6,390,921	$8,215,736	$8,154,801
75	Ending Balance Target (13)				$4,618,101	$5,037,963	$5,759,471	$6,323,563	$6,942,921	$7,019,302
76										
77	Debt Service Coverage w/ FRC (14)	2.41	2.62	2.80	[redacted]	[redacted]	1.79	1.61	1.92	1.73
78	Minimum Debt Service Coverage (15)	N/A	N/A	N/A	1.50	1.50	1.50	1.50	1.50	1.50
79										
80	Average 5/8" Meter Bill ($/month) (16)	$35.00	$37.75	$40.50	$44.40	$48.22	$52.37	$56.87	$61.76	$61.76
81	Increase		$2.75	$2.75	$3.90	$3.82	$4.15	$4.50	$4.89	$0.00

County of Kauai
Departm[illegible] Water
Financial Planning Ana[illegible]nd Water Rate Study

Historical and Projected Operating Revenues and Revenue Requirements
Fiscal Years Ending June 30

Historical			Estimated	Budget	Projected			
2008	2009	2010	2011	2012	2013	2014	2015	2016

Notes:
(5) See Table 6 for details.
(6) Misc. Operating Expenses consists of the difference between the proposed budget and the projected historical expenses, and serves to make the projection consistent with the budget.
(7) Adjustments made to reduce O&M expenditures due to staff vacancies, capitalized expenses, and to reflect the historical trend of reduced budgetary expenditure levels.
(8) Equals Operating Income less SRF loan proceeds.
(9) See Table 8 for details.
(10) FRC Debt Service Payback per DOW, 3/23/11.
(11) Per FY 2012 Annual Budget (Budget Summary FYE 2012.xls). Projected expenses based on average of FY 08-12.
(12) Total Ending Balance is summed only so that it may be compared to the Ending Balance Target.
(13) Ending Balance Target based on 25% of Revenues
(14) Equals Funds Available for Debt Service divided by Total Debt Service.
(15) Target for planning purposes.
(16) Based on a 5/8" meter using 10,000 gallons per month. The value shown for FY2012 is the average bill after the rate increase occurs.

9C p 85

County of Kauai
Department of Water
Financial Planning Analysis and Water Rate Study

Historical and Projected Operating Revenues and Revenue Requirements
Fiscal Years Ending June 30

		Historical			Estimated	Budget	Projected			
		2008	2009	2010	2011	2012	2013	2014	2015	2016
1	**REVENUES**									
2	Water Utility Fund Beginning Balance	$18,707,779	$15,215,397	$9,011,095	$14,362,450	$11,936,900	$5,061,800	$5,386,400	$4,271,500	$5,599,800
3										
4	Revenue Under Existing Rates:									
5	Operating Revenues (1)									
6	Water Sales	$13,223,896	$13,433,062	$14,272,311	$15,426,305	$15,637,051	$15,809,058	$15,982,958	$16,158,770	$16,336,517
7	Service Charge	2,769,917	3,009,416	3,087,800	3,046,100	3,684,000	3,724,524	3,765,494	3,806,914	3,848,790
8	Total Operating Revenues (2)	$15,993,813	$15,770,435	$17,360,111	$18,472,405	$19,321,051	$19,533,582	$19,748,451	$19,965,684	$20,185,307
9										
10	Other Income (1)									
11	Miscellaneous Receipts	$116,619	$175,333	$149,855	$5,000	$112,000	$112,000	$112,000	$112,000	$112,000
12	Interest Earned	817,557	562,949	275,535	461,000	355,000	355,000	355,000	355,000	355,000
13	Fire Hydrant Svc. Charge	736,888	817,839	925,133	925,133	925,133	935,943	946,881	957,951	969,153
14	Other (3)	107,354	608,262	27,140	101,216	0	0	0	0	0
15	Other - SRF Loan (4)	488,549	59,081	14,713,074	3,843,000	0	1,935,400	2,449,000	2,500,000	4,500,000
16	BAB Subsidy	0	0	0	871,800	715,616	715,616	711,125	700,775	687,873
17	Grant - Drought Mitigation	n/a	n/a	n/a	n/a	126,500	0	0	0	0
18	Cost of Power Adjustment	1,007,308	1,325,366	1,470,700	1,289,110	1,383,517	1,295,200	1,295,200	1,295,200	1,295,200
19	Total Other Income	$3,274,275	$3,548,830	$17,561,437	$7,496,259	$3,617,766	$5,349,158	$5,869,207	$5,920,926	$7,919,226
20										
21	Total Revenue	$19,268,088	$19,319,265	$34,921,548	$25,968,664	$22,938,816	$24,882,741	$25,617,658	$25,886,610	$28,104,533
22										
23	Additional Revenue Required									

	Year	% of Water Sales Revenue	Months Effective	2011	2012	2013	2014	2015	2016
26	FY 2012	11.2%	6		$1,082,000	$2,187,800	$2,211,800	$2,236,200	$2,260,800
27	FY 2013	11.2%	12			2,432,800	2,459,500	2,486,600	2,514,000
28	FY 2014	11.2%	12				2,735,000	2,765,100	2,795,500
29	FY 2015	11.2%	12					3,074,800	3,108,600
30	FY 2016	0.0%	12						0
31	Total Additional Revenue Required			$0	$1,082,000	$4,620,600	$7,406,300	$10,562,700	$10,678,900
32									
33	Total Revenue			$25,968,664	$24,020,816	$29,503,341	$33,023,958	$36,449,310	$38,783,433

Notes:
(1) Projected Revenues revised to correspond to 02Budget Summary FYE 2012.xls. 2013-2016 projected at 1.1%
(2) Matches 2012 Budget, less FRC Payback and Cost of Power Adjustment (accounted for elsewhere).
(3) Includes grant funds for Waimea project in FY 2011.
(4) Includes SRF Loan proceeds and reimbursements.

10A p 86

Option 10: Current FRC Payback, Level Rates, No Target, Deferred CIP

County of Kauai

Department of Water

Financial Planning Analysis and Water Rate Study

Historical and Projected Operating Revenues and Revenue Requirements

Fiscal Years Ending June 30

		Historical			Estimated	Budget	Projected			
		2008	2009	2010	2011	2012	2013	2014	2015	2016
34	**REVENUE REQUIREMENTS**									
35	Operating Expenditures (5)									
36	Source of Supply	$2,499,838	$2,275,707	$2,245,072	$2,223,761	$3,008,611	$3,101,886	$3,198,160	$3,297,340	$3,399,526
37	Pumping	2,947,947	2,556,313	2,576,227	3,064,600	3,100,000	3,410,000	3,580,500	3,759,500	3,947,500
38	Water Treatment Plant	1,675,094	1,723,621	1,949,808	2,306,740	2,624,967	2,703,653	2,784,636	2,868,115	2,954,267
39	Transmission & Distribution	2,496,677	2,471,122	3,302,023	3,579,434	3,389,868	3,559,423	3,737,456	3,924,320	4,120,545
40	Customer Services	520,281	610,600	762,749	730,664	875,681	901,744	928,690	956,343	984,879
41	Administrative & Engineering	2,782,432	2,475,297	2,513,490	3,038,246	3,260,122	3,364,931	3,473,317	3,585,660	3,702,159
42	Manager's Office	0	0	0	0	0	0	0	0	0
43	County Service Charge	736,888	817,839	925,133	833,500	925,133	934,400	943,700	953,100	962,600
44	Vehicles	184,373	207,307	183,874	201,310	275,600	280,100	284,600	289,200	293,900
45	Other Operating Expenses	359,215	415,079	417,380	481,679	551,400	557,600	563,900	570,200	576,600
46	Misc. Operating Expenses (6)	0	0	0	0	1,298,603	1,337,600	1,377,700	1,419,000	1,461,600
47	Adjustments (7)	(102,147)	(177,896)	(1,429,025)	(393,013)	(2,000,000)	(2,000,000)	(2,000,000)	(2,000,000)	(2,000,000)
48	Total Operating Expenditures	$14,100,598	$13,374,990	$13,446,732	$16,066,921	$17,309,984	$18,151,337	$18,872,660	$19,622,778	$20,403,576
49										
50	Operating Income	$5,167,490	$5,944,275	$21,474,816	$9,901,743	$6,710,832	$11,352,003	$14,151,299	$16,826,533	$18,379,857
51	Funds Available for Debt Service (8)	4,678,941	5,885,194	6,761,742	6,058,743	6,584,332	9,416,603	11,702,299	14,326,533	13,879,857
52										
53	Debt Service Requirement									
54	Existing Debt Service (9)	$1,943,760	$2,248,716	$2,417,456	$5,738,944	$6,198,994	$6,154,572	$7,962,963	$7,735,836	$7,868,983
55	Proposed Debt Service (9)	0	0	0	0	320,000	462,400	642,600	826,600	1,157,700
56	Debt Service Paid by FRC (10)	0	0	0	(284,622)	(1,989,115)	(1,891,892)	(818,868)	(814,432)	(808,903)
57	Total Debt Service Requirement	$1,943,760	$2,248,716	$2,417,456	$5,454,322	$4,529,880	$4,725,080	$7,786,694	$7,748,004	$8,217,780
58										
59	Capital Costs Charged to Operations									
60	Equipment (11)	$412,887	$451,949	$110,884	$465,529	$1,122,700	$512,800	$512,800	$512,800	$512,800
61	Property & Supply (11)	677,438	463,447	423,994	1,005,524	984,500	711,000	711,000	711,000	711,000
62	SRF Financed Capital (11)	2,185,874	4,781,289	5,410,800	3,843,000	0	1,935,400	2,449,000	2,500,000	4,500,000
63	Cash Financed Capital	3,439,913	4,203,176	7,592,391	1,558,884	5,928,682	1,935,400	2,449,000	2,500,000	4,500,000
64	Total Capital Costs Charged to Ops	$6,716,112	$9,899,861	$13,538,069	$6,872,937	$8,035,882	$5,094,600	$6,121,800	$6,223,800	$10,223,800
65										
66	Transfer to Emergency Reserve Fund	$0	$0	$0	$0	$1,020,153	$1,207,709	$1,357,738	$1,526,419	$887,982
67										
68	Total Revenue Requirements	$22,760,470	$25,523,567	$29,402,257	$28,394,180	$30,895,898	$29,178,726	$34,138,892	$35,121,001	$39,733,137
69										
70	Revenue Surplus/Deficiency	($3,492,382)	($6,204,302)	$5,519,291	($2,425,516)	($6,875,082)	$324,614	($1,114,933)	$1,328,309	($949,705)
71										
72	Water Utility Fund Ending Balance	$15,215,397	$9,011,095	$14,362,450	$11,936,934	$5,061,818	$5,386,414	$4,271,467	$5,599,809	$4,650,095
73	Emergency Reserve Fund Balance	N/A	N/A	N/A	N/A	$1,020,153	$2,227,862	$3,585,599	$5,112,018	$6,000,000
74	Total Ending Balance (12)	$15,215,397	$9,011,095	$14,362,450	$11,936,934	$6,081,970	$7,614,276	$7,857,066	$10,711,828	$10,650,095
75	Ending Balance Target (13)				$4,618,101	$5,100,763	$6,038,546	$6,788,688	$7,632,096	$7,716,052
76										
77	Debt Service Coverage w/ FRC (14)	2.41	2.62	2.80	[redacted]	[redacted]	1.99	1.50	1.85	1.69
78	Minimum Debt Service Coverage (15)	N/A	N/A	N/A	1.50	1.50	1.50	1.50	1.50	1.50
79										
80	Average 5/8" Meter Bill ($/month) (16)	$35.00	$37.75	$40.50	$44.40	$49.37	$54.90	$61.05	$67.89	$67.89
81	Increase		$2.75	$2.75	$3.90	$4.97	$5.53	$6.15	$6.84	$0.00

County of Kauai
Departm[illegible]f Water
Financial Planning Ana[illegible]and Water Rate Study
Historical and Projected Operating Revenues and Revenue Requirements
Fiscal Years Ending June 30

Historical			Estimated	Budget	Projected			
2008	2009	2010	2011	2012	2013	2014	2015	2016

Notes:
(5) See Table 6 for details.
(6) Misc. Operating Expenses consists of the difference between the proposed budget and the projected historical expenses, and serves to make the projection consistent with the budget.
(7) Adjustments made to reduce O&M expenditures due to staff vacancies, capitalized expenses, and to reflect the historical trend of reduced budgetary expenditure levels.
(8) Equals Operating Income less SRF loan proceeds.
(9) See Table 8 for details.
(10) FRC Debt Service Payback per DOW, 3/23/11.
(11) Per FY 2012 Annual Budget (Budget Summary FYE 2012.xls). Projected expenses based on average of FY 08-12.
(12) Total Ending Balance is summed only so that it may be compared to the Ending Balance Target.
(13) Ending Balance Target based on 25% of Revenues
(14) Equals Funds Available for Debt Service divided by Total Debt Service.
(15) Target for planning purposes.
(16) Based on a 5/8" meter using 10,000 gallons per month. The value shown for FY2012 is the average bill after the rate increase occurs.

10A P·88

County of Kauai
Departm[illegible] f Water
Financial Planning An[illegible] and Water Rate Study

Historical and Projected Operating Revenues and Revenue Requirements
Fiscal Years Ending June 30

		Historical			Estimated	Budget	Projected			
		2008	2009	2010	2011	2012	2013	2014	2015	2016
1	**REVENUES**									
2	Water Utility Fund Beginning Balance	$18,707,779	$15,215,397	$9,011,095	$14,362,450	$11,936,900	$3,061,800	$3,386,400	$2,271,500	$3,599,800
3										
4	Revenue Under Existing Rates:									
5	Operating Revenues (1)									
6	Water Sales	$13,223,896	$13,433,062	$14,272,311	$15,426,305	$15,637,051	$15,809,058	$15,982,958	$16,158,770	$16,336,517
7	Service Charge	2,769,917	3,009,416	3,087,800	3,046,100	3,684,000	3,724,524	3,765,494	3,806,914	3,848,790
8	Total Operating Revenues (2)	$15,993,813	$15,770,435	$17,360,111	$18,472,405	$19,321,051	$19,533,582	$19,748,451	$19,965,684	$20,185,307
9										
10	Other Income (1)									
11	Miscellaneous Receipts	$116,619	$175,333	$149,855	$5,000	$112,000	$112,000	$112,000	$112,000	$112,000
12	Interest Earned	817,557	562,949	275,535	461,000	355,000	355,000	355,000	355,000	355,000
13	Fire Hydrant Svc. Charge	736,888	817,839	925,133	925,133	925,133	935,943	946,881	957,951	969,153
14	Other (3)	107,354	608,262	27,140	101,216	0	0	0	0	0
15	Other - SRF Loan (4)	488,549	59,081	14,713,074	3,843,000	0	1,935,400	2,449,000	2,500,000	3,500,000
16	BAB Subsidy	0	0	0	871,800	715,616	715,616	711,125	700,775	687,873
17	Grant - Drought Mitigation	n/a	n/a	n/a	n/a	126,500	0	0	0	0
18	Cost of Power Adjustment	1,007,308	1,325,366	1,470,700	1,289,110	1,383,517	1,295,200	1,295,200	1,295,200	1,295,200
19	Total Other Income	$3,274,275	$3,548,830	$17,561,437	$7,496,259	$3,617,766	$5,349,158	$5,869,207	$5,920,926	$6,919,226
20										
21	Total Revenue (cum. rates)	$19,268,088	$19,319,265	$34,921,548	$25,968,664	$22,938,816	$24,882,741	$25,617,658	$25,886,610	$27,104,533
22										
23	Additional Revenue Required									

24	Year	% of Water Sales Revenue	Months Effective							
25					2011	2012	2013	2014	2015	2016
26	FY 2012	11.2%	6			$1,082,000	$2,187,800	$2,211,800	$2,236,200	$2,260,800
27	FY 2013	11.2%	12				2,432,800	2,459,500	2,486,600	2,514,000
28	FY 2014	11.2%	12					2,735,000	2,765,100	2,795,500
29	FY 2015	11.2%	12						3,074,800	3,108,600
30	FY 2016	0.0%	12							0
31	Total Additional Revenue Required				$0	$1,082,000	$4,620,600	$7,406,300	$10,562,700	$10,678,900
32										
33	Total Revenue			$19,268,088	$19,319,265	$34,921,548	$25,968,664	$24,020,816	$29,503,341	$33,023,958	$36,449,310	$37,783,433

Notes:
(1) Projected Revenues revised to correspond to 02Budget Summary FYE 2012.xls. 2013-2016 projected at 1.1%
(2) Matches 2012 Budget, less FRC Payback and Cost of Power Adjustment (accounted for elsewhere).
(3) Includes grant funds for Waimea project in FY 2011.
(4) Includes SRF Loan proceeds and reimbursements.

10B

p. 89

Option 10: Current FRC Payback, Level Rates, No Target, Standard CIP

County of Kauai

Department of Water

Financial Planning Analysis and Water Rate Study

Historical and Projected Operating Revenues and Revenue Requirements

Fiscal Years Ending June 30

		Historical			Estimated	Budget	Projected			
		2008	2009	2010	2011	2012	2013	2014	2015	2016
34	**REVENUE REQUIREMENTS**									
35	Operating Expenditures (5)									
36	Source of Supply	$2,499,838	$2,275,707	$2,245,072	$2,223,761	$3,008,611	$3,101,886	$3,198,160	$3,297,340	$3,399,526
37	Pumping	2,947,947	2,556,313	2,576,227	3,064,600	3,100,000	3,410,000	3,580,500	3,759,500	3,947,500
38	Water Treatment Plant	1,675,094	1,723,621	1,949,808	2,306,740	2,624,967	2,703,653	2,784,636	2,868,115	2,954,267
39	Transmission & Distribution	2,496,677	2,471,122	3,302,023	3,579,434	3,389,868	3,559,423	3,737,456	3,924,320	4,120,545
40	Customer Services	520,281	610,600	762,749	730,664	875,681	901,744	928,690	956,343	984,879
41	Administrative & Engineering	2,782,432	2,475,297	2,513,490	3,038,246	3,260,122	3,364,931	3,473,317	3,585,660	3,702,159
42	Manager's Office	0	0	0	0	0	0	0	0	0
43	County Service Charge	736,888	817,839	925,133	833,500	925,133	934,400	943,700	953,100	962,600
44	Vehicles	184,373	207,307	183,874	201,310	275,600	280,100	284,600	289,200	293,900
45	Other Operating Expenses	359,215	415,079	417,380	481,679	551,400	557,600	563,900	570,200	576,600
46	Misc. Operating Expenses (6)	0	0	0	0	1,298,603	1,337,600	1,377,700	1,419,000	1,461,600
47	Adjustments (7)	(102,147)	(177,896)	(1,429,025)	(393,013)	(2,000,000)	(2,000,000)	(2,000,000)	(2,000,000)	(2,000,000)
48	Total Operating Expenditures	$14,100,598	$13,374,990	$13,446,732	$16,066,921	$17,309,984	$18,151,337	$18,872,660	$19,622,778	$20,403,576
49										
50	Operating Income	$5,167,490	$5,944,275	$21,474,816	$9,901,743	$6,710,832	$11,352,003	$14,151,299	$16,826,533	$17,379,857
51	Funds Available for Debt Service (8)	4,678,941	5,885,194	6,761,742	6,058,743	6,584,332	9,416,603	11,702,299	14,326,533	13,879,857
52										
53	Debt Service Requirement									
54	Existing Debt Service (9)	$1,943,760	$2,248,716	$2,417,456	$5,738,944	$6,198,994	$6,154,572	$7,962,963	$7,735,836	$7,868,983
55	Proposed Debt Service (9)	0	0	0	0	320,000	462,400	642,600	826,600	1,084,100
56	Debt Service Paid by FRC (10)	0	0	0	(284,622)	(1,989,115)	(1,891,892)	(818,868)	(814,432)	(808,903)
57	Total Debt Service Requirement	$1,943,760	$2,248,716	$2,417,456	$5,454,322	$4,529,880	$4,725,080	$7,786,694	$7,748,004	$8,144,180
58										
59	Capital Costs Charged to Operations									
60	Equipment (11)	$412,887	$451,949	$110,884	$465,529	$1,122,700	$512,800	$512,800	$512,800	$512,800
61	Property & Supply (11)	677,438	463,447	423,994	1,005,524	984,500	711,000	711,000	711,000	711,000
62	SRF Financed Capital (11)	2,185,874	4,781,289	5,410,800	3,843,000	0	1,935,400	2,449,000	2,500,000	3,500,000
63	Cash Financed Capital	3,439,913	4,203,176	7,592,391	1,558,884	7,928,682	1,935,400	2,449,000	2,500,000	3,500,000
64	Total Capital Costs Charged to Ops	$6,716,112	$9,899,861	$13,538,069	$6,872,937	$10,035,882	$5,094,600	$6,121,800	$6,223,800	$8,223,800
65										
66	Transfer to Emergency Reserve Fund	$0	$0	$0	$0	$1,020,153	$1,207,709	$1,357,738	$1,526,419	$887,982
67										
68	Total Revenue Requirements	$22,760,470	$25,523,567	$29,402,257	$28,394,180	$32,895,898	$29,178,726	$34,138,892	$35,121,001	$37,659,537
69										
70	Revenue Surplus/Deficiency	($3,492,382)	($6,204,302)	$5,519,291	($2,425,516)	($8,875,082)	$324,614	($1,114,933)	$1,328,309	$123,895
71										
72	Water Utility Fund Ending Balance	$15,215,397	$9,011,095	$14,362,450	$11,936,934	$3,061,818	$3,386,414	$2,271,467	$3,599,809	$3,723,695
73	Emergency Reserve Fund Balance	N/A	N/A	N/A	N/A	$1,020,153	$2,227,862	$3,585,599	$5,112,018	$6,000,000
74	Total Ending Balance (12)	$15,215,397	$9,011,095	$14,362,450	$11,936,934	[illegible]	[illegible]	[illegible]	$8,711,828	$9,723,695
75	Ending Balance Target (13)				$4,618,101	$5,100,763	$6,038,546	$6,788,688	$7,632,096	$7,716,052
76										
77	Debt Service Coverage w/ FRC (14)	2.41	2.62	2.80	[illegible]	[illegible]	1.99	1.50	1.85	1.70
78	Minimum Debt Service Coverage (15)	N/A	N/A	N/A	1.50	1.50	1.50	1.50	1.50	1.50
79										
80	Average 5/8" Meter Bill ($/month) (16)	$35.00	$37.75	$40.50	$44.40	$49.37	$54.90	$61.05	$67.89	$67.89
81	Increase		$2.75	$2.75	$3.90	$4.97	$5.53	$6.15	$6.84	$0.00

County of Kauai
Departm[illegible] Water
Financial Planning Ana[illegible]nd Water Rate Study

Historical and Projected Operating Revenues and Revenue Requirements
Fiscal Years Ending June 30

Historical			Estimated	Budget	Projected			
2008	2009	2010	2011	2012	2013	2014	2015	2016

Notes:
(5) See Table 6 for details.
(6) Misc. Operating Expenses consists of the difference between the proposed budget and the projected historical expenses, and serves to make the projection consistent with the budget.
(7) Adjustments made to reduce O&M expenditures due to staff vacancies, capitalized expenses, and to reflect the historical trend of reduced budgetary expenditure levels.
(8) Equals Operating Income less SRF loan proceeds.
(9) See Table 8 for details.
(10) FRC Debt Service Payback per DOW, 3/23/11.
(11) Per FY 2012 Annual Budget (Budget Summary FYE 2012.xls). Projected expenses based on average of FY 08-12.
(12) Total Ending Balance is summed only so that it may be compared to the Ending Balance Target.
(13) Ending Balance Target based on 25% of Revenues
(14) Equals Funds Available for Debt Service divided by Total Debt Service.
(15) Target for planning purposes.
(16) Based on a 5/8" meter using 10,000 gallons per month. The value shown for FY2012 is the average bill after the rate increase occurs.

County of Kauai
Departm f Water
Financial Planning An nd Water Rate Study

Historical and Projected Operating Revenues and Revenue Requirements
Fiscal Years Ending June 30

		Historical			Estimated	Budget	Projected			
		2008	2009	2010	2011	2012	2013	2014	2015	2016
1	**REVENUES**									
2	Water Utility Fund Beginning Balance	$18,707,779	$15,215,397	$9,011,095	$14,362,450	$11,936,900	$5,061,800	$5,386,400	$4,271,500	$5,599,800
3										
4	Revenue Under Existing Rates:									
5	Operating Revenues (1)									
6	Water Sales	$13,223,896	$13,433,062	$14,272,311	$15,426,305	$15,637,051	$15,809,058	$15,982,958	$16,158,770	$16,336,517
7	Service Charge	2,769,917	3,009,416	3,087,800	3,046,100	3,684,000	3,724,524	3,765,494	3,806,914	3,848,790
8	Total Operating Revenues (2)	$15,993,813	$15,770,435	$17,360,111	$18,472,405	$19,321,051	$19,533,582	$19,748,451	$19,965,684	$20,185,307
9										
10	Other Income (1)									
11	Miscellaneous Receipts	$116,619	$175,333	$149,855	$5,000	$112,000	$112,000	$112,000	$112,000	$112,000
12	Interest Earned	817,557	562,949	275,535	461,000	355,000	355,000	355,000	355,000	355,000
13	Fire Hydrant Svc. Charge	736,888	817,839	925,133	925,133	925,133	935,943	946,881	957,951	969,153
14	Other (3)	107,354	608,262	27,140	101,216	0	0	0	0	0
15	Other - SRF Loan (4)	488,549	59,081	14,713,074	3,843,000	0	1,935,400	2,449,000	2,500,000	3,500,000
16	BAB Subsidy	0	0	0	871,800	715,616	715,616	711,125	700,775	687,873
17	Grant - Drought Mitigation	n/a	n/a	n/a	n/a	126,500	0	0	0	0
18	Cost of Power Adjustment	1,007,308	1,325,366	1,470,700	1,289,110	1,383,517	1,295,200	1,295,200	1,295,200	1,295,200
19	Total Other Income	$3,274,275	$3,548,830	$17,561,437	$7,496,259	$3,617,766	$5,349,158	$5,869,207	$5,920,926	$6,919,226
20										
21	Total Revenue	$19,268,088	$19,319,265	$34,921,548	$25,968,664	$22,938,816	$24,882,741	$25,617,658	$25,886,610	$27,104,533
22										
23	Additional Revenue Required									
24					2011	2012	2013	2014	2015	2016
25	Year / % of Water Sales Revenue / Months Effective									
26	FY 2012 11.2% 6					$1,082,000	$2,187,800	$2,211,800	$2,236,200	$2,260,800
27	FY 2013 11.2% 12						2,432,800	2,459,500	2,486,600	2,514,000
28	FY 2014 11.2% 12							2,735,000	2,765,100	2,795,500
29	FY 2015 11.2% 12								3,074,800	3,108,600
30	FY 2016 0.0% 12									0
31	Total Additional Revenue Required	$0	$0	$0	$0	$1,082,000	$4,620,600	$7,406,300	$10,562,700	$10,678,900
32										
33	Total Revenue	$19,268,088	$19,319,265	$34,921,548	$25,968,664	$24,020,816	$29,503,341	$33,023,958	$36,449,310	$37,783,433

Notes:
(1) Projected Revenues revised to correspond to 02Budget Summary FYE 2012.xls. 2013-2016 projected at 1.1%
(2) Matches 2012 Budget, less FRC Payback and Cost of Power Adjustment (accounted for elsewhere).
(3) Includes grant funds for Waimea project in FY 2011.
(4) Includes SRF Loan proceeds and reimbursements.

10C P. 92

Option 10: Current FRC Payback, Level Rates, No Target, Reduced CIP
County of Kauai
Department of Water
Financial Planning Analysis and Water Rate Study

Historical and Projected Operating Revenues and Revenue Requirements
Fiscal Years Ending June 30

		Historical			Estimated	Budget	Projected			
		2008	2009	2010	2011	2012	2013	2014	2015	2016
34	**REVENUE REQUIREMENTS**									
35	Operating Expenditures (5)									
36	Source of Supply	$2,499,838	$2,275,707	$2,245,072	$2,223,761	$3,008,611	$3,101,886	$3,198,160	$3,297,340	$3,399,526
37	Pumping	2,947,947	2,556,313	2,576,227	3,064,600	3,100,000	3,410,000	3,580,500	3,759,500	3,947,500
38	Water Treatment Plant	1,675,094	1,723,621	1,949,808	2,306,740	2,624,967	2,703,653	2,784,636	2,868,115	2,954,267
39	Transmission & Distribution	2,496,677	2,471,122	3,302,023	3,579,434	3,389,868	3,559,423	3,737,456	3,924,320	4,120,545
40	Customer Services	520,281	610,600	762,749	730,664	875,681	901,744	928,690	956,343	984,879
41	Administrative & Engineering	2,782,432	2,475,297	2,513,490	3,038,246	3,260,122	3,364,931	3,473,317	3,585,660	3,702,159
42	Manager's Office	0	0	0	0	0	0	0	0	0
43	County Service Charge	736,888	817,839	925,133	833,500	925,133	934,400	943,700	953,100	962,600
44	Vehicles	184,373	207,307	183,874	201,310	275,600	280,100	284,600	289,200	293,900
45	Other Operating Expenses	359,215	415,079	417,380	481,679	551,400	557,600	563,900	570,200	576,600
46	Misc. Operating Expenses (6)	0	0	0	0	1,298,603	1,337,600	1,377,700	1,419,000	1,461,600
47	Adjustments (7)	(102,147)	(177,896)	(1,429,025)	(393,013)	(2,000,000)	(2,000,000)	(2,000,000)	(2,000,000)	(2,000,000)
48	Total Operating Expenditures	$14,100,598	$13,374,990	$13,446,732	$16,066,921	$17,309,984	$18,151,337	$18,872,660	$19,622,778	$20,403,576
49										
50	Operating Income	$5,167,490	$5,944,275	$21,474,816	$9,901,743	$6,710,832	$11,352,003	$14,151,299	$16,826,533	$17,379,857
51	Funds Available for Debt Service (8)	4,678,941	5,885,194	6,761,742	6,058,743	6,584,332	9,416,603	11,702,299	14,326,533	13,879,857
52										
53	Debt Service Requirement									
54	Existing Debt Service (9)	$1,943,760	$2,248,716	$2,417,456	$5,738,944	$6,198,994	$6,154,572	$7,962,963	$7,735,836	$7,868,983
55	Proposed Debt Service (9)	0	0	0	0	320,000	462,400	642,600	826,600	1,084,100
56	Debt Service Paid by FRC (10)	0	0	0	(284,622)	(1,989,115)	(1,891,892)	(818,868)	(814,432)	(808,903)
57	Total Debt Service Requirement	$1,943,760	$2,248,716	$2,417,456	$5,454,322	$4,529,880	$4,725,080	$7,786,694	$7,748,004	$8,144,180
58										
59	Capital Costs Charged to Operations									
60	Equipment (11)	$412,887	$451,949	$110,884	$465,529	$1,122,700	$512,800	$512,800	$512,800	$512,800
61	Property & Supply (11)	677,438	463,447	423,994	1,005,524	984,500	711,000	711,000	711,000	711,000
62	SRF Financed Capital (11)	2,185,874	4,781,289	5,410,800	3,843,000	0	1,935,400	2,449,000	2,500,000	3,500,000
63	Cash Financed Capital	3,439,913	4,203,176	7,592,391	1,558,884	5,928,682	1,935,400	2,449,000	2,500,000	3,500,000
64	Total Capital Costs Charged to Ops	$6,716,112	$9,899,861	$13,538,069	$6,872,937	$8,035,882	$5,094,600	$6,121,800	$6,223,800	$8,223,800
65										
66	Transfer to Emergency Reserve,Fund	$0	$0	$0	$0	$1,020,153	$1,207,709	$1,357,738	$1,526,419	$887,982
67										
68	Total Revenue Requirements	$22,760,470	$25,523,567	$29,402,257	$28,394,180	$30,895,898	$29,178,726	$34,138,892	$35,121,001	$37,659,537
69										
70	Revenue Surplus/Deficiency	($3,492,382)	($6,204,302)	$5,519,291	($2,425,516)	($6,875,082)	$324,614	($1,114,933)	$1,328,309	$123,895
71										
72	Water Utility Fund Ending Balance	$15,215,397	$9,011,095	$14,362,450	$11,936,934	$5,061,818	$5,386,414	$4,271,467	$5,599,809	$5,723,695
73	Emergency Reserve Fund Balance	N/A	N/A	N/A	N/A	$1,020,153	$2,227,862	$3,585,599	$5,112,018	$6,000,000
74	Total Ending Balance (12)	$15,215,397	$9,011,095	$14,362,450	$11,936,934	$6,081,970	$7,614,276	$7,857,066	$10,711,828	$11,723,695
75	Ending Balance Target (13)				$4,618,101	$5,100,763	$6,038,546	$6,788,688	$7,632,096	$7,716,052
76										
77	Debt Service Coverage w/ FRC (14)	2.41	2.62	2.80	[redacted]	[redacted]	1.99	1.50	1.85	1.70
78	Minimum Debt Service Coverage (15)	N/A	N/A	N/A	1.50	1.50	1.50	1.50	1.50	1.50
79										
80	Average 5/8" Meter Bill ($/month) (16)	$35.00	$37.75	$40.50	$44.40	$49.37	$54.90	$61.05	$67.89	$67.89
81	Increase		$2.75	$2.75	$3.90	$4.97	$5.53	$6.15	$6.84	$0.00

County of Kauai
Department of Water
Financial Planning and Water Rate Study

Historical and Projected Operating Revenues and Revenue Requirements
Fiscal Years Ending June 30

Historical			Estimated	Budget	Projected			
2008	2009	2010	2011	2012	2013	2014	2015	2016

Notes:
(5) See Table 6 for details.
(6) Misc. Operating Expenses consists of the difference between the proposed budget and the projected historical expenses, and serves to make the projection consistent with the budget.
(7) Adjustments made to reduce O&M expenditures due to staff vacancies, capitalized expenses, and to reflect the historical trend of reduced budgetary expenditure levels.
(8) Equals Operating Income less SRF loan proceeds.
(9) See Table 8 for details.
(10) FRC Debt Service Payback per DOW, 3/23/11.
(11) Per FY 2012 Annual Budget (Budget Summary FYE 2012.xls). Projected expenses based on average of FY 08-12.
(12) Total Ending Balance is summed only so that it may be compared to the Ending Balance Target.
(13) Ending Balance Target based on 25% of Revenues
(14) Equals Funds Available for Debt Service divided by Total Debt Service.
(15) Target for planning purposes.
(16) Based on a 5/8" meter using 10,000 gallons per month. The value shown for FY2012 is the average bill after the rate increase occurs.

10 C p. 94

REVISED 6/27/11, 6M (Max) - EMERGENCY RESERVE FUND

OPTION 9 - 30% FRC Payback, Level Rates, Meet Targets

OPTIONS	Annual Emergency FD Contribution	FUNDING	CRP PROJECTS (IN MILLIONS) 2011	2012	2013	2014	2015	2016	SUB-TOTAL	TOTALS
9		CIP LOAN	2.843	0.000	1.935	2.449	2.500	2.500	10.384	28.69746
		CIP CASH	0.557	7.929	1.935	2.449	2.500	2.500	18.313	
	Fund Bal.	ER / Yr		1.200	1.200	1.200	1.200	0.000	4.800	5.128
		ER / Cum		1.200	2.400	3.600	4.800	4.800		
		Unassig	11.937	3.882	2.963	1.483	1.600	0.328	0.328	
		Total	11.937	5.082	5.363	5.083	6.400	5.128		
		Target		4.327	4.538	4.718	4.906	5.101		
	RATES	Ave bill	44.40	48.00	51.89	56.09	60.63	60.63		32.40%
		$ Inc.	3.90	3.60	3.89	4.20	4.54	0.00		
		Rate		8.10%	8.10%	8.10%	8.10%	0.00%	32.40%	
9A	Deferred CIP	LOAN	2.843	0.000	1.935	2.449	2.500	2.500	10.384	28.697
		CASH	0.557	7.929	1.935	2.449	2.500	2.500	18.313	
	Fund Bal.	Emerg / Yr		1.008	1.152	1.265	1.389	1.187	6.000	7.081
		Cum		1.008	2.159	3.424	4.813	6.000		
		Unassig	11.937	4.823	4.164	2.967	3.403	1.081	1.081	
		Total	11.937	5.831	6.323	6.391	8.216	7.081		
		Target		5.038	5.759	6.324	6.943	7.019		
	RATES	Ave bill	44.40	48.22	52.37	56.67	61.76	61.76		34.40%
		$ Inc.	3.90	3.82	4.15	4.50	4.89	0.00		
		Rate		8.60%	8.60%	8.60%	8.60%	0.00%	34.40%	
9B	Std. CIP	LOAN	2.843	0.000	1.935	2.449	2.500	2.500	10.384	28.697
		CASH	0.557	7.929	1.935	2.449	2.500	2.500	18.313	
	Fund Bal.	Emerg / Yr		1.010	1.160	1.279	1.409	1.142	6.000	7.471
		Cum		1.010	2.170	3.449	4.858	6.000		
		Unassig	11.937	2.860	2.362	1.431	2.258	1.471	1.471	
		Total	11.937	3.869	4.532	4.880	7.116	7.471		
		Target		5.048	5.802	6.394	7.046	7.123		
	RATES	Ave bill	44.40	48.40	52.76	57.51	62.68	62.68		36.00%
		$ Inc.	3.90	4.00	4.36	4.75	5.17	0.00		
		Rate		9.00%	9.00%	9.00%	9.00%	0.00%	36.00%	
9C	Reduced CIP	LOAN	2.843	0.000	1.935	2.449	2.500	2.500	10.384	28.697
		CASH	0.557	7.929	1.935	2.449	2.500	2.500	18.313	
	Fund Bal.	Emerg / Yr		1.008	1.152	1.265	1.389	1.187	6.000	8.155
		Cum		1.008	2.159	3.424	4.813	6.000		
		Unassig	11.937	4.823	4.164	2.967	3.403	2.155	2.155	
		Total	11.937	5.831	6.323	6.391	8.216	8.155		
		Target	4.618	5.038	5.759	6.324	6.943	7.019		
	RATES	Ave bill	44.40	48.22	52.37	56.67	61.76	61.76		34.40%
		$ Inc.	3.90	3.82	4.15	4.50	4.89	0.00		
		Rate		8.60%	8.60%	8.60%	8.60%	0.00%	34.40%	

OPTION 10 - Current FRC Payback, Level Rates, No Targets

OPTIONS	Annual Emergency FD Contribution	FUNDING	CRP PROJECTS (IN MILLIONS) 2011	2012	2013	2014	2015	2016	SUB-TOTAL	TOTALS
10		CIP LOAN	2.843	0.000	1.935	2.449	2.500	2.500	10.384	28.69746
		CIP CASH	0.557	7.929	1.935	2.449	2.500	2.500	18.313	
	Fund Bal.	ER / Yr		1.200	1.200	1.200	1.200		4.800	9.723677
		ER / Cum		1.200	2.400	3.600	4.800	4.800		
		Unassig	11.937	2.882	3.214	2.257	3.912	4.924	4.924	
		Total	11.937	4.082	5.614	5.857	8.712	9.724		
		Target		4.830	4.883	4.937	4.991	5.046		
	RATES	Ave bill	44.40	49.37	54.90	61.05	67.89	67.89		44.80%
		$ Inc.	3.90	4.97	5.53	6.15	6.84	0.00		
		Rate		11.20%	11.20%	11.20%	11.20%		44.80%	
10A	Deferred CIP	LOAN	2.843	0.000	1.935	2.449	2.500	2.500	10.384	28.697
		CASH	0.557	7.929	1.935	2.449	2.500	2.500	18.313	
	Fund Bal.	Emerg / Yr		1.020	1.208	1.358	1.526	0.888	6.000	10.650
		Cum		1.020	2.228	3.586	5.112	6.000		
		Unassig	11.937	5.062	5.386	4.271	5.600	4.650	4.650	
		Total	11.937	6.082	7.614	7.857	10.712	10.650		
		Target		5.101	6.039	6.789	7.632	7.716		
	RATES	Ave bill	44.40	49.37	54.90	61.05	67.89	67.89		44.80%
		$ Inc.	3.90	4.97	5.53	6.15	6.84	0.00		
		Rate		11.20%	11.20%	11.20%	11.20%	0.000	44.80%	
10B	Std. CIP	LOAN	2.843	0.000	1.935	2.449	2.500	2.500	10.384	28.697
		CASH	0.557	7.929	1.935	2.449	2.500	2.500	18.313	
	Fund Bal.	Emerg / Yr		1.020	1.208	1.358	1.526	0.888	6.000	9.724
		Cum		1.020	2.228	3.586	5.112	6.000		
		Unassig	11.937	3.062	3.386	2.271	3.600	3.724	3.724	
		Total	11.937	4.082	5.614	5.857	8.712	9.724		
		Target		5.101	6.039	6.789	7.632	7.716		
	RATES	Ave bill	44.40	49.37	54.90	61.05	67.89	67.89		44.80%
		$ Inc.	3.90	4.97	5.53	6.15	6.84	0.00		
		Rate		11.20%	11.20%	11.20%	11.20%	0.000	44.80%	
10C	Reduced CIP	LOAN	2.843	0.000	1.935	2.449	2.500	2.500	10.384	28.697
		CASH	0.557	7.929	1.935	2.449	2.500	2.500	18.313	
	Fund Bal.	Emerg / Yr		1.020	1.208	1.358	1.526	0.888	6.000	11.724
		Cum		1.020	2.228	3.586	5.112	6.000		
		Unassig	11.937	5.062	5.386	4.271	5.600	5.724	5.724	
		Total	11.937	6.082	7.614	7.857	10.712	11.724		
		Target	4.618	5.101	6.039	6.789	7.632	7.716		
	RATES	Ave bill	44.40	49.37	54.90	61.05	67.89	67.89		44.80%
		$ Inc.	3.90	4.97	5.53	6.15	6.84	0.00		
		Rate		11.20%	11.20%	11.20%	11.20%	0.000	44.80%	

SUMMARY OF OPTIONS

9 30% FRC payback, level rates, fixed (1.2M) Emergency Reserve fund Transfer per year till 2011

9A 30% FRC payback, level rates, 5%Emergency Reserve fund Transfer per year till 2012, Deferred CIP

9B 30% FRC payback, level rates, 5% Emergency Reserve fund Transfer per year till 2011, Std. CIP

9C 30% FRC payback, level rates, 5% Emergency Reserve fund Transfer per year till 2011, Reduced CIP

10 current FRC payback, level rates, fixed (1.2M) Emergency Reserve fund Transfer per year till 2011

10A current FRC payback, level rates, 5%Emergency Reserve fund Transfer per year till 2012, Deferred CIP

10B current FRC payback, level rates, 5% Emergency Reserve fund Transfer per year till 2011, Std. CIP

10C current FRC payback, level rates, 5% Emergency Reserve fund Transfer per year till 2011, Reduced CIP

COLOR BACKGROUND LEGEND: (will distribute printed colored copies of this worksheet in the meeting on 6/23/11).

CIP LOAN

FUND BAL.

RATES

April 29, 2011

Mr. David Craddick
Manager and Chief Engineer
Department of Water
County of Kauai
P. O. Box 1706
Lihue, HI 96766

Subject: **Financial Management Planning and Water Rate Analysis**
FRC Revenues and Level of Cash Reserves

Dear Mr. Craddick:

As we discussed on April 12, 2011, we need additional guidance from you to prepare the rate scenarios requested. The purpose of this letter is to re-state the issues and our questions so that further clarification can be obtained from the Board's Finance Committee.

Level of Cash Reserves

The Board has expressed a concern regarding the appropriate level of cash reserves to maintain. Historically, the Department has had significant cash reserves (+$10 million) which is above the industry target of 90 days of the previous year's O&M expenditures. Based on discussions with you and your staff we've modified the model to incorporate a buildup of approximately 90 days of O&M or $4 million to be set aside over a 4-year time period. After this build up is completed, we assumed that the ending balance in subsequent years would reflect a $0 balance. The 90 day assumption can also be modified to a 120-day balance if you prefer. The key issue here is that we should set a target that the Department can support based on its current and future level of operations. A balance needs to be struck between having too much in reserves and too little. Using these industry targets of 90-120 days will provide justification to the financial community and to rate payers as to why a certain level of cash reserves needs to be in place.

Questions to be answered:

- Should a separate Emergency Reserve Fund be set aside equal to 90 or 120 days of O&M?
- What level of cash reserves should the Revenue Fund keep?

Level of FRC Revenues

Since proceeds from the 2010 Bond Sale are financing FRC projects, a corresponding amount of the debt service for those bonds must be paid from FRC revenues. Currently the level of FRC revenues

SAIC Energy, Environment & Infrastructure, LLC
1001 Fourth Avenue, Suite 2500 | Seattle, WA 98154-1004 | tel: 206.695.4700 | fax: 206.695.4701 | saic.com/EEandI

is not generating the necessary amount of revenue to cover the required portion of debt service. Assuming the current level of FRC revenues (~$500,000), these revenues would need to increase by approximately 500% in order to cover debt service obligations (~$2.5 million). Because of the nature of FRC revenues, which are dependent on development, there is some chance that FRC revenues will not be collected at levels needed to cover the required portion of debt service and therefore we need to plan for this potential shortfall. The question is how to do this. Our recommendation is that FRC revenues need to first be increased by some amount. After this assumption is made, we can then run scenarios of how much coverage might be necessary from the Revenue Fund to cover potential shortfalls in FRC revenues. This shortage would need to be paid back over time by the FRC fund to the Revenue Fund and we can incorporate this into the model.

One thing to keep in mind is that under the current model, if we remove projected cash financed capital in all years, there would be enough to pay for the FRC related debt service. The impact of this would be that debt service coverage would fall to about 1.20 in most years (since you would be using cash reserves to pay for debt service as opposed to annually recurring net income) and you would not be able to pay for the planned capital projects. The upside here is that you would not be increasing rates to pay for the potential of FRC revenues not coming in at the necessary levels; however, you might have to sacrifice some bond assurance if this situation (less than expected FRC revenues) materializes.

Question to be answered:

- What level should FRC revenues be increased by?

Once we get answers to the three questions above, we can run additional scenarios. Please let me know if you have any questions. I can be reached at (206) 695-4425.

Sincerely,

SAIC Energy, Environment & Infrastructure, LLC

Ann M. Hajnosz, P.E.
Project Manager

SAIC Energy, Environment & Infrastructure, LLC
1001 Fourth Avenue, Suite 2500 | Seattle, WA 98154-1004 | tel: 206.695.4700 | fax: 206.695.4701 | saic.com/EEandI

Table 4

County of Kauai
Department of Water
Financial Planning Analysis and Water Rate Study

Rates
Fiscal Years Ending June 30

General Rates
($/month)

					Projected (2)					
1 Usage Charges	2008	2009	2010	2011	2012	2013	2014	2015	2016
2 0th Block	$0.00	$0.00	$0.00	$3.20	$3.20	$3.40	$3.60	$3.80	$3.80
3 1st Block	2.55	2.78	3.05	3.20	3.50	3.90	4.35	4.85	4.85
4 2nd Block	3.25	3.55	3.85	4.00	4.25	4.50	5.05	5.65	5.65
5 3rd Block	4.65	5.15	5.70	6.00	6.85	7.60	8.50	9.50	9.50
6 4th Block	n/a	n/a	n/a	6.25	7.20	8.05	8.95	10.00	10.00
7 Note: Historic rates per Kauai Board of Water Supply General Fee Schedule.									
8									
9 Service Charge	2008	2009	2010	2011	2012	2013	2014	2015	2016
10 5/8"	$9.50	$10.00	$10.00	$10.00	$12.00	$14.40	$16.00	$17.75	$17.75
11 3/4"	13.00	14.00	14.00	14.00	16.75	20.00	22.25	24.75	24.75
12 1"	19.00	20.00	20.00	20.00	24.25	29.50	32.75	36.50	36.50
13 1 1/2"	37.50	40.00	40.00	40.00	46.00	53.00	59.00	65.50	65.50
14 2"	57.50	60.00	60.00	60.00	70.00	81.00	90.00	100.00	100.00
15 3"	110.00	120.00	120.00	120.00	132.00	146.75	163.00	181.00	181.00
16 4"	177.50	190.00	190.00	190.00	216.00	240.00	267.00	297.00	297.00
17 6"	342.50	360.00	360.00	360.00	420.00	475.00	528.00	587.00	587.00
18 8"	550.00	580.00	580.00	580.00	680.00	755.00	840.00	934.00	934.00
19									
20 Minimum Usage Charge	2008	2009	2010	2011	2012	2013	2014	2015	2016
21 5/8" (1 Kgal)	$0.00	$0.00	$0.00	$3.20	$3.20	$3.40	$3.60	$3.80	$3.80
22 3/4" (2.5 Kgal)	0.00	0.00	0.00	8.00	8.00	8.50	9.00	9.50	9.50
23 1" (3.5 Kgal)	0.00	0.00	0.00	11.20	11.20	11.90	12.60	13.30	13.30
24 1 1/2" (10 Kgal)	0.00	0.00	0.00	32.00	32.00	34.00	36.00	38.00	38.00
25 2" (12.5 Kgal)	0.00	0.00	0.00	40.00	40.00	42.50	45.00	47.50	47.50
26 3" (50Kgal)	0.00	0.00	0.00	160.00	160.00	170.00	180.00	190.00	190.00
27 4" (175 Kgal)	0.00	0.00	0.00	560.00	560.00	595.00	630.00	665.00	665.00
28 6" (225 Kgal)	0.00	0.00	0.00	720.00	720.00	765.00	810.00	855.00	855.00
29 8" (250 Kgal)	0.00	0.00	0.00	800.00	800.00	850.00	900.00	950.00	950.00

Table 4
County of Kauai
Department of Water
Financial Planning Analysis and Water Rate Study

Rates
Fiscal Years Ending June 30

Agricultural Rates
($/month)

		Actual			Projected (2)					
30	**Usage Charges**	2008	2009	2010	2011	2012	2013	2014	2015	2016
31	1st Block	$1.25	$1.38	$1.53	$1.60	$1.75	$1.90	$2.05	$2.20	$2.20
32	Note: Historic rates per Kauai Board of Water Supply General Fee Schedule.									
33										
34	**Service Charge**									
35	5/8"	$13.50	$15.00	$15.00	$15.00	$15.00	$15.00	$16.00	$17.75	$17.75
36	3/4"	18.00	20.00	20.00	20.00	20.00	20.00	22.25	24.75	24.75
37	1"	27.00	30.00	30.00	30.00	30.00	30.00	32.75	36.50	36.50
38	1 1/2"	50.50	55.00	55.00	55.00	55.00	55.00	59.00	65.50	65.50
39	2"	81.00	90.00	90.00	90.00	90.00	90.00	90.00	100.00	100.00
40	3"	145.00	160.00	160.00	160.00	160.00	160.00	163.00	181.00	181.00
41	4"	235.00	260.00	260.00	260.00	260.00	260.00	267.00	297.00	297.00
42	6"	450.00	500.00	500.00	500.00	500.00	500.00	528.00	587.00	587.00
43	8"	720.00	800.00	800.00	800.00	800.00	800.00	840.00	934.00	934.00

Private Fire Protection
($/month)

		Actual			Projected (2)					
44	**Service Charge**	2008	2009	2010	2011	2012	2013	2014	2015	2016
45	5/8"									
46	3/4"									
47	1"									
48	1 1/2"									
49	2"	$10.00	$11.00	$11.00	$11.00	$20.50	$22.75	$25.25	$28.25	$28.25
50	3"	18.00	20.00	20.00	20.00	35.50	39.50	44.00	49.00	49.00
51	4"	30.50	35.00	35.00	35.00	58.00	64.50	71.75	80.00	80.00
52	6"	67.50	75.00	75.00	75.00	121.00	134.50	149.50	166.00	166.00
53	8"	122.50	135.00	135.00	135.00	206.00	229.00	255.00	283.00	283.00

Public Fire Protection
($/month)

		Actual			Projected (2)					
54	**Service Charge**	2008	2009	2010	2011	2012	2013	2014	2015	2016
55	Standpipe	$4.75	$5.25	$5.25	$5.75	$7.75	$8.75	$9.75	$10.75	$10.75
56	4"	10.13	11.25	11.25	12.40	16.50	18.50	20.50	23.00	23.00
57	6"	28.25	31.00	31.00	34.00	48.50	54.00	60.00	67.00	67.00

Table D

Bi-Monthly Bill Comparison
Current vs. Proposed FY 2012

Agricultural

Meter Size	Bi-Monthly Usage, gallons	Current Rates Effective July 1, 2010 — Current Rate Structure: Bi-Monthly Water Service Charge	Bi-Monthly Water Usage Charge	Bi-Monthly Bill	Average $/kgal	Proposed Rates Effective January 1, 2012 — Proposed Rate Structure: Bi-Monthly Water Service Charge	Bi-Monthly Water Usage Charage	Bi-Monthly Bill	Average $/kgal	% Increase From Current
Agricultural Customers										
5/8"	35,000	$30.00	$56.00	$86.00	$2.46	$30.00	$61.25	$91.25	$2.61	6.1%
5/8"	60,000	$30.00	$96.00	126.00	2.10	$30.00	$105.00	135.00	2.25	7.1%
5/8"	200,000	$30.00	$320.00	350.00	1.75	$30.00	$350.00	380.00	1.90	8.6%
3/4"	35,000	40.00	$56.00	96.00	2.74	40.00	$61.25	101.25	2.89	5.5%
3/4"	60,000	40.00	$96.00	136.00	2.27	40.00	$105.00	145.00	2.42	6.6%
3/4"	200,000	40.00	$320.00	360.00	1.80	40.00	$350.00	390.00	1.95	8.3%
1"	100,000	60.00	$160.00	220.00	2.20	60.00	$175.00	235.00	2.35	6.8%
1"	200,000	60.00	$320.00	380.00	1.90	60.00	$350.00	410.00	2.05	7.9%
1"	500,000	60.00	$800.00	860.00	1.72	60.00	$875.00	935.00	1.87	8.7%
1-1/2"	150,000	110.00	$240.00	350.00	2.33	110.00	$262.50	372.50	2.48	6.4%
1-1/2"	400,000	110.00	$640.00	750.00	1.88	110.00	$700.00	810.00	2.03	8.0%
1-1/2"	1,000,000	110.00	$1,600.00	1,710.00	1.71	110.00	$1,750.00	1,860.00	1.86	8.8%
2"	250,000	180.00	$400.00	580.00	2.32	180.00	$437.50	617.50	2.47	6.5%
2"	500,000	180.00	$800.00	980.00	1.96	180.00	$875.00	1,055.00	2.11	7.7%
2"	1,000,000	180.00	$1,600.00	1,780.00	1.78	180.00	$1,750.00	1,930.00	1.93	8.4%

Footnote:
(1) In 2004, DOW served 326 5/8" customers, 2 3/4" customers, 11 1" customers, 2 1-1/2" customers and 2 2" customers in the Agricultural class.

Table B

Bi-Monthly Bill Comparison

Current vs. Proposed FY 2012

General Use

Meter Size	Bi-Monthly Usage, gallons	Current Rates Effective July 1, 2010 — Existing Rate Structure: Bi-Monthly Water Service Charge	Bi-Monthly Minimum Service Charge	Bi-Monthly Water Usage Charge	Bi-Monthly Bill	Average $/kgal	Proposed Rates Effective January 1, 2012 — Proposed Rate Structure: Bi-Monthly Water Service Charge	Bi-Monthly Minimum Service Charge	Bi-Monthly Water Usage Charge	Bi-Monthly Bill	Average $/kgal	% Increase From Current
5/8"	2,000	$20.00	$6.40	$0.00	$26.40	$13.20	$24.00	$6.40	$0.00	$30.40	$15.20	15.2%
5/8"	7,500	20.00	6.40	17.60	44.00	5.87	24.00	6.40	19.25	49.65	6.62	12.8%
5/8"	20,000	20.00	6.40	62.40	88.80	4.44	24.00	6.40	67.50	97.90	4.90	10.2%
5/8"	35,000	20.00	6.40	136.40	162.80	4.65	24.00	6.40	149.45	179.85	5.14	10.5%
5/8"	60,000	20.00	6.40	292.65	319.05	5.32	24.00	6.40	329.45	359.85	6.00	12.8%
3/4"	30,000	28.00	16.00	80.00	124.00	4.13	33.50	16.00	87.50	137.00	4.57	10.5%
3/4"	75,000	28.00	16.00	237.60	281.60	3.75	33.50	16.00	257.75	307.25	4.10	9.1%
3/4"	125,000	28.00	16.00	459.60	503.60	4.03	33.50	16.00	498.85	548.35	4.39	8.9%
3/4"	175,000	28.00	16.00	770.85	814.85	4.66	33.50	16.00	857.10	906.60	5.18	11.3%
1"	50,000	40.00	22.40	137.60	200.00	4.00	48.50	22.40	150.50	221.40	4.43	10.7%
1"	200,000	40.00	22.40	668.00	730.40	3.65	48.50	22.40	722.75	793.65	3.97	8.7%
1"	300,000	40.00	22.40	1,120.00	1,182.40	3.94	48.50	22.40	1,215.35	1,286.25	4.29	8.8%
1"	400,000	40.00	22.40	1,732.50	1,794.90	4.49	48.50	22.40	1,917.85	1,988.75	4.97	10.8%
1-1/2"	200,000	80.00	64.00	576.00	720.00	3.60	92.00	64.00	630.00	786.00	3.93	9.2%
1-1/2"	500,000	80.00	64.00	1,665.60	1,809.60	3.62	92.00	64.00	1,801.50	1,957.50	3.92	8.2%
1-1/2"	700,000	80.00	64.00	2,515.60	2,659.60	3.80	92.00	64.00	2,716.50	2,872.50	4.10	8.0%
1-1/2"	1,000,000	80.00	64.00	4,371.85	4,515.85	4.52	92.00	64.00	4,850.25	5,006.25	5.01	10.9%
2"	400,000	120.00	80.00	1,200.00	1,400.00	3.50	140.00	80.00	1,312.50	1,532.50	3.83	9.5%
2"	1,000,000	120.00	80.00	3,280.00	3,480.00	3.48	140.00	80.00	3,562.50	3,782.50	3.78	8.7%
2"	1,750,000	120.00	80.00	6,780.00	6,980.00	3.99	140.00	80.00	7,400.00	7,620.00	4.35	9.2%
2"	2,250,000	120.00	80.00	9,880.00	10,080.00	4.48	140.00	80.00	10,965.00	11,185.00	4.97	11.0%
3"	800,000	240.00	320.00	2,240.00	2,800.00	3.50	264.00	320.00	2,450.00	3,034.00	3.79	8.4%
3"	2,000,000	240.00	320.00	6,720.00	7,280.00	3.64	264.00	320.00	7,250.00	7,834.00	3.92	7.6%
3"	3,000,000	240.00	320.00	11,920.00	12,480.00	4.16	264.00	320.00	13,060.00	13,644.00	4.55	9.3%
3"	4,000,000	240.00	320.00	18,045.00	18,605.00	4.65	264.00	320.00	20,085.00	20,669.00	5.17	11.1%
4"	1,000,000	380.00	1,120.00	2,080.00	3,580.00	3.58	432.00	1,120.00	2,275.00	3,827.00	3.83	6.9%
4"	3,500,000	380.00	1,120.00	11,280.00	12,780.00	3.65	432.00	1,120.00	12,150.00	13,702.00	3.91	7.2%
4"	5,500,000	380.00	1,120.00	20,280.00	21,780.00	3.96	432.00	1,120.00	21,950.00	23,502.00	4.27	7.9%
4"	7,000,000	380.00	1,120.00	29,655.00	31,155.00	4.45	432.00	1,120.00	32,750.00	34,302.00	4.90	10.1%
6"	5,000,000	720.00	1,440.00	14,560.00	16,720.00	3.34	840.00	1,440.00	15,925.00	18,205.00	3.64	8.9%
6"	12,000,000	720.00	1,440.00	40,160.00	42,320.00	3.53	840.00	1,440.00	43,425.00	45,705.00	3.81	8.0%
6"	17,500,000	720.00	1,440.00	67,160.00	69,320.00	3.96	840.00	1,440.00	73,300.00	75,580.00	4.32	9.0%
6"	22,500,000	720.00	1,440.00	97,785.00	99,945.00	4.44	840.00	1,440.00	108,425.00	110,705.00	4.92	10.8%
8"	1,000,000	1,160.00	1,600.00	1,600.00	4,360.00	4.36	1,360.00	1,600.00	1,750.00	4,710.00	4.71	8.0%
8"	4,000,000	1,160.00	1,600.00	12,800.00	15,560.00	3.89	1,360.00	1,600.00	13,750.00	16,710.00	4.18	7.4%
8"	20,000,000	1,160.00	1,600.00	106,800.00	109,560.00	5.48	1,360.00	1,600.00	120,750.00	123,710.00	6.19	12.9%
8"	30,000,000	1,160.00	1,600.00	168,050.00	170,810.00	5.69	1,360.00	1,600.00	191,000.00	193,960.00	6.47	13.6%

Revenue Test
Adjusted Rates

Line No.	Meter Size	FY 2012 Average Meters	FY 2012 Monthly Rate	FY 2012 Annual Revenue	FY 2013 Average Meters	FY 2013 Monthly Rate	FY 2013 Annual Revenue	FY 2014 Average Meters	FY 2014 Monthly Rate	FY 2014 Annual Revenue	FY 2015 Average Meters	FY 2015 Monthly Rate	FY 2015 Annual Revenue	FY 2016 Average Meters	FY 2016 Monthly Rate	FY 2016 Annual Revenue
Service Charges:																
0	5/8"	18,963	$12.00	$2,503,100	19,172	$14.40	$3,312,900	19,383	$16.00	$3,721,500	19,596	$17.75	$4,173,900	19,814	$17.75	$4,220,400
1	3/4"	84	16.75	15,500	85	20.00	20,400	86	22.25	23,000	87	24.75	25,800	90	24.75	26,700
2	1"	191	24.25	50,700	193	29.50	68,300	195	32.75	76,600	197	36.50	86,300	200	36.50	87,600
3	1-1/2"	201	46.00	103,700	203	53.00	129,100	205	59.00	145,100	207	65.50	162,700	210	65.50	165,100
4	2"	163	70.00	127,100	165	81.00	160,400	167	90.00	180,400	169	100.00	202,800	171	100.00	205,200
5	3"	52	132.00	78,600	53	146.75	93,300	54	163.00	105,600	55	181.00	119,500	56	181.00	121,600
6	4"	15	216.00	38,500	15	240.00	43,200	15	267.00	48,100	15	297.00	53,500	15	297.00	53,500
7	6"	10	420.00	46,800	10	475.00	57,000	10	528.00	63,400	10	587.00	70,400	10	587.00	70,400
8	8"	3	680.00	22,700	3	755.00	27,200	3	840.00	30,200	3	934.00	33,600	3	934.00	33,600
9	General Service Charges	19,682		$2,984,700	19,899		$3,911,800	20,118		$4,393,900	20,339		$4,928,500	20,569		$4,984,100
10																
11	5/8"	402	$15.00	$72,400	406	$15.00	$73,100	410	$16.00	$78,700	416	$17.75	$88,600	422	$17.75	$89,900
12	3/4"	5	20.00	1,200	5	20.00	1,200	5	22.25	1,300	5	24.75	1,500	5	24.75	1,500
13	1"	12	30.00	4,300	12	30.00	4,300	12	32.75	4,700	12	36.50	5,300	12	36.50	5,300
14	1-1/2"	3	55.00	2,000	3	55.00	2,000	3	58.00	2,100	3	65.50	2,400	3	65.50	2,400
15	2"	1	90.00	1,100	1	90.00	1,100	1	90.00	1,100	1	100.00	1,200	1	100.00	1,200
16	Agricultural Service Charges	423		$81,000	427		$81,700	431		$87,900	437		$99,000	443		$100,300
17																
18	2"	59	$20.50	$11,200	60	$22.75	$16,400	61	$25.25	$18,500	62	$28.25	$21,000	63	$28.25	$21,400
19	3"	5	35.50	1,700	5	39.50	2,400	5	44.00	2,600	5	49.00	2,900	5	49.00	2,900
20	4"	22	58.00	12,300	22	64.50	17,000	22	71.75	18,900	22	80.00	21,100	22	80.00	21,100
21	6"	44	121.00	51,700	44	134.50	71,000	44	149.50	78,900	44	166.00	87,600	44	166.00	87,600
22	8"	52	206.00	106,400	53	229.00	145,600	54	255.00	165,200	55	283.00	186,800	56	283.00	190,200
23	Private Fire Service Charges	182		$183,300	184		$252,400	186		$284,100	188		$319,400	190		$323,200
24																
25	5/8"	19,365		$2,575,500	19,578		$3,386,000	19,793		$3,800,200	20,012		$4,262,500	20,236		$4,310,300
26	3/4"	89		16,700	90		21,600	91		24,300	92		27,300	95		28,200
27	1"	203		55,000	205		72,600	207		81,300	209		91,600	212		92,800
28	1-1/2"	204		105,700	206		131,100	208		147,200	210		165,100	213		167,500
29	2"	223		138,400	226		177,900	229		200,000	232		225,000	235		227,800
30	3"	57		80,300	58		95,700	59		108,200	60		122,400	61		124,500
31	4"	37		48,800	37		60,200	37		67,000	37		74,600	37		74,600
32	6"	54		98,500	54		128,000	54		142,300	54		158,000	54		158,000
33	8"	55		129,100	56		172,800	57		195,400	58		220,400	59		223,800
34	Total Service Charges	20,287		$3,249,000	20,510		$4,245,900	20,735		$4,765,900	20,964		$5,346,900	21,202		$5,407,600
35																
36	% Difference	1.1%		11.5%	1.1%		30.7%	1.1%		12.2%	1.1%		12.2%	1.1%		1.1%
37																
38	*Minimum Usage Charge:*	Average Meters	Usage Rate	Annual Revenue	Average Meters	Usage Rate	Annual Revenue	Average Meters	Usage Rate	Annual Revenue	Average Meters	Usage Rate	Annual Revenue	Average Meters	Usage Rate	Annual Revenue
39																
40	**General Customers**															
41	Zero Block (Minimum Usage Charge)															
42	5/8" 0 2,000	18,963	$3.20	$728,200	19,172	$3.40	$782,200	19,383	$3.60	$837,300	19,596	$3.80	$893,600	19,814	$3.80	$903,500
43	3/4" 0 5,000	84	8.00	8,100	85	8.50	8,700	86	9.00	9,300	87	9.50	9,900	90	9.50	10,300
44	1" 0 7,000	191	11.20	25,700	193	11.90	27,500	195	12.60	29,500	197	13.30	31,400	200	13.30	31,900
45	1-1/2" 0 20,000	201	32.00	77,200	203	34.00	82,800	205	36.00	88,600	207	38.00	94,400	210	38.00	95,800
46	2" 0 25,000	163	40.00	78,200	165	42.50	84,200	167	45.00	90,200	169	47.50	96,300	171	47.50	97,500
47	3" 0 100,000	52	160.00	98,800	53	170.00	108,100	54	180.00	116,600	55	190.00	125,400	56	190.00	127,700
48	4" 0 350,000	15	560.00	100,800	15	595.00	107,100	15	630.00	113,400	15	665.00	119,700	15	665.00	119,700
49	6" 0 450,000	10	720.00	86,400	10	765.00	91,800	10	810.00	97,200	10	855.00	102,600	10	855.00	102,600
50	8" 0 500,000	3	800.00	28,800	3	850.00	30,600	3	900.00	32,400	3	950.00	34,200	3	950.00	34,200
51	Total Zero Block	19,682		$1,233,200	19,899		$1,329,100	20,118		$1,414,600	20,339		$1,507,500	20,569		$1,523,200
52																

900

			FY 2012			FY 2013			FY 2014			FY 2015			FY 2016		
Consumption Charges:			Usage 000 gal	Usage Rate	Annual Revenue	Usage 000 gal	Usage Rate	Annual Revenue	Usage 000 gal	Usage Rate	Annual Revenue	Usage 000 gal	Usage Rate	Annual Revenue	Usage 000 gal	Usage Rate	Annual Revenue
General Customers																	
First Block																	
5/8"	2,000	14,000	1,053,800	$3.50	$3,530,200	1,065,400	$3.90	$4,155,100	1,077,100	$4.35	$4,685,400	1,089,000	$4.85	$5,281,700	1,101,000	$4.85	$5,339,900
3/4"	6,000	56,000	16,500	3.50	55,300	16,700	3.90	65,100	16,900	4.35	73,500	17,100	4.85	82,900	17,200	4.85	83,400
1"	7,000	137,000	64,600	3.50	216,400	65,400	3.90	255,100	66,100	4.35	287,500	66,800	4.85	324,000	67,500	4.85	327,400
1-1/2"	20,000	338,000	182,000	3.50	609,700	184,000	3.90	717,600	186,000	4.35	809,100	188,100	4.85	912,300	190,100	4.85	922,000
2"	25,000	800,000	255,500	3.50	855,900	258,300	3.90	1,007,400	261,100	4.35	1,135,800	264,000	4.85	1,280,400	266,900	4.85	1,294,500
3"	100,000	1,200,000	215,800	3.50	722,300	218,000	3.90	850,200	220,400	4.35	958,700	222,800	4.85	1,080,600	225,300	4.85	1,092,700
4"	350,000	2,000,000	127,800	3.50	428,100	129,200	3.90	503,900	130,600	4.35	568,100	132,000	4.85	640,200	133,500	4.85	647,500
6"	450,000	8,000,000	245,900	3.50	823,800	248,500	3.90	969,200	251,300	4.35	1,093,200	254,000	4.85	1,231,900	256,800	4.85	1,245,500
8"	500,000	2,000,000	17,800	3.50	59,600	18,000	3.90	70,200	18,200	4.35	79,200	18,400	4.85	89,200	18,700	4.85	90,700
Total 1st Block			2,179,500		$7,301,300	2,203,500		$8,593,800	2,227,700		$9,690,500	2,252,200		$10,923,200	2,277,000		$11,043,600
Second Block																	
5/8"	14,001	28,000	518,200	$4.25	$2,137,600	523,900	$4.50	$2,357,600	529,700	$5.05	$2,675,000	535,500	$5.65	$3,025,600	541,400	$5.65	$3,058,900
3/4"	58,001	114,000	9,200	4.25	38,000	9,300	4.50	41,900	9,400	5.05	47,500	9,500	5.65	53,700	9,600	5.65	54,200
1"	137,001	274,000	18,200	4.25	75,100	18,400	4.50	82,800	18,600	5.05	93,900	18,800	5.65	106,200	19,000	5.65	107,400
1-1/2"	338,001	675,000	54,700	4.25	225,600	55,300	4.50	248,900	55,800	5.05	282,300	56,500	5.65	319,200	57,200	5.65	323,200
2"	800,001	1,500,000	72,700	4.25	299,900	73,500	4.50	330,800	74,300	5.05	375,200	75,100	5.65	424,300	75,900	5.65	428,800
3"	1,200,001	2,400,000	101,400	4.25	418,300	102,500	4.50	461,300	103,800	5.05	523,200	104,800	5.65	592,100	105,900	5.65	598,300
4"	2,000,001	5,000,000	63,400	4.25	261,500	64,100	4.50	288,500	64,800	5.05	327,200	65,500	5.65	370,100	66,200	5.65	374,000
6"	8,000,001	15,000,000	95,500	4.25	398,100	97,500	4.50	438,800	98,600	5.05	497,900	99,700	5.65	563,300	100,800	5.65	569,500
8"	2,000,001	5,000,000	29,900	4.25	123,300	30,300	4.50	136,400	30,600	5.05	154,500	30,900	5.65	174,600	31,300	5.65	176,800
Total 2nd Block			964,200		$3,977,400	974,800		$4,387,000	985,500		$4,976,700	996,300		$5,629,100	1,007,300		$5,691,100
Third Block																	
5/8"	28,001	35,000	116,000	$6.85	$745,300	117,300	$7.60	$891,500	118,600	$8.50	$1,008,100	119,900	$9.50	$1,139,100	121,200	$9.50	$1,151,400
3/4"	114,001	130,000	1,800	6.85	11,600	1,800	7.60	13,700	1,800	8.50	15,300	1,800	9.50	17,100	1,800	9.50	17,100
1"	274,001	350,000	4,400	6.85	28,300	4,500	7.60	34,200	4,500	8.50	38,300	4,600	9.50	43,700	4,600	9.50	43,700
1-1/2"	675,001	775,000	10,100	6.85	64,800	10,200	7.60	77,500	10,300	8.50	87,600	10,500	9.50	99,800	10,600	9.50	100,700
2"	1,500,001	1,850,000	14,800	6.85	85,100	14,900	7.60	113,200	15,100	8.50	128,400	15,300	9.50	145,400	15,400	9.50	146,300
3"	2,400,001	3,500,000	32,200	6.85	206,900	32,500	7.60	247,000	32,900	8.50	279,700	33,200	9.50	315,400	33,600	9.50	319,200
4"	5,000,001	5,500,000	4,000	6.85	25,700	4,000	7.60	30,400	4,100	8.50	34,900	4,100	9.50	39,000	4,200	9.50	39,900
6"	15,000,001	20,000,000	49,900	6.85	320,600	50,400	7.60	383,000	51,000	8.50	433,500	51,500	9.50	489,300	52,100	9.50	495,000
8"	5,000,001	25,000,000	5,200	6.85	33,400	5,300	7.60	40,300	5,300	8.50	45,100	5,400	9.50	51,300	5,500	9.50	52,300
Total 3rd Block			238,400		$1,531,800	240,900		$1,830,800	243,600		$2,070,900	246,300		$2,340,100	249,000		$2,365,600
Fourth Block																	
5/8"	over	35,000	430,800	$7.20	$2,897,100	435,600	$8.05	$3,506,600	440,400	$8.95	$3,941,600	445,200	$10.00	$4,452,000	450,100	$10.00	$4,501,000
3/4"	over	130,000	16,400	7.20	110,300	16,500	8.05	132,800	16,700	8.95	149,500	16,900	10.00	169,000	17,100	10.00	171,000
1"	over	350,000	8,800	7.20	59,200	8,900	8.05	71,600	9,000	8.95	80,600	9,100	10.00	91,000	9,200	10.00	92,000
1-1/2"	over	775,000	54,700	7.20	367,900	55,300	8.05	445,200	55,900	8.95	500,300	56,500	10.00	566,000	57,200	10.00	572,000
2"	over	1,850,000	37,700	7.20	253,500	38,100	8.05	306,700	38,500	8.95	344,600	38,900	10.00	389,000	39,300	10.00	393,000
3"	over	3,500,000	18,800	7.20	126,400	19,000	8.05	153,000	19,300	8.95	172,700	19,500	10.00	195,000	19,700	10.00	197,000
4"	over	5,500,000	3,600	7.20	24,200	3,600	8.05	29,000	3,700	8.95	33,100	3,700	10.00	37,000	3,700	10.00	37,000
6"	over	20,000,000	22,200	7.20	149,300	22,500	8.05	181,100	22,700	8.95	203,200	23,000	10.00	230,000	23,200	10.00	232,000
8"	over	25,000,000	0	7.20	0	0	8.05	0	0	8.95	0	0	10.00	0	0	10.00	0
Total 4th Block			593,000		$3,987,900	599,500		$4,826,000	606,200		$5,425,600	612,900		$6,129,000	619,500		$6,195,000
Total General Service			3,975,100		$16,798,400	4,018,700		$19,637,600	4,083,000		$22,163,700	4,107,700		$25,021,400	4,152,800		$25,295,300
% Difference			1.1%		6.4%	1.1%		16.9%	1.1%		12.8%	1.1%		12.9%	1.1%		1.1%
Agricultural Customers																	
Total Agricultural			193,300	$1.75	$338,300	195,400	$1.90	$371,300	197,600	$2.05	$405,100	199,800	$2.20	$439,600	202,000	$2.20	$444,400
Total Cons. Charges			4,168,400		$17,136,700	4,214,100		$20,008,900	4,280,600		$22,568,800	4,307,500		$25,461,000	4,354,800		$25,739,700
% Difference			1.1%		6.4%	1.1%		16.8%	1.1%		12.8%	1.1%		12.8%	1.1%		1.1%
TOTAL CALCULATED REVENUES (1)					$21,618,900			$25,577,900			$28,749,200			$32,315,400			$32,670,500
% Difference					6.8%			18.3%			12.4%			12.4%			1.1%
ADJUSTMENT FACTOR					-5.55%			-5.53%			-5.53%			-5.52%			-5.52%
ADJUSTED CALCULATED REVENUES					$20,418,400			$24,162,300			$27,159,400			$30,539,600			$30,867,400
REVENUE REQUIRED					$20,403,051			$24,154,182			$27,154,751			$30,528,384			$30,864,207
DIFFERENCE					$16,349			$8,118			$4,649			$2,216			$3,193
					0.08%			0.03%			0.02%			0.01%			0.01%

Footnotes
(1) Excludes Public Fire Protection revenue.

DEPARTMENT OF WATER, COUNTY OF KAUAI/WATER RATE STUDY
SECTION 2: INPUT OF SYSTEM LOAD DATA
Fiscal Year Ending June 30

Line No.	Description	FY 2012 Total System
1	Total Annual Sales (gallons)	4,560,000,000
2		
3	Fire Protection & No-Charge Use (gallons) (1)	45,600,000
4		
5	Total Annual Customers	20,287
6		
7	Average Annual Customer Usage	224,774
8		
9	Average-Day Units/Day (gallons per day)	12,616,082
10		
11	Peak-Day Units/Day (gallons per day)	19,805,644
12		
13	Ratio: Peak Day/Average Day	1.57
14	General Service Peak Ratio	1.50
15	Agricultural Peak Ratio	1.70
16		
17	Excess Demand	7,187,562
18	(Peak day - Average day)	
19		
20	Allocation Factor for Base Cost	64%
21	(Average-Day Units/Day/Peak-Day Units/Day)	

Footnotes:
(1) Assumed 1% of Total Annual Sales based on 'FiscalBilling by Fiscal Year 2007-2009.xls'.

007

800

DEPARTMENT OF WATER, COUNTY OF KAUAI/WATER RATE STUDY
SECTION 3: CLASSIFICATION OF NET PLANT FOR FY 2009
Fiscal Year Ending June 30

Line No.	Description	Total	Base	Extra Capacity	Customer Costs Meters	Customer Costs Customers	Direct Fire Protection	Base	Extra Capacity	Customer Costs Meters	Customer Costs Customers	FP	Allocation Factor
1	Source of Supply												
2	Structures and Improvements	$207,403	$207,403	$0	$0	$0	$0	100	0	0	0	0	Factor Base
3	Land and Land Rights	20,274	20,274	0	0	0	0	100	0	0	0	0	Factor Base
4	Lakes, Rivers & Other Intakes	3,860	3,860	0	0	0	0	100	0	0	0	0	Factor Base
5	Wells and Springs	7,752,160	7,752,160	0	0	0	0	100	0	0	0	0	Factor Base
6	Infiltration Galleries & Tunnels	56,401	56,401	0	0	0	0	100	0	0	0	0	Factor Base
7	Total	$8,040,098	$8,040,098	$0	$0	$0	$0	100	0	0	0	0	Factor Base
8													
9	Pumping Plant												
10	Structures and Improvements	$9,139,387	$5,849,208	$3,290,179	$0	$0	$0	64	36	0	0	0	Factor Base/EC
11	Land and Land Rights	381	244	137	0	0	0	64	36	0	0	0	Factor Base/EC
12	Electric Pumping Equipment	23,011,214	14,727,177	8,284,037	0	0	0	64	36	0	0	0	Factor Base/EC
13	Total	$32,150,982	$20,576,629	$11,574,353	$0	$0	$0						
14													
15	Treatment Plant												
16	Structures and Improvements	$182,786	$116,983	$65,803	$0	$0	$0	64	36	0	0	0	Factor Base/EC
17	Land and Land Rights	150	96	54	0	0	0	64	36	0	0	0	Factor Base/EC
18	Water Treatment Equipment	1,981,043	1,267,867	713,175	0	0	0	64	36	0	0	0	Factor Base/EC
19	Total	$2,163,979	$1,384,946	$779,032	$0	$0	$0						
20													
21	Transmission and Distribution Plant												
22	Distribution Reservoirs & Standpipe	$33,111,397	$21,191,293	$11,920,103	$0	$0	$0	64	36	0	0	0	Factor Base/EC
23	Land and Land Rights	499,259	319,526	179,733	0	0	0	64	36	0	0	0	Factor Base/EC
24	Transmission & Distribution Mains	85,339,280	54,617,139	30,722,141	0	0	0	64	36	0	0	0	Factor Base/EC
25	Services	12,499,424	0	0	12,499,424	0	0	0	0	100	0	0	Factor Meter
26	Meters	4,579,148	0	0	4,579,148	0	0	0	0	100	0	0	Factor Meter
27	Hydrants	7,621,737	76,217	0	0	0	7,545,520	1	0	0	0	99	Factor FP
28	Total	$143,650,244	$76,204,175	$42,821,977	$17,078,572	$0	$7,545,520	53	30	12	0	5	Factor TD
29													
30	SUBTOTAL: Net Utility Plant	$186,005,303	$106,205,848	$55,175,362	$17,078,572	$0	$7,545,520	57	30	9	0	4	Factor P

Source: Department of Water Supply, Summary of Fixed Assets Additions and Retirements (Adjusted) and Summary of Accumulated Depreciation Additions and Retirements as of June 30, 2009.

DEPARTMENT OF WATER, COUNTY OF KAUAI/WATER RATE STUDY
SECTION 1: INPUT RANGE
Fiscal Year Ending June 30

Line No.		Input Range	
1	Budget Year	2012	(Fiscal Year ending June 30)
2	Rate Setting Year	2012	(Fiscal Year ending June 30)
3			
4			
5			
6	Scenario Number		
7			
8	Inflation:		
9	Customer Growth	1.10%	
10	Water Sales Growth	1.10%	
11	Rounding Option	-2	
12	% of Extra Capacity recovered from Consumption Charges	67%	
13			
14	Days in Year	365	

600

010

DEPARTMENT OF WATER, COUNTY OF KAUAI/WATER RATE STUDY
SECTION 3: CLASSIFICATION OF NET PLANT FOR FY 2009 (CONTINUED)
Fiscal Year Ending June 30

Line No.	Description	Total	Base	Extra Capacity	Customer Costs Meters	Customer Costs Customers	Direct Fire Protection	Basis of Classification Base	Extra Capacity	Customer Costs Meters	Customer Costs Customers	FP	Allocation Factor
	General Plant												
1	Structures and Improvements	$5,057,395	$2,887,772	$1,500,022	$464,269	$0	$205,330	57	30	9	0	4	Factor P
2	Office Furniture & Equipment	69,011	39,405	20,469	6,335	0	2,802	57	30	9	0	4	Factor P
3	Engineering Furniture & Equipment	55,838	31,884	16,562	5,126	0	2,267	57	30	9	0	4	Factor P
4	Shop Furniture and Equipment	28,501	16,274	8,453	2,615	0	1,157	57	30	9	0	4	Factor P
5	Administration Furniture and Equipment	72,766	41,549	21,581	6,680	0	2,954	57	30	9	0	4	Factor P
6	Microbiological Lab Furniture and Equipmer	155,803	88,964	46,211	14,303	0	6,326	57	30	9	0	4	Factor P
7	Computer Equipment and Software	1,080,999	617,251	320,625	99,236	0	43,869	57	30	9	0	4	Factor P
8	Transportation Equipment	1,818,020	1,038,090	539,225	166,894	0	73,812	57	30	9	0	4	Factor P
9	Stores Equipment	80,329	45,868	23,826	7,374	0	3,261	57	30	9	0	4	Factor P
10	Tools, Shop & Garage Equipment	508,755	290,499	150,897	46,704	0	20,655	57	30	9	0	4	Factor P
11	Laboratory Equipment	0	0	0	0	0	0	57	30	9	0	4	Factor P
12	Power-Operated Equipment	406,777	232,270	120,650	37,342	0	16,515	57	30	9	0	4	Factor P
13	Communication Equipment	384,362	219,471	114,002	35,284	0	15,605	57	30	9	0	4	Factor P
14	Utility Plan Held for Future Use	5,456	3,115	1,618	501	0	222	57	30	9	0	4	Factor P
15	Miscellaneous Equipment	8,372	4,781	2,483	769	0	340	57	30	9	0	4	Factor P
16	Total General Plant	$9,732,385	$5,557,193	$2,886,624	$893,433	$0	$395,135						
17	Total Net Utility Plant	$195,737,688	$111,763,041	$58,061,986	$17,972,005	$0	$7,940,655	57	30	9	0	4	Factor P

Source: Department of Water Supply, Schedule of Fixed Assets & Depreciation Expense for the FY Ending June 30, 2009.

DEPARTMENT OF WATER, COUNTY OF KAUAI/WATER RATE STUDY
SECTION 4: CLASSIFICATION OF OPERATING EXPENSES AND OTHER REVENUES FOR FY 2012
Fiscal Year Ending June 30

Line No.	Description	FY 2012 Total	Base	Extra Capacity	Customer Costs Meters	Customer Costs Customers	Direct Fire Protection	Basis of Classification Base	Extra Capacity	Customer Costs Meters	Customer Costs Customers	FP	Allocation Factor
1	**Operating Expenses**												
2	Source of Supply	$3,008,611	$1,925,511	$1,083,100	$0	$0	$0	64	36	0	0	0	Factor Base/EC
3	Water Treatment Plant	2,624,967	1,679,979	944,988	0	0	0	64	36	0	0	0	Factor Base/EC
4	Transmission and Distribution	3,389,668	1,796,630	1,016,960	406,784	0	169,493	53	30	12	0	5	Factor TD
5	Customer Services (1)	875,881	0	0	17,514	858,167	0	0	0	2	98	0	Factor Meter/Cust
6	SUBTOTAL:Total O&M less	$9,899,126	$5,402,120	$3,045,048	$424,298	$858,167	$169,493	55	31	4	9	2	Factor less PP&A
7	Power, Pumping and Admin												
8													
9	Power and Pumping	$3,100,000	$1,984,000	$1,116,000	$0	$0	$0	64	36	0	0	0	Factor Base/EC
10													
11	Administrative and Engineering	$3,260,122	$1,760,027	$1,004,118	$140,165	$283,631	$55,422	55	31	4	9	2	Factor less PP&A
12													
13	Manager's Office	$0	$0	$0	$0	$0	$0	55	31	4	9	2	Factor less PP&A
14													
15	County Service Charge	$925,133	$505,123	$284,941	$39,781	$80,487	$15,727	55	31	4	9	2	Factor less PP&A
16													
17	Vehicles	$275,600	$150,478	$84,885	$11,851	$23,977	$4,685	55	31	4	9	2	Factor less PP&A
18													
19	Other Operating Expenses	$551,400	$301,064	$169,831	$23,710	$47,972	$9,374	55	31	4	9	2	Factor less PP&A
20													
21	Adjustments to Operating Expenses	($701,397)	($394,186)	($222,343)	($25,250)	($50,501)	($9,820)	56	32	4	7	1	Factor OE less Adj
22													
23	Total Operating Expenses	$17,309,984	$9,728,627	$5,482,480	$614,575	$1,243,733	$244,881	56	32	4	7	1	Factor OE

Footnotes:
(1) Classification factor based on percent of Meter Part costs to total Customer Service Costs.

011

FY 2012 Cost of Service Analysis
Fiscal Years Ending June 30

012

DEPARTMENT OF WATER, COUNTY OF KAUAI/WATER RATE STUDY
SECTION 4: CLASSIFICATION OF REVENUE REQUIREMENTS FOR FY 2012
Fiscal Year Ending June 30

Line No.	Description	FY 2012 Total	Base	Extra Capacity	Customer Costs Meters	Customer Costs Customers	Direct Fire Protection	Basis of Classification Base	Extra Capacity	Customer Costs Meters	Customer Costs Customers	FP	Allocation Factor
1	**Total Operating Expense**	$17,309,984	$9,728,627	$5,482,480	$514,575	$1,243,733	$244,881	57	32	4	7	1	Factor OE
	Capital Requirements												
2	Debt Service (1)	$4,529,880	$2,853,824	$1,449,561	$0	$0	$181,185	63	32	0	0	4	Factor P less Mtrs
3	Transfer to Emergency Reserve Fund	$1,020,153	581,487	326,449	40,806	71,411	10,202	57	32	4	7	1	Factor OE
4	Capital Costs Charged to Operations (1)	10,035,882	6,322,606	3,211,482	0	0	401,435	63	32	0	0	4	Factor P less Mtrs
5	Total Capital Requirements	$15,585,914	$9,757,917	$4,987,492	$40,806	$71,411	$592,832						
	Other Revenues												
6	Miscellaneous Receipts	($112,000)	($63,840)	($35,840)	($4,480)	($7,840)	($1,120)	57	32	4	7	1	Factor OE
7	Other - SRF Loans (1)	0	0	0	0	0	0	63	32	0	0	4	Factor P less Mtrs
8	BAB Subsidy	(715,616)	(472,306)	(243,309)	0	0	0	66	34	0	0	0	
9	Grant - Drought Mitigation	(126,500)	(83,490)	(43,010)	0	0	0	66	34	0	0	0	
10	Cost of Power Adjustment	(1,383,517)	(913,121)	(470,396)	0	0	0	66	34	0	0	0	
11	Interest Earned	(355,000)	(209,450)	(113,600)	(7,100)	(14,200)	(10,650)	59	32	2	4	3	Factor Rev. Reqt less Int
12	Total Other Revenue	($2,692,633)	($1,742,207)	($906,155)	($11,580)	($22,040)	($11,770)						
13	**Subtotal**	$30,203,265	$17,744,337	$9,563,817	$643,801	$1,293,104	$825,943	59	32	2	4	3	Factor Subtotal
14	**Use of Utility Fund Reserves**	($8,875,082)	($5,591,302)	($2,840,028)	$0	$0	($355,003)	63	32	0	0	4	Factor P Less Mtrs
15	**System Cost of Service**	$21,328,183	$12,153,035	$6,723,791	$643,801	$1,293,104	$470,940	57	32	3	6	2	Factor Rev. Reqt

Footnotes:
(1) Meter costs are collected through initial customer installation charges and FRC revenues.

DEPARTMENT OF WATER, COUNTY OF KAUAI/WATER RATE STUDY
SECTION 5: SUMMARY OF COST OF SERVICE FOR FY 2012
Fiscal Year Ending June 30

Line No.		FY 2012 Total Revenue Requirement	Base	Extra Capacity	Meters	Customers	Direct Fire Protection
1	Operating Expenses	$17,309,984	$9,728,627	$5,482,480	$614,575	$1,243,733	$244,681
2	Other Revenues	(2,692,633)	(1,742,207)	(906,155)	(11,580)	(22,040)	(11,770)
	Net Operating Expenses	$14,617,351	$7,986,420	$4,576,325	$602,995	$1,221,693	$233,111
3	Capital Expenditures	$10,035,882	$6,322,606	$3,211,482	$0	$0	$401,435
4	Debt Service	$4,529,880	$2,853,824	$1,449,561	$0	$0	$181,195
5	Transfer to Emergency Reserve Fund	$1,020,153	$581,487	$326,449	$40,806	$71,411	$10,202
6	Use of Utility Fund Reserves	($8,875,082)	($5,591,302)	($2,840,026)	$0	$0	($355,003)
7	Total Revenue Requirement	$21,328,183	$12,153,035	$6,723,791	$643,801	$1,293,104	$470,940
			57%	32%	3%	6%	2%
8	Revenue Requirement (Less County Service Charge)	$20,403,050					
9	Revenue at Current Rates (1)	$20,246,183					
10	Over (Under) Cost of Service	($1,082,000)					
11	As a Percent of Current Revenue	5.34%					
12	Rev. at % Rate Increase (2)	$21,379,970	11.20%				
13	Change in Revenue	$1,133,786					

Footnotes:
(1) Potable, Private and Public Fire Protection rate revenue.
(2) 6 months of rate increase in 2012.

013

014

DEPARTMENT OF WATER, COUNTY OF KAUAI/WATER RATE STUDY
SECTION 6: DEVELOPMENT OF AVERAGE UNIT COSTS FOR FY 2012
Fiscal Year Ending June 30

Line No.	Meter Size	Projected Average FY 2012 Meters GS	AG	Total GS + AG	Private Fire Protection
1	5/8	18,963	402	19,365	
2	3/4	84	5	89	
3	1	191	12	203	
4	1 1/2	201	3	204	
5	2	163	1	164	59
6	3	52	0	52	5
7	4	15	0	15	22
8	6	10	0	10	44
9	8	3	0	3	52
10	Total	19,682	423	20,105	182
11					
12					

Potable & Fire Protection

Maximum Flow (gpm) (1)	Equivalents Relative to 5/8" Meter	FY 2012 No. of Meters	Equivalent 5/8" Meters
20	1.0	19,365	19,365
30	1.5	89	134
50	2.5	203	508
100	5.0	204	1,020
160	8.0	223	1,784
300	15.0	57	855
500	25.0	37	925
1000	50.0	54	2,700
1600	80.0	55	4,400
		20,287	31,691

Public Fire Protection - Hydrants

	Demand Factor (2)	Projected FY 2012 No. of Hydrants	Equivalent FP Connections
Standpipe	18	352	6,330
4	38	41	1,571
6	111	2,193	244,105
Total		2,586	252,005

General Service

Meter Size	Maximum Flow (gpm)	Equivalents Relative to 5/8" Meter	Projected FY 2012 No. of Meters	Equivalent 5/8" Meters
5/8	20	1.0	18,963	18,963
3/4	30	1.5	84	126
1	50	2.5	191	478
1 1/2	100	5.0	201	1,005
2	160	8.0	163	1,304
3	300	15.0	52	780
4	500	25.0	15	375
6	1000	50.0	10	500
8	1600	80.0	3	240
Total			19,682	23,771

Agricultural

Equivalents Relative to 5/8" Meter	Projected FY 2012 No. of Meters	Equivalent 5/8" Meters
1.0	402	402
1.5	5	8
2.5	12	30
5.0	3	15
8.0	1	8
15.0	0	0
25.0	0	0
50.0	0	0
80.0	0	0
	423	463

Private Fire Protection

Meter Size	Demand Factor (2)	Projected FY 2012 No. of Meters	Capacity Equivalent FP Connections	Meters Equivalent 5/8" Meters
2	6	59	365	472
3	18	5	90	75
4	38	22	843	550
6	111	44	4,898	2,200
8	237	52	12,335	4,160
Total		182	18,531	7,457

	Base	Peak Ratio	Days in the Year	Peak Day	Average Day	Extra Capacity (Kgal/day)
Total System	4,605,600,000	1.57	365	19,805,644	12,618,082	7,188
General Service	4,366,700,000	1.50	365	17,945,342	11,963,562	5,982
Agricultural	193,300,000	1.70	365	900,301	529,589	371
Fire Protection (3)	45,600,000		365	960,000	124,932	835
	4,605,600,000			19,805,644	12,618,082	7,188

Footnotes:
(1) AWWA M6, pages 28-29.
(2) AWWA M1, page 224.
(3) Peak per AWWA Manual page 222 - fire demand 4,000 gpm with 4 hour duration.

DEPARTMENT OF WATER, COUNTY OF KAUAI/WATER RATE STUDY
SECTION 6: DEVELOPMENT OF AVERAGE UNIT COSTS FOR FY 2012
Fiscal Year Ending June 30

Line No.	Item	Total	Base	Extra Capacity	Customer Costs: Meters	Customer Costs: (1) Bills	Direct Fire Protection
1	Total System Units of Services		4,605,600	7,188	31,691	121,722	270,536
2	Total		Kgal	Kgal/day	projected equivalent meters	projected bills	projected equivalent connections
3							
4							
5	O&M Expenses	$14,617,351	$7,986,420	$4,576,325	$602,995	$1,221,693	$233,111
6	Unit Cost		$1.734	$636.662	$19.027	$10.037	$0.862
7							
8	Capital Requirements	$10,035,882	$6,322,606	$3,211,482	$0	$0	$401,435
9	Unit Cost		$1.373	$446.784	$0.000	$0.000	$1.484
10							
11	Debt Service	$4,529,660	$2,853,824	$1,449,561	$0	$0	$181,195
12	Unit Cost		$0.620	$201.664	$0.000	$0.000	$0.670
13							
14	Transfer to Emergency Reserve Fund	$1,020,153	$581,487	$326,449	$40,806	$71,411	$10,202
15	Unit Cost		$0.126	$45.418	$1.288	$0.587	$0.038
16							
17	Use of Utility Fund Reserves	($8,875,082)	($5,591,302)	($2,840,026)	$0	$0	($355,003)
18	Unit Cost		($1.214)	($395.107)	$0.000	$0.000	($1.312)
19							
20	Total Unit Cost of Service	$21,328,183	$12,153,035	$6,723,791	$643,801	$1,293,104	$470,940
21	Total from Line 32	$21,284,673	$2.639	$935.419	$20.315	$10.623	$1.741

Line No.	Item	Total	Base	Extra Capacity	Customer Costs: Meters	Customer Costs: (1) Customers	Direct Fire Protection	Total Avg Charge per Kgal	Consumption Charge per Kgal	(2) Capacity Charge per equiv. Meter/month	(3) Direct Fire Charge per equiv. conn./month
22	Total System:										
23	Unit Cost of Service	$4.631	$2.639	$935.419	$20.315	$10.623	$1.741				
24		per Kgal	per Kgal	per Kgal/day	per year	per bill	per year				
25	General Service:										
26	Units of service		4,366,700	5,982	23,771	118,092	0				
27	Allocated Cost of Service	$18,855,762	$11,522,638	$5,595,676	$482,907	$1,254,541	$0	$4.32	$3.50	$12.56	
28	Agricultural:										
29	Units of service		193,300	371	463	2,538	0				
30	Allocated Cost of Service	$893,479	$510,071	$347,040	$9,406	$26,962	$0	$4.62	$3.84	$27.16	
31	Public & Private Fire										
32	Units of service		45,600	835	7,457	1,092	270,536				
33	Allocated Cost of Service	$1,535,432	$120,327	$781,075	$151,489	$11,601	$470,940			$0.28	$0.16
34											
35	Total:										
36	Units of service		4,605,600	7,188	31,691	121,722	270,536				
37	Allocated Cost of Service	$21,284,673	$12,153,036	$6,723,791	$643,802	$1,293,104	$470,940	$4.62	$3.62	$12.17	

Footnotes:
(1) Projected FY 2012 bills based on 6 bills per customer.
(2) Includes 1/3 of Extra Capacity costs.
(3) For standby service capacity.

015

County of Kauai
Department of Water
Financial Planning Analysis and Water Rate Study

FY 2012 Cost of Service Analysis
Fiscal Years Ending June 30

DEPARTMENT OF WATER, COUNTY OF KAUAI/WATER RATE STUDY
SECTION 7: RATE DESIGN

Line No.	Cost Classification	FY 2012 Revenue Requirement	Potable: Revenues Needed from Consumption Charges at COS	Potable: Revenues Needed from Monthly Service Charge at COS: Based on Customers	Potable: Revenues Needed from Monthly Service Charge at COS: Based on Meters	Fire Protection: Revenues Needed from Monthly Service Charge at COS: Private	Fire Protection: Revenues Needed from Monthly Service Charge at COS: Public
1	Base	$12,153,035	$12,032,709	$0	$0	$5,788	$114,539
2	Extra Capacity	6,723,791	3,981,620	0	1,961,096	$53,500	$727,575
3	Meters	643,801	0	0	492,313	$151,489	0
4	Customers	1,293,104	0	1,281,503	0	$11,601	0
5	Direct Fire Protection	470,940	0	0	0	0	$470,940
6	Total Rev. Requirement	$21,284,671	$16,014,329	$1,281,503	$2,453,409	$222,378	$1,313,054
7	check	$21,284,673	Total Srvc. Ch.	$3,734,912			
8		$21,328,183					

9 **Monthly Service Charge:**

Potable

Meter Size	Average # of Meters	Meter Index Number (1)	Equivalent 5/8" Meters	Meters: Annual Revenue Required	Meters: Monthly Meter Charge (2)	Capacity: Annual Revenue Required	Capacity: Monthly Capacity Charge (3)	Customer: Monthly Customer Charge (4)	COS Monthly Service Charge	Annual Rev. from Service Charges at COS	Existing Service Charge
5/8	19,365	1.0	19,365	$392,722	$1.69	$1,566,241	$6.74	$5.31	$13.74	$3,192,901	$10.00
3/4	89	1.5	134	2,707	2.54	10,797	10.11	5.31	17.96	19,176	14.00
1	203	2.5	508	10,282	4.23	41,047	16.85	5.31	26.39	64,274	20.00
1 1/2	204	5.0	1,020	20,686	8.45	82,498	33.70	5.31	47.46	116,182	40.00
2	164	8.0	1,312	26,607	13.52	106,115	53.92	5.31	72.75	143,172	60.00
3	52	15.0	780	15,818	25.35	63,088	101.10	5.31	131.76	82,218	120.00
4	15	25.0	375	7,605	42.25	30,330	168.50	5.31	216.06	38,891	190.00
6	10	50.0	500	10,140	84.50	40,440	337.00	5.31	426.81	51,217	360.00
8	3	80.0	240	4,867	135.20	19,411	539.20	5.31	679.71	24,470	580.00
	20,105		24,233	$491,445		$1,959,965				$3,732,501	

Public Fire Protection - Hydrants

Meter Size	Average # of Hydrants	Demand Factor	Charge per Equiv. Unit	COS Monthly Service Charge	Annual Rev. from Service Charges at COS	Proposed Monthly Service Charge	Annual Rev. from Service Charges at Proposed Rates	Existing Service Charge
Standpipe	352	18	$0.43	$7.79	$32,905	$7.75	$32,736	$ 5.75
4	41	36	0.43	16.61	8,172	16.50	8,118	12.40
6	2,193	111	0.43	48.24	1,269,484	48.50	1,276,326	34.00
					$1,310,561		$1,317,180	

Private Fire Protection

Meter Size	Average # of Meters	Meter: Meter Index Number (1)	Meter: Equivalent 5/8" Meters	Meter: Monthly Charge (2)	Capacity: (1) Demand Factor	Capacity: (5) Charge per Equiv. Unit	Capacity: Monthly Service Charge	Customer: Monthly Customer Charge (4)	COS Monthly Service Charge	Annual Rev. from Service Charges at COS	Proposed Monthly Service Charge	Annual Rev. from Service Charges at Proposed Rates	Existing Service Charge
2	59	8.0	472	$13.52	6	$0.28	$1.72	$5.31	$20.55	$14,549	$20.50	$14,514	$11.00
3	5	15.0	75	25.35	18	0.28	4.99	5.31	35.65	2,139	35.50	2,130	20.00
4	22	25.0	550	42.25	38	0.28	10.64	5.31	58.20	15,365	58.00	15,312	35.00
6	44	50.0	2,200	84.50	111	0.28	30.91	5.31	120.72	63,740	121.00	63,888	75.00
8	52	80.0	4,160	135.20	237	0.28	65.86	5.31	206.37	128,775	206.00	128,544	135.00
			7,457							$224,568		$224,388	

Consumption Charge at COS per 1,000 Gallons:

Est. FY 2012 Consumption Related Costs	$16,014,329	
Est. FY 2012 Water Consumption (000 gals.)	4,605,600	$3.48

Footnotes:
(1) From AWWA Meter Manual.
(2) Monthly meter charge per 5/8" meter = $1.69 (Revenue needed from Meters portion of Service Charge based on Meters/Equivalent 5/8" Meters/12)
(3) Monthly capacity charge per 5/8" meter = $6.74 (Revenue needed from Extra Capacity portion of Service Charge based on Meters/Equivalent 5/8" Meters/12)
(4) Monthly customer charge per customer = $5.31 (Revenue needed from Customer portion of Service Charge based on Customers/Average # of Meters/12)
(5) See Section 6 for details.

Craddick, David

From: Hajnosz, Ann M. <ANN.M.HAJNOSZ@saic.com>
Sent: Thursday, August 25, 2011 7:57 AM
To: Craddick, David
Cc: Baker, Andrew S.; Yano, Marites
Subject: Responses
Attachments: 2010 Kauai Water Rate Study - 082411.pdf; 2010 Kauai Water Rate Study - 082411.xls

David – here are the responses to your questions. I know that this spreadsheet is pretty complex there at the end so I apologize for that. We also had some hidden columns in there so I'm sure it was not easy to decipher. Here is the information you asked for – the line numbers pertain to the attached pdf and spreadsheet.

Line 105: Usage: This is the sum of the Total Consumption for Blocks 1-4.
Revenue: This is the sum of the Total Revenue from Consumption Charges from Blocks 1-4.

Line 106: Zero Block Consumption: We added this line to clarify things. This is a calculation of the amount of consumption that occurs in the Zero Block. It is calculated the same way the other calculations of consumption by block were calculated, by taking the product of the Block Percentages and the total consumption by class. Ex: 403,900 kGal in 2012 for the 2" size (from Table 2 of the rate model), times 5.77% consumption in the Zero Block for the 2" (from Table 5 of the rate model) = 23,305 kGal consumed in the Zero Block in 2012 for the 2".
The value in this line is the sum of the Zero Block consumption for all the meter sizes.

Line 107: This is the sum of the usage on Line 105 and Line 106.

Line 108: Usage: This is the % difference in total general service consumption from 2011.
Revenue: This is the % difference in total general service consumption revenue from 2011.

Line 111: Usage: Total Agriculture: This is directly from Table 2 in the rate model.
Revenue: This is the product of the amount of usage and the usage rate.

Line 113: Usage: This is the sum of the Total General Service consumption and Total Agricultural consumption
Revenue: This is the sum of the Total General Service consumption revenue and Total Agricultural consumption revenue.

Line 114: Usage: This is the % difference in total consumption from 2011.
Revenue: This is the % difference in total consumption revenue from 2011.

Line 116: This is the sum of Total General Service Consumption revenue ($16,798,400), Total Agricultural consumption revenue ($338,300), Total Service Charge revenue ($3,249,000), and Minimum Usage Charge (Zero Block) revenue ($1,233,200).

Line 117: This is the % difference from 2011.

Line 118: This is an Adjustment Factor to correct for the difference between the consumption in the budget and the revenue in the budget. Some additional information on this calculation is provided below:

The Adjustment Factor was calculated in the following manner:

The Total Calculated Revenues under Existing Rates were calculated: $20,456,100 in FY2012. (see Revenues worksheet cell J120 – there are some rounding differences here)
The Revenue at Existing Rates (per 2012 budget) is $19,321,050.

The Adjustment Factor = [(Revenue at Existing Rates per Budget) / (Calculated Revenue at Existing Rates)] – 1, or
Adjustment Factor = [$19,321,050/$20,456,100] – 1 = -5.55%

Line 119: These are the total revenues, adjusted down to be consistent with the 2012 Budget.

Line 121: This is the revenue requirement, per the Op Statement (Table 9).

Line 123: This is the difference between the adjusted calculated revenues from Line 119 and the revenue requirement from Line 121.

Ag. Rates – you may recall that we had this discussion and it was determined that we should continue the policy of subsidizing the Agricultural consumption rate, rather than bringing it up to cost of service. On this basis, we increased the consumption rate at the same level as prior rate increases. The Agricultural service charge was in fact already above cost of service. Because we could not identify a reason for Agricultural service charges to be higher than General Service, we held the Ag service charge steady until the General Service service charge surpassed it (in 2014), and then kept the two rates the same.

We hope this helps your understanding of the calculations. I'm afraid I'll be mostly out touch today – I'm driving down to Portland to attend the parent orientation at the University of Portland where our daughter is a new freshman. Andy is in the office and is available to answer questions. His number is 206.695.4486. I'll try to check in later tonight to make sure you have everything you need for the meeting tomorrow.

Ann

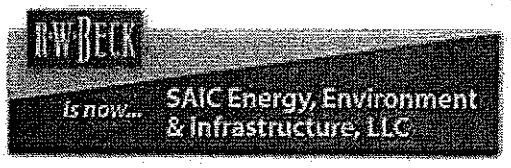
Ann Miyahira Hajnosz, PE
Water Section Co-Lead | Water, Environment & Transportation
SAIC Energy, Environment & Infrastructure, LLC
office: 206.695.4425 | mobile: 425.503.3731
1001 4th Avenue, Suite 2500
Seattle, WA 98154-1004

Please note my e-mail address has changed to:
ann.m.hajnosz@saic.com

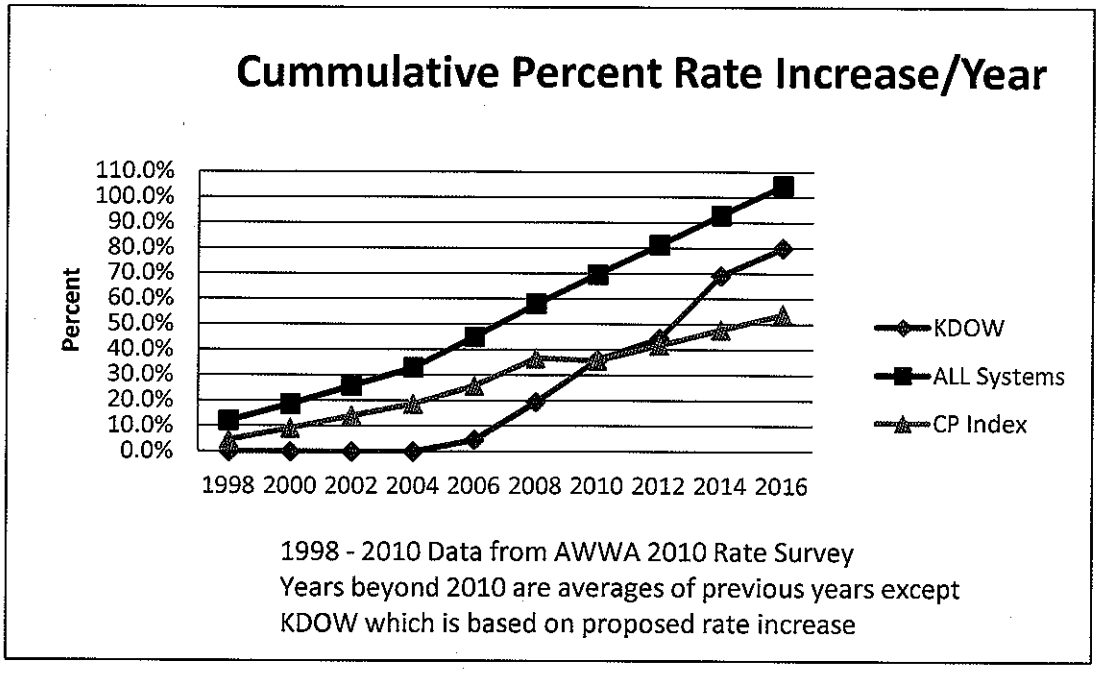
Energy | Environment | National Security | Health | Critical Infrastructure

Please consider the environment before printing this email.

This email and any attachments to it are intended only for the identified recipients. It may contain proprietary or otherwise legally protected information of SAIC. Any unauthorized use or disclosure of this communication is strictly prohibited. If you have received this communication in error, please notify the sender and delete or otherwise destroy the email and all attachments immediately.



	KDOW	ALL Systems	CP Index
1998	0.0%	12.3%	4.7%
2000	0.0%	18.8%	9.2%
2002	0.0%	26.0%	14.1%
2004	0.0%	33.0%	18.7%
2006	4.6%	45.1%	25.8%
2008	19.5%	58.1%	36.7%
2010	36.0%	69.7%	35.8%
2012	44.4%	81.3%	41.8%
2014	69.1%	92.9%	47.8%
2016	79.9%	104.5%	53.8%



Copyright AWWA and Raftelis Financial Consultants,Inc., 2010 All Rights Reserved.

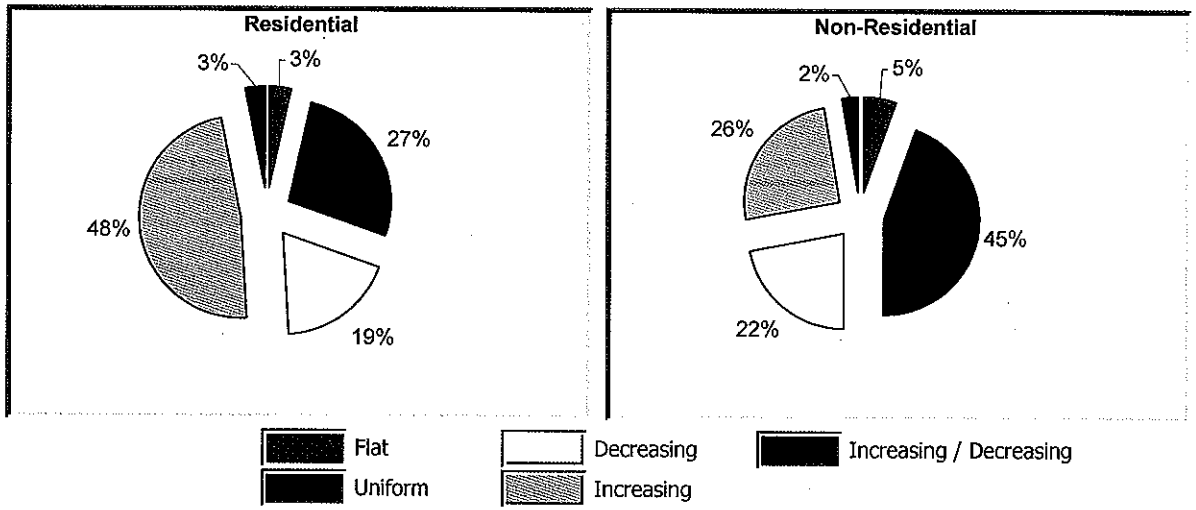
Charts

U.S. Water Rate Structure

Print

19

Water page



REVISED RATE TABLE DELAYING HALF THE 2012 INCREASE TO 2013 THEN CONTINUING THIS IMPLEMENTATION METHODOLOGY TO 2016 WHERE THERE PREVIOUSLY WAS NO INCREASE.
THIS HAS THE EFFECT OF DELAYING HALF THE PROPOSED INCREASE FOR ONE YEAR.

Table 4
County of Kauai
Department of Water
Financial Planning Analysis and Water Rate Study

Rates
Fiscal Years Ending June 30

General Rates
($/month)

		Historic (1)				Projected (2)											
1	**Usage Charges**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**		**2013**			**2014**			**2015**		**2016**
2	0th Block		$0.00	$0.00	$0.00	$3.20	$3.20	$0.00	$3.20	$3.40	$0.10	$3.30	$3.60	$0.15	$3.45	$3.80	$0.18	$3.63	$3.80
3	1st Block	$2.35	2.55	2.78	3.05	3.20	3.50	$0.15	$3.35	3.90	$0.20	$3.55	4.35	$0.40	$3.95	4.85	$0.45	$4.40	4.85
4	2nd Block	$2.90	3.25	3.55	3.85	4.00	4.25	$0.13	$4.13	4.50	$0.13	$4.25	5.05	$0.40	$4.65	5.65	$0.50	$5.15	5.65
5	3rd Block	$4.15	4.65	5.15	5.70	6.00	6.85	$0.43	$6.43	7.60	$0.38	$6.80	8.50	$0.85	$7.65	9.50	$0.93	$8.58	9.50
6	4th Block		n/a	n/a	n/a	6.25	7.20	$0.48	$6.73	8.05	$0.43	$7.15	8.95	$0.90	$8.05	10.00	$0.98	$9.03	10.00
7	Note: Historic rates per Kauai Board of Water Supply General Fee Schedule.																		
8																			
9	**Service Charge**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**		**2013**			**2014**			**2015**		**2016**
10	5/8"	$9.00	$9.50	$10.00	$10.00	$10.00	$12.00	$1.00	$11.00	$14.40	$1.20	$13.20	$16.00	$1.40	$14.60	$17.75	$1.58	$16.18	$17.75
11	3/4"	$12.00	13.00	14.00	14.00	14.00	16.75	$1.38	$15.38	20.00	$1.63	$16.38	22.25	$1.94	$20.31	24.75	$2.22	$22.53	24.75
12	1"	$18.00	19.00	20.00	20.00	20.00	24.25	$2.13	$22.13	29.50	$2.63	$26.88	32.75	$2.94	$29.81	36.50	$3.34	$33.16	36.50
13	1 1/2"	$35.00	37.50	40.00	40.00	40.00	46.00	$3.00	$43.00	53.00	$3.50	$49.50	59.00	$4.75	$54.25	65.50	$5.63	$59.88	65.50
14	2"	$55.00	57.50	60.00	60.00	60.00	70.00	$5.00	$65.00	81.00	$5.50	$75.50	90.00	$7.25	$82.75	100.00	$8.63	$91.38	100.00
15	3"	$100.00	110.00	120.00	120.00	120.00	132.00	$6.00	$126.00	146.75	$7.38	$139.38	163.00	$11.81	$151.19	181.00	$14.91	$166.09	181.00
16	4"	$165.00	177.50	190.00	190.00	190.00	216.00	$13.00	$203.00	240.00	$12.00	$228.00	267.00	$19.50	$247.50	297.00	$24.75	$272.25	297.00
17	6"	$325.00	342.50	360.00	360.00	360.00	420.00	$30.00	$390.00	475.00	$27.50	$447.50	528.00	$40.25	$487.75	587.00	$49.63	$537.38	587.00
18	8"	$520.00	550.00	580.00	580.00	580.00	680.00	$50.00	$630.00	755.00	$37.50	$717.50	840.00	$61.25	$778.75	934.00	$77.63	$856.38	934.00
19																			
20	**Minimum Usage Charge**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**		**2013**			**2014**			**2015**		**2016**
21	5/8" (1 Kgal)	$0.00	$0.00	$0.00	$0.00	$3.20	$3.20			$3.40	$3.30	$3.60		$3.45	$3.80		$3.63	$3.80	
22	3/4" (2.5 Kgal)	$0.00	0.00	0.00	0.00	8.00	8.00			8.50		9.00			9.50			9.50	
23	1" (3.5 Kgal)	$0.00	0.00	0.00	0.00	11.20	11.20			11.90		12.60			13.30			13.30	
24	1 1/2" (10 Kgal)	$0.00	0.00	0.00	0.00	32.00	32.00			34.00		36.00			38.00			38.00	
25	2" (12.5 Kgal)	$0.00	0.00	0.00	0.00	40.00	40.00			42.50		45.00			47.50			47.50	
26	3" (50Kgal)	$0.00	0.00	0.00	0.00	160.00	160.00			170.00		180.00			190.00			190.00	
27	4" (175 Kgal)	$0.00	0.00	0.00	0.00	560.00	560.00			595.00		630.00			665.00			665.00	
28	6" (225 Kgal)	$0.00	0.00	0.00	0.00	720.00	720.00			765.00		810.00			855.00			855.00	
29	8" (250 Kgal)	$0.00	0.00	0.00	0.00	800.00	800.00			850.00		900.00			950.00			950.00	

Agricultural Rates
($/month)

		Historic (1)				Projected (2)				
30	**Usage Charges**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
31	1st Block	$1.13	$1.25	$1.38	$1.53	$1.60	$1.75	$1.90	$2.05	$2.20	$2.20
32	Note: Historic rates per Kauai Board of Water Supply General Fee Schedule.										
33											
34	**Service Charge**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
35	5/8"	$12.00	$13.50	$15.00	$15.00	$15.00	$15.00	$15.00	$16.00	$17.75	$17.75
36	3/4"	$16.00	18.00	20.00	20.00	20.00	20.00	20.00	22.25	24.75	24.75
37	1"	$24.00	27.00	30.00	30.00	30.00	30.00	30.00	32.75	36.50	36.50
38	1 1/2"	$46.00	50.50	55.00	55.00	55.00	55.00	55.00	59.00	65.50	65.50
39	2"	$72.00	81.00	90.00	90.00	90.00	90.00	90.00	90.00	100.00	100.00
40	3"	$130.00	145.00	160.00	160.00	160.00	160.00	160.00	163.00	181.00	181.00
41	4"	$210.00	235.00	260.00	260.00	260.00	260.00	260.00	267.00	297.00	297.00
42	6"	$400.00	450.00	500.00	500.00	500.00	500.00	500.00	528.00	587.00	587.00
43	8"	$640.00	720.00	800.00	800.00	800.00	800.00	800.00	840.00	934.00	934.00

County of Kauai
Department of Water
Financial Planning Analysis and Water Rate Study

Revenue Test
Adjusted Rates

Line No.	Meter Size			FY 2012 Average Meters	FY 2012 Monthly Rate	FY 2012 Annual Revenue	FY 2013 Average Meters	FY 2013 Monthly Rate	FY 2013 Annual Revenue	FY 2014 Average Meters	FY 2014 Monthly Rate	FY 2014 Annual Revenue	FY 2015 Average Meters	FY 2015 Monthly Rate	FY 2015 Annual Revenue	FY 2016 Average Meters	FY 2016 Monthly Rate	FY 2016 Annual Revenue
Service Charges:																		
0	5/8"			18,963	$12.00	$2,503,100	19,172	$14.40	$3,312,900	19,383	$16.00	$3,721,500	19,596	$17.75	$4,173,900	19,814	$17.75	$4,220,400
1	3/4"			84	16.75	15,500	85	20.00	20,400	86	22.25	23,000	87	24.75	25,800	90	24.75	26,700
2	1"			191	24.25	50,700	193	29.50	68,300	195	32.75	76,600	197	36.50	86,300	200	36.50	87,600
3	1-1/2"			201	46.00	103,700	203	53.00	129,100	205	59.00	145,100	207	65.50	162,700	210	65.50	165,100
4	2"			163	70.00	127,100	165	81.00	160,400	167	90.00	180,400	169	100.00	202,800	171	100.00	205,200
5	3"			52	132.00	78,600	53	146.75	93,300	54	163.00	105,600	55	181.00	119,500	56	181.00	121,600
6	4"			15	216.00	36,500	15	240.00	43,200	15	267.00	48,100	15	297.00	53,500	15	297.00	53,500
7	6"			10	420.00	46,800	10	475.00	57,000	10	528.00	63,400	10	587.00	70,400	10	587.00	70,400
8	8"			3	680.00	22,700	3	755.00	27,200	3	840.00	30,200	3	934.00	33,600	3	934.00	33,600
9	General Service Charges			19,682		$2,984,700	19,899		$3,911,800	20,118		$4,393,900	20,339		$4,928,500	20,569		$4,984,100
10																		
11	5/8"			402	$15.00	$72,400	406	$15.00	$73,100	410	$16.00	$78,700	416	$17.75	$88,600	422	$17.75	$89,900
12	3/4"			5	20.00	1,200	5	20.00	1,200	5	22.25	1,300	5	24.75	1,500	5	24.75	1,500
13	1"			12	30.00	4,300	12	30.00	4,300	12	32.75	4,700	12	36.50	5,300	12	36.50	5,300
14	1-1/2"			3	55.00	2,000	3	55.00	2,000	3	59.00	2,100	3	65.50	2,400	3	65.50	2,400
15	2"			1	90.00	1,100	1	90.00	1,100	1	90.00	1,100	1	100.00	1,200	1	100.00	1,200
16	Agricultural Service Charges			423		$81,000	427		$81,700	431		$87,900	437		$99,000	443		$100,300
17																		
18	2"			59	$20.50	$11,200	60	$22.75	$16,400	61	$25.25	$18,500	62	$28.25	$21,000	63	$28.25	$21,400
19	3"			5	35.50	1,700	5	39.50	2,400	5	44.00	2,600	5	49.00	2,900	5	49.00	2,900
20	4"			22	58.00	12,300	22	64.50	17,000	22	71.75	18,900	22	80.00	21,100	22	80.00	21,100
21	6"			44	121.00	51,700	44	134.50	71,000	44	149.50	78,900	44	166.00	87,600	44	166.00	87,600
22	8"			52	206.00	106,400	53	229.00	145,600	54	255.00	165,200	55	283.00	186,800	56	283.00	190,200
23	Private Fire Service Charges			182		$183,300	184		$252,400	186		$284,100	188		$319,400	190		$323,200
24																		
25	5/8"			19,365		$2,575,500	19,578		$3,386,000	19,793		$3,800,200	20,012		$4,262,500	20,236		$4,310,300
26	3/4"			89		16,700	90		21,600	91		24,300	92		27,300	95		28,200
27	1"			203		55,000	205		72,600	207		81,300	209		91,600	212		92,900
28	1-1/2"			204		105,700	206		131,100	208		147,200	210		165,100	213		167,500
29	2"			223		139,400	226		177,900	229		200,000	232		225,000	235		227,800
30	3"			57		80,300	58		95,700	59		108,200	60		122,400	61		124,500
31	4"			37		48,800	37		60,200	37		67,000	37		74,600	37		74,600
32	6"			54		98,500	54		128,000	54		142,300	54		158,000	54		158,000
33	8"			55		129,100	56		172,800	57		195,400	58		220,400	59		223,800
34	Total Service Charges			20,287		$3,249,000	20,510		$4,245,900	20,735		$4,765,900	20,964		$5,346,900	21,202		$5,407,600
35																		
36	% Difference			1.1%		11.5%	1.1%		30.7%	1.1%		12.2%	1.1%		12.2%	1.1%		1.1%
37																		
38	*Minimum Usage Charge:*			Average Meters		Usage Rate	Annual Revenue	Average Meters		Usage Rate	Annual Revenue	Average Meters		Usage Rate	Annual Revenue	Average Meters		Usage Rate	Annual Revenue	Average Meters		Usage Rate	Annual Revenue
39																						
40	**General Customers**																					
41	Zero Block (Minimum Usage Charge)																					
42	5/8"	0	2,000	18,963		$3.20	$728,200	19,172		$3.40	$782,200	19,383		$3.60	$837,300	19,596		$3.80	$893,600	19,814		$3.80	$903,500
43	3/4"	0	5,000	84		8.00	8,100	85		8.50	8,700	86		9.00	9,300	87		9.50	9,900	90		9.50	10,300
44	1"	0	7,000	191		11.20	25,700	193		11.90	27,600	195		12.60	29,500	197		13.30	31,400	200		13.30	31,900
45	1-1/2'	0	20,000	201		32.00	77,200	203		34.00	82,800	205		36.00	88,600	207		38.00	94,400	210		38.00	95,800
46	2"	0	25,000	163		40.00	78,200	165		42.50	84,200	167		45.00	90,200	169		47.50	96,300	171		47.50	97,500
47	3"	0	100,000	52		160.00	99,800	53		170.00	108,100	54		180.00	116,600	55		190.00	125,400	56		190.00	127,700
48	4"	0	350,000	15		560.00	100,800	15		595.00	107,100	15		630.00	113,400	15		665.00	119,700	15		665.00	119,700
49	6"	0	450,000	10		720.00	86,400	10		765.00	91,800	10		810.00	97,200	10		855.00	102,600	10		855.00	102,600
50	8"	0	500,000	3		800.00	28,800	3		850.00	30,600	3		900.00	32,400	3		950.00	34,200	3		950.00	34,200
51	Total Zero Block			19,682			$1,233,200	19,899			$1,323,100	20,118			$1,414,500	20,339			$1,507,500	20,569			$1,523,200
52																						

005

				FY 2012			FY 2013			FY 2014			FY 2015			FY 2016		
Consumption Charges:			Usage 000 gal	Usage Rate	Annual Revenue	Usage 000 gal	Usage Rate	Annual Revenue	Usage 000 gal	Usage Rate	Annual Revenue	Usage 000 gal	Usage Rate	Annual Revenue	Usage 000 gal	Usage Rate	Annual Revenue
General Customers																	
First Block																	
5/8"	2,000	14,000	1,053,800	$3.50	$3,530,200	1,065,400	$3.90	$4,155,100	1,077,100	$4.35	$4,685,400	1,089,000	$4.85	$5,281,700	1,101,000	$4.85	$5,339,900
3/4"	5,000	58,000	16,500	3.50	55,300	16,700	3.90	65,100	16,900	4.35	73,500	17,100	4.85	82,900	17,200	4.85	83,400
1"	7,000	137,000	64,600	3.50	216,400	65,400	3.90	255,100	66,100	4.35	287,500	66,800	4.85	324,000	67,500	4.85	327,400
1-1/2'	20,000	338,000	182,000	3.50	609,700	184,000	3.90	717,600	186,000	4.35	809,100	188,100	4.85	912,300	190,100	4.85	922,000
2"	25,000	800,000	255,500	3.50	855,900	258,300	3.90	1,007,400	261,100	4.35	1,135,800	264,000	4.85	1,280,400	266,900	4.85	1,294,500
3"	100,000	1,200,000	215,600	3.50	722,300	218,000	3.90	850,200	220,400	4.35	958,700	222,800	4.85	1,080,600	225,300	4.85	1,092,700
4"	350,000	2,000,000	127,800	3.50	428,100	129,200	3.90	503,900	130,600	4.35	568,100	132,000	4.85	640,200	133,500	4.85	647,500
6"	450,000	8,000,000	245,900	3.50	823,800	248,500	3.90	969,200	251,300	4.35	1,093,200	254,000	4.85	1,231,900	256,800	4.85	1,245,500
8"	500,000	2,000,000	17,800	3.50	59,600	18,000	3.90	70,200	18,200	4.35	79,200	18,400	4.85	89,200	18,700	4.85	90,700
Total 1st Block			2,179,500		$7,301,300	2,203,500		$8,593,800	2,227,700		$9,690,500	2,252,200		$10,923,200	2,277,000		$11,043,600
Second Block																	
5/8"	14,001	28,000	518,200	$4.25	$2,137,600	523,900	$4.50	$2,357,600	529,700	$5.05	$2,675,000	535,500	$5.65	$3,025,600	541,400	$5.65	$3,058,900
3/4"	58,001	114,000	9,200	4.25	38,000	9,300	4.50	41,900	9,400	5.05	47,500	9,500	5.65	53,700	9,600	5.65	54,200
1"	137,001	274,000	18,200	4.25	75,100	18,400	4.50	82,800	18,600	5.05	93,900	18,800	5.65	106,200	19,000	5.65	107,400
1-1/2'	338,001	675,000	54,700	4.25	225,600	55,300	4.50	248,900	55,900	5.05	282,300	56,500	5.65	319,200	57,200	5.65	323,200
2"	800,001	1,500,000	72,700	4.25	299,900	73,500	4.50	330,800	74,300	5.05	375,200	75,100	5.65	424,300	75,900	5.65	428,800
3"	1,200,001	2,400,000	101,400	4.25	418,300	102,500	4.50	461,300	103,600	5.05	523,200	104,800	5.65	592,100	105,900	5.65	598,300
4"	2,000,001	5,000,000	63,400	4.25	261,500	64,100	4.50	288,500	64,800	5.05	327,200	65,500	5.65	370,100	66,200	5.65	374,000
6"	8,000,001	15,000,000	96,500	4.25	398,100	97,500	4.50	438,800	98,600	5.05	497,900	99,700	5.65	563,300	100,800	5.65	569,500
8"	2,000,001	5,000,000	29,900	4.25	123,300	30,300	4.50	136,400	30,600	5.05	154,500	30,900	5.65	174,600	31,300	5.65	176,800
Total 2nd Block			964,200		$3,977,400	974,800		$4,387,000	985,500		$4,976,700	996,300		$5,629,100	1,007,300		$5,691,100
Third Block																	
5/8"	28,001	35,000	116,000	$6.85	$745,300	117,300	$7.60	$891,500	118,600	$8.50	$1,008,100	119,900	$9.50	$1,139,100	121,200	$9.50	$1,151,400
3/4"	114,001	130,000	1,800	6.85	11,600	1,800	7.60	13,700	1,800	8.50	15,300	1,800	9.50	17,100	1,800	9.50	17,100
1"	274,001	350,000	4,400	6.85	28,300	4,500	7.60	34,200	4,500	8.50	38,300	4,600	9.50	43,700	4,600	9.50	43,700
1-1/2'	675,001	775,000	10,100	6.85	64,900	10,200	7.60	77,500	10,300	8.50	87,600	10,500	9.50	99,800	10,600	9.50	100,700
2"	1,500,001	1,850,000	14,800	6.85	95,100	14,900	7.60	113,200	15,100	8.50	128,400	15,300	9.50	145,400	15,400	9.50	146,300
3"	2,400,001	3,500,000	32,200	6.85	206,900	32,500	7.60	247,000	32,900	8.50	279,700	33,200	9.50	315,400	33,600	9.50	319,200
4"	5,000,001	5,500,000	4,000	6.85	25,700	4,000	7.60	30,400	4,100	8.50	34,900	4,100	9.50	39,000	4,200	9.50	39,900
6"	15,000,001	20,000,000	49,900	6.85	320,600	50,400	7.60	383,000	51,000	8.50	433,500	51,500	9.50	489,300	52,100	9.50	495,000
8"	5,000,001	25,000,000	5,200	6.85	33,400	5,300	7.60	40,300	5,300	8.50	45,100	5,400	9.50	51,300	5,500	9.50	52,300
Total 3rd Block			238,400		$1,531,800	240,900		$1,830,800	243,600		$2,070,900	246,300		$2,340,100	249,000		$2,365,600
Fourth Block																	
5/8"	over	35,000	430,800	$7.20	$2,897,100	435,600	$8.05	$3,506,600	440,400	$8.95	$3,941,600	445,200	$10.00	$4,452,000	450,100	$10.00	$4,501,000
3/4"	over	130,000	16,400	7.20	110,300	16,500	8.05	132,800	16,700	8.95	149,500	16,900	10.00	169,000	17,100	10.00	171,000
1"	over	350,000	8,800	7.20	59,200	8,900	8.05	71,600	9,000	8.95	80,600	9,100	10.00	91,000	9,200	10.00	92,000
1-1/2'	over	775,000	54,700	7.20	367,900	55,300	8.05	445,200	55,900	8.95	500,300	56,600	10.00	566,000	57,200	10.00	572,000
2"	over	1,850,000	37,700	7.20	253,500	38,100	8.05	306,700	38,500	8.95	344,600	38,900	10.00	389,000	39,300	10.00	393,000
3"	over	3,500,000	18,800	7.20	126,400	19,000	8.05	153,000	19,300	8.95	172,700	19,500	10.00	195,000	19,700	10.00	197,000
4"	over	5,500,000	3,600	7.20	24,200	3,600	8.05	29,000	3,700	8.95	33,100	3,700	10.00	37,000	3,700	10.00	37,000
6"	over	20,000,000	22,200	7.20	149,300	22,500	8.05	181,100	22,700	8.95	203,200	23,000	10.00	230,000	23,200	10.00	232,000
8"	over	25,000,000	0	7.20	0	0	8.05	0	0	8.95	0	0	10.00	0	0	10.00	0
Total 4th Block			593,000		$3,987,900	599,500		$4,826,000	606,200		$5,425,600	612,900		$6,129,000	619,500		$6,195,000
General Service			3,975,100		$16,798,400	4,018,700		$19,637,600	4,063,000		$22,163,700	4,107,700		$25,021,400	4,152,800		$25,295,300
Zero Block Consumption			387,400			391,700			396,000			400,400			404,800		
Total General Service Sold			4,362,500			4,410,400			4,459,000			4,508,100			4,557,600		
% Difference			1.1%		6.4%	1.1%		16.9%	1.1%		12.9%	1.1%		12.9%	1.1%		1.1%
Agricultural Customers																	
Total Agricultural			193,300	$1.75	$338,300	195,400	$1.90	$371,300	197,600	$2.05	$405,100	199,800	$2.20	$439,600	202,000	$2.20	$444,400
Total Cons. Charges			4,555,800		$17,136,700	4,605,800		$20,008,900	4,656,600		$22,568,800	4,707,900		$25,461,000	4,759,600		$25,739,700
% Difference			1.1%		6.4%	1.1%		16.8%	1.1%		12.8%	1.1%		12.8%	1.1%		1.1%
TOTAL CALCULATED REVENUES (1)					$21,618,900			$25,577,900			$28,749,200			$32,315,400			$32,670,500
% Difference					6.8%			18.3%			12.4%			12.4%			1.1%
ADJUSTMENT FACTOR					-5.55%			-5.53%			-5.53%			-5.52%			-5.52%
ADJUSTED CALCULATED REVENUES					$20,419,400			$24,162,300			$27,159,400			$30,530,600			$30,867,400
REVENUE REQUIRED					$20,403,051			$24,154,182			$27,154,751			$30,528,384			$30,864,207
DIFFERENCE					$16,349			$8,118			$4,649			$2,216			$3,193
					0.08%			0.03%			0.02%			0.01%			0.01%

Footnotes
(1) Excludes Public Fire Protection revenue.

Bi-monthly Total Comparison of the Different Counties

Approximate total cost for family of 4
bi-monthly total: 2 x 7500 gal = 15,000 gal
*bi-monthly total: 2 x 10.027 = 20.05 Ccf
Use Charge (UC)
Service Charge (SC)
Cost of Power Adjustment (CPA)

Use Charge

County	Block 1	Block 2	Block 3	Block 1	Block 2	Block 3	UC
Big Island	$0.89	$1.80		5	10		$22.45
Kauai	$3.20	$4.00		12	1		$42.40
Honolulu (current)	$2.79	$3.36		13	2		$42.99
Honolulu (proposed)	$3.06	$3.68		13	2		$47.14
Maui	$1.75	$3.20		5	10		$40.75
Princeville Utilities	$1.52			15			$22.76
Austin Texas	$1.06	$2.78	$7.15	2	7	6	$64.48
*San Francisco	$3.50	$4.60		2.244	12.576		$65.70
*Tuscon	$1.60	$6.05		15	5.054		$54.58

	Service Charge				Cost of Power Adjustment		
County	bi-monthly	SC	Total		bi-monthly x gallon or (Ccf)	CPA	Total
Big Island	2	$14.70	$29.40		15	$2.23	$33.45
Kauai	2	$13.20	$26.40		15	$0.51	$7.65
Honolulu (current)	2	$5.84	$11.68		15	$0.03	$0.42
Honolulu (proposed)	2	$6.40	$12.80		15	$0.03	$0.42
Maui	2	$9.25	$18.50		15	$0.00	$0.00
Princeville Utilities	2	$6.11	$12.22		15	$0.42	$6.29
Austin Texas	2	$7.10	$14.20		15	$0.00	$0.00
*San Francisco	2	$7.00	$14.00		15	$0.00	$0.00
*Tuscon	2	$7.53	$15.06		20.054	$0.00	$0.00

Bi-monthly Total

County	UC	SC	CPA	Total	
Big Island	$22.45	$29.40	$33.45	$85.30	
Kauai	$42.40	$26.40	$7.65	$76.45	
Honolulu (current)	$42.99	$11.68	$0.42	$55.09	subsidy from muti family
Honolulu (proposed)	$47.14	$12.80	$0.42	$60.36	subsidy from muti family
Maui	$40.75	$18.50	$0.00	$59.25	subsidy from commercial, hotel rates
Princeville Utilities	$22.76	$12.22	$6.29	$41.26	
Austin Texas	$64.48	$14.20	$0.00	$78.68	subsidy from commercial rates and muti family
*San Francisco	$65.70	$14.00	$0.00	$79.70	**
*Tuscon	$54.58	$15.06	$0.00	$69.64	subsidy from commercial rates and muti family

**San Francisco is almost entirely a gravity system with power generated from the Moccasin Hydro Plant and there is a dual fire system. Large hydrants are serviced, installed and maintained by the Fire Department

7500 gallon x 1 Ccf	10.027	20.054
748 gallon /month		

DEPARTMENT OF WATER
County of Kaua'i

"Water has no Substitute – Conserve it!"

For Board of Water Supply Finance Committee Review

Community Improvement Districts Scenario

Community Improvement District maximum charge per customer along two example water distribution lines not built to current standards. If the pipelines went up in size to the 12" or larger transmission line there is a reduction of project cost that is FRC related.

Job. 02-18 Pipeline Replacement, Kapaa Homesteads, Phase II

Kapahi Road – Replace 1787' of 2 ½" line with 1730' of 6" DI : 34 customers

Kaehulua Road – Replace 3,647' of 2 ½" and 855' of 4" PVC with 4,760' of 6" DI: 36 customers

Laipo Road – Replace 1,041' of 2" GS with 1,053' of 6" DI: 8 customers

Mailihuna Road – Replace 490' of 4" CI and 450' of 2" PVC with 641' of 6" DI: 12 customers

Ea Road – Replace 763' of 3" GS and 370' of 2" GS with 655' of 6" DI and 394' of 4" DI : 15 customers

Lani Road – Replace 380' of 2" GS and 350' of 1 ½" PVC with 565' of 6" DI and 176' of 4" DI: 32 customers

Honua Road – Replace 465' of 1 ½" with 465' of 6" DI: 12 customers

Hoku Road – Replace 600' of 3" PVC and 560' of 2 ½" PVC with 1,190' of 6" DI and 49' of 12" DI: 23 customers

Total Customers: 178
Total Construction Cost : 2,734,461
No FRC cost

Individual customer debt coverage of expansion = $2,734,461/178 = $15,362.14 = $17.07/ mo for 75 yrs

Job. 05-01 Waimea Main Replacement

Pokole/Laau Road – Replace 1005' of 2", 4", and 8" line with 1035' of 6" PVC : 11 customers

Moana Road – Replace 150 of 2" and 8" with 190' of 6" and 8" PVC: 3 customers

Halepule Road – Replace 800' of 1 ½" and 4" with 390' of 6" PVC: 5 customers

Panako Road – Replace 592' of 2" and 3" CI and 430' of 6" PVC: 8 customers

4398 Pua Loke Street, Lihu'e, Kaua'i, Hawai'i or P. O. Box 1706, Lihu'e, HI 96766-5706
Phone No. (808) 245-5400 – Administration FAX No. (808) 246-8628 – Engineering/Fiscal/Shop FAX No. (808) 245-5813

Kaumuali'I HWY – Replace 533' of 2" and 3" with 530' of 12" DI : 5 customers

Kahakai Road – Replace 485' of 2" and 3" with 1157' of 6" PVC: 18 customers

Alawai Road – Replace 1670' of 2", 4", 5" and 8" with 1705' of 6" and 8" PVC: 34 customers

Pule Road – Replace 1521' of 2 ½" with 764' of 4" and 8" PVC: 12 customers

Menehune Road – Replace 905' of 2", 3" and 8" with 905 of 6" and 8" PVC: 10 customers

Gay Road – Replace 1200' of 3" with 1,230' of 6" DI PVC: 6 customers

Total Customers: 112
Total Construction Cost : 3,261,764
FRC cost = 27.9 % = $910,032
Replacement cost = 72.1 % = $2,351,732

Individual customer debt coverage of expansion = $2,351,732/112 = $20,997.61 = $23.33/mo for 75 yrs

			Non-FRC				
Case #	Project Name	# customers	Const Cost	Cost per Cust.	useful Life in years	Cost / yr per Cust.	Cost / mo per Cust.
1	Kapaa Hmstd Ph II 02-18	178	$2,734,461	$15,362	75	$205	$17.07
2	Waimea Main Replacement	112	$2,351,732	$20,998	75	$280	$23.33

Over the years these customers have not been paying a reduced depreciation cost due to reduced line sizes.

Since these customers have been paying full system depreciation costs an argument can be made that to pay for the full cost of a new line is over collection of the replacement cost of the original line size. Therefore a reduction in this cost would be fair and justifiable depending on a firm Bd policy on the matter.

Respectfully submitted,

David R. Craddick, P.E.
Manager and Chief Engineer

Beardmore, Carol

From: Craddick, David
Sent: Friday, April 08, 2011 9:51 AM
Beardmore, Carol
Subject: FW: Revised Revenue Requirement Analysis
Attachments: 2010 Kauai Water Rate Study_Match_Budget (032411).xls; 2010 Kauai Water Rate Study_SRF (032411).xls

Mk copies for finance committee meeting 4/7/11

From: Hajnosz, Ann M. [mailto:ANN.M.HAJNOSZ@saic.com]
Sent: Thursday, March 24, 2011 9:05 AM
To: Craddick, David; Yano, Marites
Subject: FW: Revised Revenue Requirement Analysis

From: Baker, Andrew S.
Sent: Thursday, March 24, 2011 10:52 AM
To: Craddick, David; Yano, Marites
Cc: Hajnosz, Ann M.
Subject: Revised Revenue Requirement Analysis

David and Tess-

Please find attached two versions of the Model with the revised Revenue Requirement analysis.
The first version ("Match_Budget") closely matches previous versions of the model, differing only in the following ways:

- Revised revenue per the 3/23/11 Budget
- Revised FRC Payback per the 3/23/11 Budget
- Reverted our O&M Adjustment from $1.5M to $2.0M to assume carryover savings
- Added the $1M Emergency Reserve transfer in 2012-2015

Additional points that we would like to highlight with this version of the analysis are:

- The Bond Fund is expended by 2013, so increases or decreases in the Capital Expenditures directly impact the bottom line from 2013-2016.
- We assumed that capital expenditures from 2014 to 2016 would be split 50/50 between SRF funds and cash. This assumption will need to be re-evaluated once the projects have been identified.
- The FRC Debt Service payback assumes that FRC revenues increase by a sufficient rate in 2013 to cover that payback requirement.
- Assuming there are no capital projects funded out of the FRC after 2012, a 530% increase over projected 2012 revenue would be required to fund this level of FRC Debt Service payback.

The second version ("SRF") differs from the "Match_Budget" version in by one significant assumption, which is that a greater fraction of the Capital Expenditures from 2013 to 2016 could be funded by SRF loans. As mentioned above, this assumption will need to be evaluated once the full project list is identified. This version assumes that:

- Rate increases will only be made to meet a 1.50 Debt Service Coverage Ratio
- SRF Loans can be taken to cover the capital expenditures up to a level that will allow the ending balance to be zero.

This version of the analysis demonstrates how sensitive the revenue requirements are to the capital expenditures. Other effects would be observed if other sources of funds were identified for the capital expenditures or the capital expenditure budget was lowered.

If you have any questions don't hesitate to call.

Thanks.

Andy Baker
Civil Engineer | Water, Environment & Transportation
SAIC Energy, Environment & Infrastructure, LLC
office: 206.695.4486 | mobile: 206.569.8466

1001 Fourth Avenue, Suite 2500
Seattle, WA 98154-1004
www.saic.com/EEandI

Pipe Cost/LF(1)	$ 13.72	$ 13.52	$ 21.45	$ 28.07	$ 29.17	$ 43.78	$ 45.79	$ 62.26	$ 58.96	$ 97.82	$ 118.80	$ 169.57
Trench Width (Inches)(2)	24	24	24	24	24	30	30	36	36	42	48	54

Ductile Iron Pipe (Class 52) Upgrade Cost Percentage (Including Excavation and Backfill)(3)

Existing Pipe Size	Upgraded Pipe Size											
	4"	6"	8"	10"	12"	14"	16"	18"	20"	24"	30"	36"
4"		-0.3%	11.3%	20.9%	22.5%	58.8%	61.7%	100.8%	95.9%	167.6%	213.2%	302.2%
6"			11.7%	21.5%	23.2%	59.8%	62.7%	102.1%	97.2%	169.7%	215.7%	305.8%
8"				6.2%	7.2%	35.8%	37.7%	68.1%	65.0%	116.2%	150.8%	213.1%
10"					0.8%	26.2%	27.6%	54.4%	52.0%	94.7%	124.6%	175.8%
12"						25.0%	26.4%	52.7%	50.4%	92.1%	121.5%	171.3%
14"							0.9%	20.4%	18.9%	48.7%	70.3%	105.5%
16"								19.2%	17.8%	46.7%	67.9%	102.1%
18"									-1.1%	21.4%	38.2%	64.5%
20"										23.2%	40.3%	67.5%
24"											12.9%	31.8%
30"												16.0%
36"												

(1) Based on December 2010 cost/LF from ISI Hawaii Water Solutions
(2) Based on required trench width in Water System Standards (Table 300-1)
(3) Apply percentages to proposal line items related to waterline linear footage and appurtenances, concrete reaction blocks, ductile iron fittings, and hydrotesting.

Pipe Cost/LF(1)	$ 2.59	$ 5.14	$ 8.90	$ 13.36	$ 18.87	$ 26.57	$ 34.88	$ 44.89	$ 73.11	$ 84.68	$ 107.24	$ 158.92
Trench Width (Inches)(2)	24	24	24	24	24	30	30	36	36	42	48	54

PVC C-900 Pipe Upgrade Cost Percentage (Including excavation and backfill)(3)

Existing Pipe Size *	Upgraded Pipe Size											
	4"	6"	8"	10"	12"	14"	16"	18"	20"	24"	30"	36"
4"		19.7%	48.7%	83.2%	125.7%	200.2%	264.3%	356.6%	574.6%	678.9%	868.1%	1282.2%
6"			14.6%	32.0%	53.4%	98.4%	130.7%	184.7%	294.5%	354.5%	457.3%	673.4%
8"				10.0%	22.4%	54.7%	73.4%	110.9%	174.3%	215.3%	281.0%	412.1%
10"					8.2%	34.8%	47.2%	77.2%	119.4%	151.8%	200.5%	292.9%
12"						23.2%	32.0%	57.6%	87.5%	114.8%	153.7%	223.4%
14"							6.3%	25.8%	47.0%	67.7%	96.7%	147.6%
16"								17.7%	33.9%	52.6%	77.5%	119.1%
18"									12.6%	27.7%	47.8%	80.8%
20"										13.2%	29.3%	53.5%
24"											13.9%	34.7%
30"												17.1%
36"												

(1) Based on December 2010 cost/LF from ISI Hawaii Water Solutions

(2) Based on required trench width in Water System Standards (Table 300-1)

(3) Apply percentages to proposal line items related to waterline linear footage and appurtenances, concrete reaction blocks, ductile iron fittings, and hydrotesting.

Trench Width (Inches)[1]	24	24	24	24	24	30	30	36	36	42	48	54

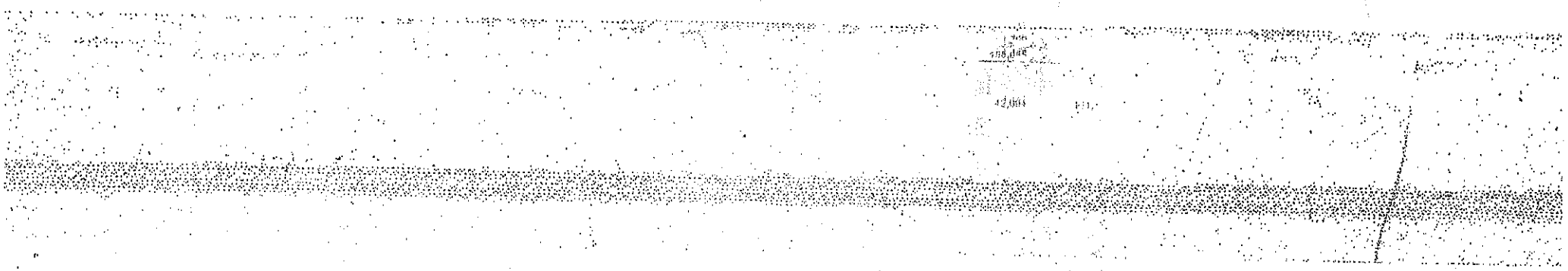
Trench Upgrade Cost Percentage[2]

Existing Pipe Size \ Upgraded Pipe Size	4"	6"	8"	10"	12"	14"	16"	18"	20"	24"	30"	36"
4"		0.0%	0.0%	0.0%	0.0%	15.0%	15.0%	30.0%	30.0%	45.0%	60.0%	75.0%
6"			0.0%	0.0%	0.0%	15.0%	15.0%	30.0%	30.0%	45.0%	60.0%	75.0%
8"				0.0%	0.0%	15.0%	15.0%	30.0%	30.0%	45.0%	60.0%	75.0%
10"					0.0%	15.0%	15.0%	30.0%	30.0%	45.0%	60.0%	75.0%
12"						15.0%	15.0%	30.0%	30.0%	45.0%	60.0%	75.0%
14"							0.0%	12.0%	12.0%	24.0%	36.0%	48.0%
16"								12.0%	12.0%	24.0%	36.0%	48.0%
18"									0.0%	10.0%	20.0%	30.0%
20"										10.0%	20.0%	30.0%
24"											8.6%	17.1%
30"												7.5%
36"												

(1) Based on required trench width in Water System Standards (Table 300-1)
(2) Apply percentages to proposal line items related to roadway paving and traffic control.

DEPARTMENT OF WATER
5 YEAR Debt Service SCHEDULE
FOR FISCAL YEARS ENDING 2011 TO 2015

		FRC	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021-2025	2026-2030	2031-2035	10 to term TOTAL
504 State Grant/Bond	$ 2,500,000															
1980 FmHA Loan							FINAL PMT.									
1980 FmHA Loan	Principal		14,500	15,500	16,000	17,000										95,000
1980 FmHA Loan	Interest (5%)		4,050	3,325	2,550	1,750	$ -									16,975
1980 FmHA Loan Total			18,550	18,825	18,550	18,750										111,975
2001A	2001A Gen Obligation Bonds															
2001A	Principal		390,000	410,000	435,000	460,000	110,000	120,000	125,000	135,000	140,000	150,000	3,155,000		-	5,830,000
2001A	Interest (4.00 - 5.625%)		280,575	262,819	241,359	216,188	3,094	193,688	186,797	179,484	171,750	163,594	592,763		-	2,492,110
2001A Total			670,575	672,819	676,359	676,188	113,094	313,688	311,797	314,484	311,750	313,594	3,747,763	-	-	8,322,110
2001A	2001A Gen Obligation Bonds- Refunding Portion															
2001A	Principal		-	-	-	-	335,000	345,000	365,000	385,000	400,000	425,000	910,000	-		3,165,000
2001A	Interest		149,988	149,988	149,988	149,988	142,869	128,419	111,963	93,213	73,588	52,963	44,419	-		1,247,381
2001A Total			149,988	149,988	149,988	149,988	477,869	473,419	476,963	478,213	473,588	477,963	954,419	-	-	4,412,381
2005A	2005A Gen Obligation Bonds															
2005A	Principal		65,000	65,000	65,000	65,000	125,000	130,000	135,000	135,000	155,000	150,000	915,000	1,200,000		3,205,000
2005A	Interest		152,450	149,950	147,309	144,628	140,631	135,213	129,075	122,325	115,075	107,450	414,488	153,088		1,911,681
2005A Total			217,450	214,950	212,309	209,628	265,631	265,213	264,075	257,325	270,075	257,450	1,329,488	1,353,088	-	5,116,681
2010A	2010A Taxable General Obligation Bonds - BAB															
2010A	Principal		0	0	0	1,875,000	1,915,000	1,970,000	2,030,000	2,100,000	2,185,000	2,275,000	13,065,000	16,915,000	16,670,000	60,000,000
2010A	Interest		2,490,862	2,920,881	2,920,881	2,902,552	2,860,306	2,807,645	2,745,053	2,672,510	2,589,724	2,497,446	10,798,109	6,951,125	1,720,719	46,877,814
2010A Total			2,490,862	2,920,881	2,920,881	4,777,552	4,775,306	4,777,645	4,775,053	4,772,510	4,774,724	4,772,446	23,863,109	23,866,125	17,390,719	106,877,814
BOND Total	Principal		469,500	490,500	516,000	2,417,000	2,503,000	2,565,000	2,655,000	2,755,000	2,880,000	3,000,000	18,045,000	18,115,000	15,670,000	72,095,000
BOND Total	Interest		3,077,925	3,486,962	3,462,087	3,415,106	3,147,800	3,264,964	3,172,887	3,067,532	2,950,137	2,821,453	11,849,778	7,104,213	1,720,719	52,545,962
BOND Total	TOTAL		3,547,425	3,977,462	3,978,087	5,832,106	5,650,800	5,829,964	5,827,887	5,822,532	5,830,137	5,821,453	29,894,778	25,219,213	17,390,719	124,640,962
DW400-0001	STABLE 1MG TANK & CONNECTING WATERLINE															
DW400-0001	Principal		293,360	293,453	294,275	295,012	295,779	296,525	297,342	298,094	298,869	299,630	1,509,982	1,221,643		5,693,864
DW400-0001	Interest		13,974	13,882	13,060	12,323	11,556	10,809	9,993	9,241	8,466	7,704	26,692	7,162		144,862
DW400-0001	Loan Fee		182,664	173,134	163,591	154,021	144,426	134,807	125,164	115,314	105,800	96,080	333,719	89,125		1,817,846
DW400-0001 Total			490,000	480,469	470,925	461,355	451,761	442,142	432,498	422,649	413,134	403,415	1,870,393	1,317,930	-	7,656,572
DW404-0001	SRF Loan - Hanapepe 27" Steel															
DW404-0001	Principal		34,358	34,700	35,043	35,392	35,743	36,098	36,455	36,815	37,183	37,552	134,422			493,762
DW404-0001	Interest		4,803	4,461	4,118	3,769	3,418	3,063	2,706	2,343	1,978	1,609	2,672			34,942
DW404-0001	Loan Fee		15,768	14,649	13,519	12,377	11,224	10,059	8,883	7,696	6,496	5,285	8,782			114,738
DW404-0001 Total			54,929	53,810	52,680	51,538	50,385	49,220	48,044	46,857	45,657	44,446	145,876	-	-	643,442
DW404-0002	SRF Loan - Hanapepe River Crossing															
DW404-0002	Principal		61,854	62,267	62,682	63,508	64,136	64,775	65,417	66,067	66,722	67,385	241,132			885,947
DW404-0002	Interest		8,617	8,004	7,389	6,763	6,133	5,496	4,855	4,204	3,549	2,886	4,793			62,689
DW404-0002	Loan Fee		28,293	26,284	24,256	22,207	20,138	18,048	15,936	13,807	11,654	9,480	15,750			205,856
DW404-0002 Total			98,564	96,556	94,527	92,478	90,409	88,319	86,209	84,078	81,925	79,752	261,675	-	-	1,154,492



DEPARTMENT OF WATER
5 YEAR Debt Service SCHEDULE
FOR FISCAL YEARS ENDING 2011 TO 2015

		FRC	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021-2025	2026-2030	2031-2035	10 to term TOTAL
DW406-0001	SRF Loan - Kapilimao Well															-
DW406-0001	Principal		46,169	46,628	47,118	47,586	48,067	48,548	49,051	49,542	50,044	51,971	102,664	-		587,387
DW406-0001	Interest		5,802	5,345	4,853	4,386	3,904	3,424	2,920	2,429	1,927	1,423	1,298	-		37,710
DW406-0001	Loan Fee		18,670	17,165	15,646	14,111	12,561	10,994	9,413	7,814	6,200	4,570	4,182	-		121,327
DW406-0001 Total			70,641	69,137	67,617	66,082	64,532	62,966	61,384	59,786	58,171	57,964	108,144	-	-	746,423
DW406-0003	SRF Loan - kapilimao 0.5MG Tank															-
DW406-0003	Principal		41,328	85,012	85,367	85,727	86,088	86,450	86,812	87,178	87,545	87,913	445,139	455,694		1,720,255
DW406-0003	Interest		4,658	8,961	8,605	8,245	5,885	5,522	5,160	4,794	4,428	4,059	14,724	5,277		74,318
DW406-0003	Loan Fee		27,954	53,675	51,109	48,332	45,543	42,742	39,929	37,105	34,269	31,420	113,959	40,837		567,173
DW406-0003 Total			73,940	145,647	143,082	140,304	137,515	134,714	131,902	129,077	126,241	123,393	573,822	501,808	-	2,361,746
DW406-0005	Kaumualii Hwy 12" Main Replace															
DW406-0005	Principal		187,401	187,697	188,290	188,897	189,502	190,112	190,715	191,329	191,942	192,558	972,069	887,899		3,758,412
DW406-0005	Interest		11,568	11,272	10,679	10,072	9,467	8,857	8,254	7,640	7,028	6,411	22,777	7,110		121,134
DW406-0005	Loan Fee		120,624	114,533	108,429	102,304	96,160	89,996	83,813	77,610	71,386	65,143	231,369	72,272		1,233,640
DW406-0005 Total			319,593	313,502	307,398	301,273	295,129	288,965	282,782	276,579	270,356	264,113	1,226,215	967,281	-	5,113,186
DW408-0002	SRF Loan - Poipu Rd 16 inch Main															
DW408-0002	Principal		262,189	262,609	263,028	263,450	263,872	264,295	264,716	265,141	265,565	265,991	1,336,351	537,367		4,514,574
DW408-0002	Interest		7,118	6,697	6,279	5,857	5,435	5,012	4,590	4,236	3,741	3,316	10,182	1,073		63,536
DW408-0002	Loan Fee		144,594	136,069	127,531	118,979	110,414	101,834.45	93,242	84,636	76,014	67,380	206,901	21,835		1,289,428
DW408-0002 Total			413,900	405,376	396,838	388,286	379,720	371,141	362,548	354,011	345,321	336,687	1,553,434	560,275	-	5,867,537
DW410-0001	SRF Loan - Kokolau Tunnel Repai															
DW410-0001	Principal		83,922	85,078	86,243	87,431	88,633	89,852	91,085	92,339	93,608	94,895	144,854	-		1,037,942
DW410-0001	Interest		13,931	12,776	11,610	10,422	9,220	8,001	6,766	5,514	4,245	2,958	1,985	-		87,427
DW410-0001	Loan Fee		33,053	30,316	27,542	24,729	21,878	18,988	16,056	13,087	10,076	7,023	4,719	-		207,468
DW410-0001 Total			130,906	128,169	125,395	122,582	119,731	116,841	113,911	110,940	107,929	104,876	151,558	-	-	1,332,837
DW410-0005	SRF Loan - Rehab Lihue Steel Tan															
DW410-0005	Principal		64,371	64,668	64,964	65,264	65,565	65,867	66,169	66,475	66,781	67,089	340,467			997,679
DW410-0005	Interest		4,515	4,218	3,921	3,621	3,321	3,018	2,716	2,411	2,105	1,797	4,323			35,985
DW410-0005	Loan Fee		31,902	29,807	27,703	25,590	23,466	21,333	19,190	17,037	14,874	12,701	30,560			254,163
DW410-0005 Total			100,787	98,693	96,589	94,475	92,352	90,218	88,075	85,922	83,759	81,586	375,350	-	-	1,287,807
DW413-0002	SRF Loan - Wailua Homesteads W															
DW413-0002	Principal		20,567	20,675	20,793	20,902	21,015	21,127	21,245	21,358	21,473	21,588	87,489			298,230
DW413-0002	Interest		1,583	1,476	1,357	1,248	1,135	1,023	905	792	678	561	1,066			11,820
DW413-0002	Loan Fee		9,526	8,856	8,184	7,507	6,827	6,143	5,455	4,764	4,069	3,370	6,415			71,115
DW413-0002 Total			31,676	31,006	30,333	29,656	28,976	28,292	27,605	26,913	26,218	25,519	94,970	-	-	381,165
DW413-0006	SRF Loan - 16 inch Waterline - Ku															
DW413-0006	Principal		120,220	120,413	120,605	120,799	120,992	121,188	121,379	121,574	42,942	43,188	219,656			1,272,954
DW413-0006	Interest		3,066	2,873	2,682	2,488	2,295	2,100	1,908	1,713	1,712	1,465	3,518			25,820
DW413-0006	Loan Fee		62,291	58,383	54,468	50,546	46,619	42,685	38,745	34,799	9,590	8,192	19,710			426,028
DW413-0006 Total			185,577	181,669	177,754	173,833	169,90	165,972	162,032	158,085	54,243	52,846	242,885	-	-	1,724,802
DW413-0005	- Omnellas 0.2 MG Tan															
DW413-0005			40,997	41,229	41,482	41,716	41,9	42,197	42,452	42,694	121,768	121,964	612,750	123,057		1,314,264

DEPARTMENT OF WATER
5 YEAR Debt Service SCHEDULE
FOR FISCAL YEARS ENDING 2011 TO 2015

		FRC	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021-2025	2026-2030	2031-2035	10 to term TOTAL
DW413-0005	Interest		3,656	3,425	3,172	2,938	2,695	2,457	2,202	1,960	1,518	1,323	3,682	147		29,175
DW413-0005	Loan Fee		20,484	19,150	17,808	16,458	15,100	13,734	12,361	10,979	30,846	26,887	74,830	2,999		261,637
DW413-0005 Total			65,138	63,803	62,462	61,111	59,754	58,388	57,015	55,633	154,133	150,173	691,263	126,204	-	1,605,076
DW434-0003	WAHA, WAWAE & NIHO RDS MA[illegible]MENT															
DW434-0003	Principal		91,716	92,125	92,417	92,714	93,011	93,311	93,607	93,908	94,209	94,511	477,110	436,079		1,844,718
DW434-0003	Interest		5,942	5,533	5,242	4,944	4,647	4,348	4,052	3,751	3,450	3,147	11,184	2,175.84		58,418
DW434-0003	Loan Fee		59,209	56,224	53,228	50,222	47,206	44,181	41,146	38,101	35,047	31,983	113,606	22,123		592,277
DW434-0003 Total			156,868	153,883	150,887	147,881	144,865	141,840	138,805	135,760	132,706	129,642	601,900	460,378	-	2,495,414
SRF LOAN	PRINCIPAL		1,348,253	1,396,551	1,402,507	1,408,398	1,414,364	1,420,343	1,426,445	1,432,515	1,438,651	1,446,237	6,624,084	3,861,639	-	24,419,987
SRF LOAN	INTEREST		89,234	86,923	80,966	75,076	69,110	63,130	57,028	51,028	44,822	38,660	108,897	22,944	-	787,816
SRF LOAN	LOAN FEE		755,032	738,447	693,012	647,382	601,561	555,546	509,336	462,747	416,321	369,515	1,164,503	249,292	-	7,162,694
	TOTAL		$ 2,192,519.33	$ 2,221,920.63	$ 2,176,485.67	$ 2,130,855.53	$ 2,085,034.45	$ 2,039,019.06	$ 1,992,809.63	$ 1,946,290.36	$ 1,899,794.06	$ 1,854,410.99	$ 7,897,484.15	$ 3,933,875.27	$ -	$ 32,370,499.13
BOND & SRF COMBINED ' PRINCIPAL			1,817,753	1,887,051	1,918,507	3,825,398	3,917,364	3,985,343	4,081,445	4,187,515	4,318,651	4,446,237	24,669,084	21,776,639	15,670,000	96,514,987
BOND & SRF COMBINED ' INTEREST			3,167,159	3,573,885	3,543,053	3,490,161	3,216,910	3,328,094	3,229,915	3,118,560	2,994,959	2,860,113	11,958,675	7,127,157	1,720,719	53,333,760
BOND & SRF COMBINED ' LOAN FEE			755,032	738,447	693,012	647,382	601,561	555,546	509,336	462,747	416,321	369,515	1,164,503	249,292	-	7,162,694
BOND & SRF COMBINED ' TOTAL			5,739,944	6,199,383	6,154,573	7,962,961	7,735,834	7,868,983	7,820,697	7,768,822	7,729,931	7,675,864	37,792,262	29,153,088	17,390,719	157,011,441

Less: [illegible]		CATCH UP$														
Less: Adjustments Accrued Prior to Bond Sale Date		$ 547,087.76	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Less: Adjustments Accrued FRC Related Projects																
Total Debt Service to be Funded by FRC		$ 547,087.76	$ 1,989,114.55	$ 1,968,272.73	$ 2,504,297.93	$ 2,541,240.50	$ 2,523,043.49	$ 2,502,554.88	$ 2,476,191.94	$ 2,437,724.67	$ 2,407,475.58	$ 11,341,232.87	$ 10,332,563.12	$ 5,217,215.84	$ 50,047,097.15

Source Breakdown of FRC Debt Service

Bonds	$ 547,087.76	1,091,214.18	1,088,573.56	1,642,893.87	1,698,223.05	1,698,506.11	1,696,590.84	1,689,078.02	1,702,492.28	1,689,183.94	8,488,420.25	8,512,925.05	5,217,215.84	37,180,025.61
SRF	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Total	$ 547,087.76	1,989,114.55	1,968,272.73	2,504,297.93	2,541,240.50	2,523,043.49	2,502,554.88	2,476,191.94	2,437,724.67	2,407,475.58	11,341,232.87	10,332,563.12	5,217,215.84	50,047,097.15

MANAGER'S REPORT NO. 12-1:

July 22, 2011

Re: Response to Attorney Belles Graham's correspondence in reference to Subdivision No. S-2009-12 The Koloa Early School and Honpa Hongwanji Mission of Hawaii

RECOMMENDATION:

Your concurrence is requested to allow the Manger to enter into an agreement in accordance with Part III Section XII of the rules with the subject landowner providing indemnification of both the Department and the County against any lawsuit or damages including attorney costs and adjacent landowners losses should any fire damages arise out of this approval and if the Fire department approves the fire flow conditions. The indemnification shall be in the form of insurance as well as a covenant on the land and shall remain in full force and effect until the uses requiring the higher fire flow are eliminated or the line is brought up to standard.

BACKGROUND:

The developer is requesting waiver of fire flow requirements for a school and church.
The property is currently developed we do not expect water use patterns to change and current fire flow has been checked at around 1000 gpm. The minimum flow required for schools is 2000 GPM.

Thank you for your attention to this matter.

Respectfully submitted,

David R. Craddick, P.E
Manager and Chief Engineer

MANAGER'S REPORT NO. 12-17

August 4, 2011

Re: Second Change Order for Job 05-02 (H-8), Drill and Test Hanalei Well #2 & Job 05-02 (HW-12), Drill and Test Wainiha Well #4 Contract No. 457

RECOMMENDATION: It is recommended that the Board approve the contract amendment for

a. Contract No. 457 with Kodani and Associate, Inc., for the subject projects/contract.
b. Board allocate $32,430.00 from BAB Fund Balance to fund this contract amendment #2.

FUNDING:

Contract No. 457 with Kodani and Associates	$250,000.00
Amendment #1	$175,000.00
Amendment #2	$32,430.00
Total Amended Project Budget	$457,430.00
Total Project Funds Certified	$425,000.00
Additional Funds Requested, (BAB)	$ 32,430.00
BALANCE REMAINING (prior to subject fund request)	
BAB Fund Balance	$24,242,056.24
Total Requested from BAB Fund Balance	$ 32,430.00
New BAB Fund Balance	$24,209,626.00

BACKGROUND:

The consultant is requesting additional fees for the projects due to the following:

1. Due to the length of time of the projects - in excess of 5 years - costs of goods and services have increased.

2. Due to the change in venue for the Hanalei site (ecologically sensitive area, longer distance from government roadway, stream crossings, etc), the respective scopes of work have increased dramatically.

3. Agency requirements have changed over the course of this project. As an example, the requirements for The Engineering Report (for DOH) have been expanded to include a quantitative hydrologic analysis to determine the two- and ten-year zones of contribution for both wells, and explanations for the sources of all constituents with concentrations above the laboratory detection limits, even if concentrations are far below the MCLs.

Due to the extraordinary length of this project, it is feasible that additional fees be required. It is the intention of current DOW staff to complete this design project in an expedited manner. The consultant, Kodani and Associates, Inc. proposes an increase in fees of Twenty Three Thousand, Six Hundred Ninety Dollars ($23,690.00), for the Hanalei Site; and an increase in fees of Eight Thousand, Seven Hundred Forty Dollars ($8,740.00) for the Wainiha Site, which appears reasonable based on the supporting documentation provided from the sub consultants.

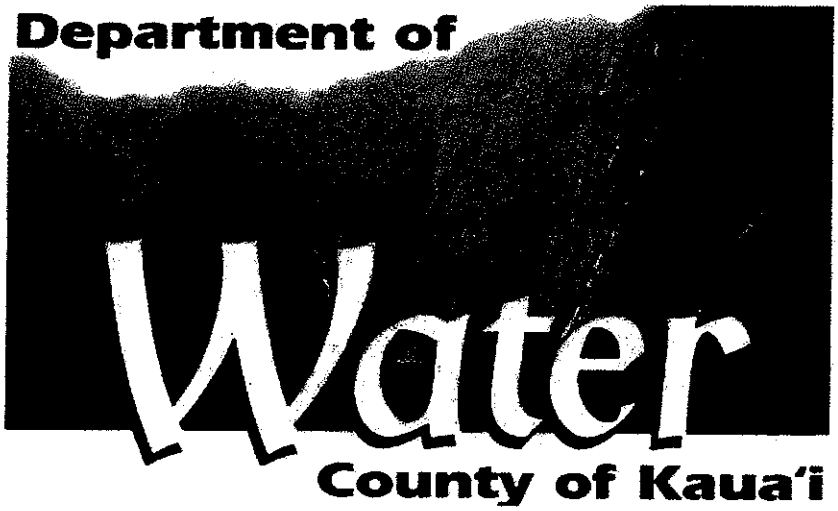
Respectfully submitted,

Aaron Zambo, PE
Project Manager

Concurred:

David R. Craddick
Manager and Chief Engineer

AZ:file



Goals for the Manager and Chief Engineer

FY 2012

Board's Goals for DOW Manager for Year 2011-12

(Goals:ro)

Item #	Goal	Status	Deadline	Measure
	Goals from Board			
1	**Bond Float and Water Plan 2020**			
	1. Encumber $39 million in BAB 2. Encumber $45 million in BAB		December 2011 July 2012	
2	**Personnel and Accounting**			
	Improve employee morale, employee survey		Baseline - Year beginning Year end figures	
3	**Standards**			
	Source Water Protection Plan	Working on grant funding application		
4	**Facilities**			
5	**Inter Agency Coordination**			
	Inter agency coordination between DOW, Planning and DPW for smart growth initiatives			
6	**Performance Indicators**			
	1. Organizational Best Practices			
	2. Customer Service Complaints/Active Account			

Board's Goals for DOW Manager for Year 2011-12

(Goals:ro)

Item #	Goal	Status	Deadline	Measure
6	**Performance Indicators - continued**			
	3. Technical Quality Complaints/Active Account			
	4. Customer Service Cost per Active Account			
	5. Unaccounted for Water Loss			
	6. Water Treatment Cost/MG produced			
	Goals from Staff			
1	**Operations**			
	Continue to support and implement the re-organization of the operations division			
2	**Engineering**			
	Provide additional temporary storage space for files (approximately 10'x 3' area) until new permanent facilities (new office building) are built	Need to arrange for leak-proofing of containers	June 30, 2011	
3	**Special Projects**			
	Due to recent and anticipated staff departure and retirement within the Department, priority to evaluate and reorganize the current engineering activities and staff structure for the future operations related to the design and construction of projects within the Department of Water, which include Water Plan 2020 as well as privately funded projects. In doing so, make it a priority to attract and retain qualified staff during the reorganization process.			
4	**Water Resources and Planning**			

Board's Goals for DOW Manager for Year 2011-12

(Goals:ro)

5	Fiscal			

KDOW EMPLOYEE SATISFACTION SURVEY

Tally Sheet - June 2011		Number of Responses per Column in Employee Satisfaction Surveys Received				
KDOW Leadership		Strongly Agree	Agree	Neither	Disagree	Strongly Disagree
1	KDOW is a leader in the industry.	5	18	25	10	5
2	KDOW is a strong competitor in key growth areas.	4	21	22	10	6
3	KDOW leadership has a clear vision of the future.	4	21	17	12	10
4	KDOW leadership has made changes which are positive for the company.	4	8	25	15	13
5	KDOW leadership has made changes which are positive for me.	2	11	20	18	13
Your Job Satisfaction		Very Satisfied	Satisfied	Neither	Dissatisfied	Strongly Dissatisfied
1	That you receive appropriate recognition for your	3	17	17	12	14
2	That your work gives you a sense of personal accomplishment?	7	27	17	7	1
3	With your direct supervisor?	8	29	13	6	4
4	With your overall job security?	17	21	14	6	5
5	With the company as a place to work?	10	13	21	6	13
3	With your job overall?	6	22	16	12	4
		Much more satisfied	Somewhat more satisfied	Same level of satisfaction as last year	Somewhat less satisfied	Much less satisfied
	Compared with a year ago, how would you describe your overall job	2	5	21	14	17

Organizational Best Practices Index

Purpose:

To summarize a utility's implementation of management programs important to water and wastewater utilities.

Discussion:

This indicator summarizes the status of implementation of good management practices at a utility. It is particularly useful for identifying potential benchmarking partners, especially organizations that may have advanced knowledge and experience with applying these tools. Correlations with other indicators might show that performance in other areas is related to investments in improved management practices.

Utilities will use a self-scoring system, identical to that used for the QualServe self-assessment program, to identify the degree to which each of seven important practices are being implemented by utility staff. Scores will be available individually for each of the seven areas, plus the aggregate, or index score.

The practices included in the index are as follows:

1. Strategic Planning

Good strategic planning practice will include

- ❑ Vision, mission, and organizational values statements;
- ❑ Consideration of the internal and external factors that will or may impact the utility;
- ❑ An assessment of the utility's strengths and opportunities for improvement for the next 3 to 10 years;
- ❑ Analysis and selection of strategies in the areas of water and wastewater system management, customer service, finance, human resources management, and business process improvement;
- ❑ Short- and long-term action plans, including allocation of resources directed at achieving the goals and strategies the utility has adopted; and
- ❑ A process for strategic plan development and annual review/updates that facilitate input from customers, employees, and other stakeholders.

2. Long-Term Financial Planning

This planning process looks 5 to 25 years into the future and matches resources to achievement of strategic goals such as

- ❑ Funding of operations and maintenance costs;
- ❑ Funding of the capital improvement plan, taking into account the effects of capital improvements on operations and maintenance costs;
- ❑ Funding of the optimized asset management plan for all asset classes; and
- ❑ Development of rate alternatives and recommended projected rates over the life of the plan.

3. Risk Management Planning

This planning process is used for identifying the potential risks to the utility within the context of its strategic plan and for developing plans to mitigate physical and financial loss. Examples of planning elements are

- ❑ Disaster readiness planning;
- ❑ Security program for resources, facilities, and service delivery systems;
- ❑ Health and safety programs for employees and the general public;
- ❑ Public liability exposure;
- ❑ Emergency operations planning;
- ❑ Hazardous material contingency planning; and

- ❑ Insurance procurement (or alternative self-insurance policies), including property and casualty insurance, health and worker's compensation insurance, and liability insurance.

4. Performance Measurement System

An effective performance measurement system will

- ❑ Be multidimensional, utilizing appropriate measures for internal and external stakeholders, supporting both routine work and special projects, and offering integrated measurement systems responsive to the needs of line employees, management, and executives;
- ❑ Have a process for establishing targets, usually in conjunction with the budgeting process, that reflect broad internal, external, financial, and improvement goals in strategic and operating plans;
- ❑ Provide measures focused on quality, efficiency, and effectiveness; and
- ❑ Include a routine monitoring and reporting process.

Tools such as the utility business process framework, the Kaplan and Norton balanced scorecard, and the Governmental Accounting Standards Board (GASB) performance measurement framework offer useful outlines for organizing a measurement system.

5. Optimized Asset Management Program

An asset management program ensures the best decisions at all levels of the asset's life cycle to optimize performance, reduce risk, and minimize cost. Effective asset management programs will include

- ❑ An inventory of infrastructure assets;
- ❑ A condition assessment for all asset classes;
- ❑ Replacement cycles for each asset class;
- ❑ Assessments of the financial impacts of both maintenance and replacement of assets;
- ❑ Life-cycle costing in support of major asset decisions;
- ❑ Integrated use of data from multiple sources, such as geographical information and maintenance management systems to support decisions; and
- ❑ Communications with elected officials, customers, and the general public.

6. Customer Involvement Program

This is a formal program for relating with customers in a way that ensures they participate effectively in the utility management process. Examples of good practices include

- ❑ Offering educational programs and materials and assessing their effectiveness;
- ❑ Providing customers with a list of subject matter experts to answer their questions;
- ❑ Conducting customer satisfaction surveys and responding to what is learned;
- ❑ Soliciting input on projects and programs under consideration, in planning, or under construction;
- ❑ Identifying and confirming customer priorities both in terms of topic and breadth and degree of concern; and
- ❑ Resolving customer issues and complaints.

7. Continuous Improvement Program

An organizational continuous improvement program will help utility employees at all levels examine their practices with the goal of identifying and implementing improvements to service quality, effectiveness, and efficiency. A large number of systems and programs are available to water and wastewater utilities. Good practice would include examining the following and participating in the appropriate suite of systems that are aligned

with utility goals:

- ISO 9000 series
- ISO 14001
- Other environmental management systems
- Work process documentation programs
- Self-assessments, peer reviews, and benchmarking such as those offered through QualServe
- National Biosolids Partnership
- The Partnership for Safe Water
- The Malcolm Baldrige National Quality Award Program or similar state-run programs

The recommended scoring system is as follows:

- This activity is fully implemented at our utility (5 points).
- This activity is largely implemented, but there is room for improvement (4 points).
- This activity is implemented, but there is room for substantial improvement (3 points).
- This activity is implemented, but only occasionally or without uniformity (2 points).
- This activity is not practiced at our utility (1 point).

With seven practices each scoring between 1 and 5, the aggregate score at each utility will range between 7 and 35.

Mathematical Expression and Measurement Tips:

Each of the seven components to this indicator will be assigned a level of conformance of between 1 and 5 by utility staff. The index will equal the sum of the seven component scores.

This type of self-assessment is necessarily subjective. A single respondent will have only limited knowledge to make a selection. A team comprised of executive, managerial, and line employees can provide a deeper and broader collective view and is likely to offer a truer assessment, provided that good group processes are used to solicit and discuss information before seeking consensus on a response that all can support.

Data Needed to Support the Calculation:

Utility self-assigned levels of conformance to each of the seven index components.

Definitions:

As included in the discussion above.

Applicability:

This indicator is applicable to all water and wastewater utilities, regardless of customer base, size, or ownership. Practices are likely to be more formal and extensive in larger utilities.

Additional Guidance:

Utilities reporting high levels of conformance with the components of this indicator should anticipate inquiries from others looking for study partners.

Survey designers should consider asking for the source of information provided by the utility: cross-functional team, subject matter expert, or individual (identified by job title).

QualServe Business System:
Organizational Development

QualServe Business Process Category:
Leadership and Organization
Continuous Improvement
Customer Strategy and Satisfaction
Strategic Planning
Financial and Fiscal Management

Utility Business Architecture Category:
Understand Markets and Customers
Develop Business Plans

Provide Legal Services and Risk Management
Measure and Improve Performance

Balanced Scorecard Measure Type:

Learning and Growth
Internal Process

GASB Indicator Type:

Service Effort

Customer Service Complaints and Technical Quality Complaints

Purpose:

To measure the complaint rates experienced by the utility, with individual quantification of those related to customer service and those related to core utility services. It is expressed as complaints per 1,000 customer accounts.

Discussion:

This pair of indicators captures all complaints received by the utility, which are reported either as "service associated" or as "technical quality" complaints. Only those logged by the utility, whether acted on or not, count. Frivolous complaints and those unrelated to utility business are not considered.

The number of complaints is a good measure of customer service. The two categories suggested here allow a utility to track those that are people related and those that are product related. Utility staff engaged in customer service may want to track measures for additional subcategories as a way to quantify the causes of such complaints.

Mathematical Expression and Measurement Tips:

$$\text{customer service complaint rate} = \frac{(1{,}000)(\text{number customer service-associated complaints})}{\text{number of active customer accounts}}$$

$$\text{technical quality complaint rate} = \frac{(1{,}000)(\text{number technical quality-associated complaints})}{\text{number of active customer accounts}}$$

Both types of complaints are recorded as the number of complaints per 1,000 customers per reporting period. All complaints are recorded in one category or the other.

Data Needed to Support the Calculation:

- ❑ Number of active customer accounts during the reporting period
- ❑ Number of customer service–associated complaints received by the utility during the reporting period
- ❑ Number of technical quality–associated complaints received by the utility during the reporting period

Definitions:

- ❑ *Active customer account* means all customer accounts of all classes that were billed for some or all of the reporting period. A single account may include service through more than one water or wastewater service connection.
- ❑ A *complaint* is an expression of dissatisfaction conveyed to a utility employee acting in his/her official capacity, whether or not action is taken to resolve it. Complaints may be communicated orally or in writing. To clarify, a

complaint is a request for action, whereas an inquiry is a request for information.

- *Customer* refers to an individual service agreement for water or wastewater service at a single property, regardless of size or billing category. An individual may own more than one property and be counted as a customer more than once. For example, an individual has three properties and each property has a meter. This utility would count this as three accounts.
- *Customer service complaints*, in the context of these indicators, refers to relationship factors such as personal appearance, courteousness, helpfulness, professionalism, responsiveness, adherence to traffic laws while driving a vehicle, and timeliness. It also refers to customer support services such as turn-on/turn-off, billing, rate setting, and communication. All utility employees should have assigned responsibility for good customer service, thereby helping the utility build a positive image within the community.
- *Technical qualities of service complaints* are directly related to core services of the utility. They include complaints associated with water quality, taste, odor, appearance, pressure, sewage backups and overflows, disruptions of water or wastewater service, disruptions of traffic, and facilities upkeep.

Applicability:

These indicators apply at all water and wastewater utilities serving retail customers. Wholesalers will find value primarily in data for technical quality complaints.

QualServe Business System:
Customer Relations

QualServe Business Process Category:
Customer Strategy and Satisfaction Customer Service

Utility Business Architecture Category:
Customer Service

Balanced Scorecard Measure Type:
Customer

GASB Indicator Type:
Service Accomplishments

Customer Service Cost per Account

Purpose:

To measure the amount of resources a utility applies to its customer service program.

Discussion:

The indicator is expressed as the cost of managing a single customer account for 1 year. When viewed alone, it quantifies resource efficiency. Viewing in conjunction with other indicators gives the respondent more information about utility operational performance. For example, a utility with high numbers of complaints and low customer service costs might be sacrificing effectiveness and yet appear efficient. That information can help to identify opportunities for improvement.

Mathematical Expression and Measurement Tips:

Customer service cost per active account =

$$\frac{\text{total customer service costs}}{\text{number of active accounts}}$$

Data Needed to Support the Calculation:

- ❑ Total customer service costs for the reporting period
- ❑ Number of active customer accounts

Definitions:

- ❑ *Customer service costs* are all direct salaries, employee benefits, and direct costs, including contracts that are associated with providing the following services to customers, plus a proportional share of total utility indirect costs:
  - — Activation of new accounts
  - — Meter reads, maintenance, and repair or replacement
  - — Preparation and delivery of bills
  - — Receipt and processing of payments
  - — Records maintenance
  - — Collection of delinquent accounts
  - — Processing of bankruptcies
  - — Provision of turn-on/turn-off services
  - — Receipt, investigation, and resolution of complaints
  - — Preparation and provision of outreach and educational materials, including the Consumer Confidence Report

  Specifically excluded are all costs associated with maintaining service pipelines and customer plumbing on the customer side of the meter if present or service property line if no meter is present.
- ❑ *Active customer account* means all customer accounts that were billed for some or all of the reporting period. A single account may include service through more than one water or wastewater service connection.

Applicability:

This indicator is applicable to all water and wastewater utilities, regardless of customer base, size, or ownership.

Additional Guidance:

- ❑ If water and wastewater services are billed together, there are options for requesting and presenting the data supporting this indicator:
  - — The preferred option is to separate accountings for costs associated with each service and provide separate tallies of active customer accounts for each service.
  - — An acceptable alternative is to provide aggregate costs for both services and provide separate counts of active customer accounts for water and wastewater services represented by those costs.
  - — A third alternative is to report single numbers for total costs and active customer accounts.
- ❑ When preparing surveys, similar consideration should be given to utilities that employ single billings for multiple services such as water, wastewater, solid waste, electricity, and natural gas services.
- ❑ It is uncertain whether utilities will have data in sufficient detail to make this indicator meaningful. During pilot testing of the survey and database, and perhaps for early surveys, respondents should be asked to qualify their data using a fixed set of measures, such as
  - — This data is accurate and would withstand an audit.
  - — The data reported is an estimate and we have a high degree of confidence in it.
  - — The data reported is a guesstimate.

QualServe Business System:
Customer Relations

QualServe Business Process Category:
Customer Accounts Management
Continuous Improvement

Utility Business Architecture Category:
Customer Service
Measure and Improve Performance

Balanced Scorecard Measure Type:
Financial

GASB Indicator Type:
Relating Efforts and Accomplishments

Distribution System Water Loss

Purpose:

To quantify the percentage of produced water that fails to reach customers and cannot otherwise be accounted for through authorized usage.

Discussion:

Distribution system water loss is the difference between the volume of water distributed for use by all customer classes and the volume of water actually consumed by authorized users. There are many factors contributing to distribution system water loss. The major ones are leakage, metering inaccuracies, and unauthorized consumption. Among these, only leakage is a true loss of water. Metering inaccuracies affect the utility's capability for measuring true loss, but such inaccuracies can lead to both overstatements and understatements of the true loss. Unauthorized consumptions diminish revenues and should be dealt with, but they are not real losses of water.

A distribution system without losses is an unrealistic goal. There is a loss rate that each utility considers as acceptable based on its own circumstances. Because water losses impact revenues, it is important that a utility have practices in place to understand the specific causes of losses in its system. The utility will then be able to make good decisions regarding operations, maintenance, and pipeline replacements. This is particularly important in areas of water shortage and especially during drought conditions when the utility may be asking its customers to curtail use. Public knowledge of losses within the system makes it difficult for a utility to instill a need for conservation.

Tracking water losses helps utility managers understand the condition of distribution system infrastructure and the effects of its operation, maintenance, and replacement practices.

Increasing rates of water loss and high loss rates are both reasons to examine current and planned practices.

This indicator provides opportunity for a utility manager to compare the distribution system water loss against that in the distribution systems of other utilities. Utilities with high loss rates may find value in identifying practices in place and contributing to more favorable loss rates at other utilities.

Utilities that are fully and accurately metered will have little difficulty providing data for this indicator. Others will have varying degrees of difficulty and may find that this indicator is beyond their current capacity to measure reliably. In itself, that realization may be reason to examine and improve practices.

Mathematical Expression and Measurement Tips:

distribution water loss (% of distribution) =

$$\frac{100\ [\text{volume of water distributed} - (\text{volume of water billed} + \text{volume of unbilled authorized water})]}{\text{volume of water distributed}}$$

Data Needed to Support the Calculation:

- ❑ Total volume of water distributed for customer use
- ❑ Total volume of water billed to customers
- ❑ Total volume of unbilled authorized water to customers

Definitions:

- ❑ *Volume of water distributed* is the total volume of water entering the distribution system from all sources, including treatment facilities, well fields, individual wells, and purchased water connections.
- ❑ *Volume of water billed to customers* is the total volume of water billed to all classes of registered customers, the water supplier, and others.
- ❑ *Volume of unbilled authorized water* is the total volume of water used for authorized purposes but is not billed. Examples of unbilled authorized uses include firefighting and training, municipal uses such as flushing mains and sewers, street cleaning, watering of municipal properties, public fountains, construction, tank drainage, storage tank overflows, and frost protection. Most utilities may need to use estimates to compile this number.
- ❑ *Water losses* are those water volumes that do not find their way to authorized uses while under control of the utility. Water losses consist of real losses and apparent losses. The former are true losses of water from the utility's system, up to the point of customer metering. Apparent losses consist of unauthorized use and inaccuracies associated with metering. Water losses occur throughout the water system, from source water intakes, transmission pipelines, treatment facilities, distribution pipelines and storage facilities. (For this indicator, the focus is on losses from the points of distribution through the points of customer service meters.)

Applicability:

This indicator is applicable to all water utilities, regardless of customer base, size, or ownership.

QualServe Business System:
Water Operations

QualServe Business Process Category:
Distribution Operations and Maintenance

Utility Business Architecture Category:
Water Distribution

Balanced Scorecard Measure Type:
Internal Process

GASB Indicator Type:
Service Accomplishments

Performance Indicator No. 6

WATER TREATMENT COST PER 1,000 GALLONS DELIVERED

Purpose:

To quantify water disinfection costs per thousand gallons delivered for ground water or surface water based on each method of treatment.

Discussion:

This performance indicator is not an AWWA performance indicator it does however provide data on the treatment costs per unit of water delivered. This is useful for management purposes to analyze the risk associated with each method of treatment as the chlorine disinfection methods come under increased Homeland Security scrutiny to minimize potential willful releases of chlorine gas.

Mathematical Expression and Measurement Tips:

$$\text{Treatment cost per thousand gallons} = \frac{\text{total materials, labor, equipment and electric cost}}{\text{total gallons produced /1000}}$$

This calculation needs to be done for each treatment type i.e.: chlorine gas, hypochlorite solution, chloramine or other methods of disinfection that may come into use such as ozone or ultraviolet light.

Data needed to support the calculation:

- Total disinfection material cost per year for each type of disinfection used.
- Total yearly labor hour's times unit cost and benefits to store, deliver and replace each disinfection material used.
- Total yearly equipment costs to store, deliver and replace each disinfection material used.
- Total yearly electric costs to run the equipment used to deliver each water type
- Total gallons produced for each type of disinfection and each water type i.e.: ground water or surface water

Definitions

Total treatment cost will be defined as the materials, consumable equipment, electric costs and labor involved in meeting EPA water treatment regulations but not including quality testing of the water.

Department of Water
County of Kaua'i

MEMORANDUM

September 8, 2011

TO: **All Water Board Members**
FROM: Roy Oyama, Chairperson of the Kaua'i Board of Water Supply
RE: **Annual Job Performance Evaluation of the DOW Manager and Chief Engineer**

As part of the annual Job Performance Evaluation of the DOW Manager and Chief Engineer, please take a few minutes to assist with the evaluation process by documenting your perspective on how you feel our Water Manager has performed in his various interactions with you and the other Water Board members. We have enclosed the County's Job Performance Evaluation Form and request that you use this form. Please feel free to add a page to the form should you want to expand on your comments or need more space.

Please submit your completed evaluation by Friday, September 16. As this information is confidential, please return it to Carol Beardmore at the Department of Water in a sealed confidential envelope. Thank you very much!

Sincerely,

Roy Oyama, Chairperson
Kaua'i Board of Water Supply

cab
Attachment
Board-Gen/JPR Eval.of Water Manager, Memo to Water Board (9-8-11):cab

Department of Water
County of Kaua'i

MEMORANDUM

September 8, 2011

TO: **Peers of the Kaua'i DOW Manager and Chief Engineer**
Mr. Gary Heu, Managing Director, Office of the Mayor
Mr. Larry Dill, County Engineer, Dept. of Public Works
Mr. Al Castillo, County Attorney, Office of the County Attorney
Mr. Wally Rezentes, Jr., Finance Director, Finance Department
Mr. Malcolm Fernandes, Personnel Director, Dept. of Personnel Services
Mr. Michael Dahilig, Planning Director, Planning Department
Mr. Jay Furfaro, Chairman, Kaua'i County Council
Mr. Peter Nakamura, County Clerk, County Clerk's Office
Ms. Darryl Perry, Chief of Police, Kauai Police Department
Mr. Eugene Jimenez, Housing Director, County Housing Agency
Mr. George Costa, Director, Office of Economic Development
Mr. Robert Westerman, Fire Chief, Kauai Fire Department
Mr. Theodore Daligdig III, Civil Defense Manager, Civil Defense Department

FROM: Roy Oyama, Chairperson of the Kaua'i Board of Water Supply
RE: **Annual Job Performance Evaluation of the DOW Manager and Chief Engineer**

The Board of Water Supply will be conducting an annual Job Performance Evaluation of the DOW Manager and Chief Engineer shortly. We know that you all have busy schedules so we would be very grateful if you would take a few minutes to assist us in our evaluation process. We have enclosed the County's Job Performance Evaluation Form and request that you use this form to document your perspective on how you feel our Water Manager has performed in his various interactions with you and your Department. Please feel free to add a page to the form should you want to expand on your comments or need more space.

Again, we would greatly appreciate your assistance by submitting your completed evaluation by Friday, September 16. As this information is confidential, please return to Carol Beardmore at the Department of Water in a sealed confidential envelope. Thank you very much!

Sincerely,

Roy Oyama, Chairperson
Kaua'i Board of Water Supply

cab
Attachment
Board-Gen/JPR Eval.of Water Manager, Memo to Peers (9-8-11):cab

Department of Water
County of Kaua'i

MEMORANDUM

September 8, 2011

TO: **DOW Division Heads Reporting to the Kaua'i DOW Manager and Chief Engineer**
Mr. William Eddy
Mr. Gregg Fujikawa
Ms. Marites Yano

FROM: Roy Oyama, Chairperson of the Kaua'i Board of Water Supply
RE: **Annual Job Performance Evaluation of the DOW Manager and Chief Engineer**

The Board of Water Supply will be conducting an annual Job Performance Evaluation of the DOW Manager and Chief Engineer shortly. We request your assistance in our evaluation process. We have enclosed the County's Job Performance Evaluation Form for Department Heads and request that you use this form to document your perspective on how you feel our Water Manager has performed in his various interactions with you since his appointment. Please feel free to add a page to the form should you want to expand on your comments or need more space.

We would greatly appreciate your assistance by submitting your completed evaluation by Wednesday, September 14, 2011. As this information is confidential, please return to Carol in a sealed confidential envelope. Thank you very much!

Sincerely,

Roy Oyama, Chairperson
Kaua'i Board of Water Supply

cab
Attachment
Board-Gen/JPR Eval.of Water Manager, Memo to DOW Div Heads (9-8-11):cab

New Business

Department of Water, County of Kaua'i

SUMMARY REQUEST FOR STATE AID

CAPITAL IMPROVEMENT PROGRAM (CIP)

Fiscal Year 2012

SYSTEM	WATER PLAN 2020 NO.	PROJECT	FISCAL YEAR (in thousands of dollars)					
			TOTAL 2012-16	2011-12	2012-13	2013-14	2014-15	2015-2016
		FIRE PROTECTION Improvements for State Schools						
Priority No. 1: Kīlauea Water System	WKK-7 WKK-9	Kīlauea School Waterline Improvements	1,300	1,300	--	--	--	
		AFFORDABLE HOUSING Infrastructure Development						
Priority No. 2: Wailua/Kapa'a Water System	WK-8	Kapa'a Storage Improvements	8,000	--	8,000	--	--	
		FIRE PROTECTION Improvements for State Schools						
Priority No. 3: Hanalei Water System	H-5	Hanalei School Waterline Improvements	3,000	--	3,000	--	--	
		AFFORDABLE HOUSING Infrastructure Development						
Priority No. 4: Wailua/Kapa'a Water System	WK-27A WK-33	Kawaihau, Kahuna & Piliamoo Roads - 12" and 18" Mains	4,500	--	--	4,500	--	
Priority No. 5: Wailua/Kapa'a Water System	WK-39	Drill & Develop Kapa'a Homesteads Well No. 4	4,000	--	--	4,000	4,000	
Priority No. 6: Kekaha Water System	KW-28	Renovate Kekaha (Amfac) Shaft and 12" Ductile Iron Waterline	4,000	--	--	--	4,000	
		TOTALS	**24,800**	**1,300**	**11,000**	**8,500**	**8,000**	

DEPARTMENT OF WATER

County of Kauai

"Water has no Substitute – Conserve It!"

MANAGER'S REPORT NO. 12-23

September 22, 2011

Re: Request Board Approval for contract amendment with R.W. Beck/SAIC for additional funds for FRC Study

RECOMMENDATION:

It is recommended that the Board approve the contract amendment.

FUNDING: #27, Contractual Services

Fiscal:	Financial Management Planning & Rate Analysis		$ 50,000
FRC STUDY			
Original Contract		$ 8,000	
Amendment 1	to add surface water treatment costs study	19,900	
Amendment 2	to add SRF/BAB loan payment debt service	20,000	
Amendment 3	New Request to add 2005 Bond debt service payment and other project anticipated with interest costs.	9,000	
Subtotal		106,900	
Contract Amount Funded		97,900	
Amount Requested			9,000
Balance Remaining			$ 41,000

BACKGROUND:

A contract to review the FRC was entered into in about April 2010 to review and propose revised Facility Reserve Charges.

It was felt that operating costs and new treatment facility costs should be reviewed. The first amendment was made to the contract. Later it was found that certain SRF loans were utilized for expansion related projects and although were originally funded from the FRC account the loan proceeds were deposited in the Water Utility Fund and interest payments were taken from that fund until last year when the auditor made a general correction. In the future, the interest payments will need to come from the FRC fund. In addition to the SRF expansion related projects the interest expense for expansion related projects in the BAB project list needed to be added to the FRC costs. Those interest costs were the subject of the second amendment to the contract.

This last year we determined the 2005 bond which has been paid entirely from the Water Utility Fund was for a tank that is expansion related. We are asking Beck to give a price to review that and other projects we believe will need to be debt funded in the FRC calculation. This is the work to be performed on the third amendment.

--- 4398 Pua Loke Street, Lihue, Kauai, Hawaii or P. O. Box 1706, Lihue, HI 96766-5706 ---
Phone No. (808) 245-5400 -- Administration FAX No. (808) 246-8628 -- Engineering/Fiscal/Shop FAX No. (808) 245-5813

This last year we determined the 2005 bond which has been paid entirely from the Water Utility Fund was for a tank that is expansion related. We are asking Beck to give a price to review that and other projects we believe will need to be debt funded in the FRC calculation. This is the work to be performed on the third amendment.

Respectfully submitted,

David R. Craddick, P.E.
Manager and Chief Engineer

DRC/cab
Mgrrp_R W Beck Contract Amendment-addtl funds for FRC Study (9-22-11)

SAIC

September 13, 2011

Mr. David Craddick
Manager and Chief Engineer
Department of Water
County of Kaua'i
P. O. Box 1706
Lihue, Hawai'i 96766

Subject: **Contract No. 506 Facility Reserve Charge Study – Amendment No. 3 Request**

Dear Mr. Craddick:

Per our discussion last week, we are submitting this request for an amendment to the subject contract to cover unanticipated additional services. As you are aware this project has taken longer to complete than anticipated. Therefore, we are requesting that an additional $9,000 be added to the contract to Task 6 to cover the following activities:

- Update the FRC study to reflect the debt service on the 2005 Bonds.
- Respond to Board and Client requests for additional information.

We are submitting revised Exhibits A and B that reflect the new scope and amount for Task 6.

This estimate reflects the following assumptions:

- DOW will provide the following data:
  - Projects that were funded by the 2005 bond proceeds, including project description and location.
- No changes will be made to growth assumptions.
- No formatting changes will be made.
- The deliverable for the FRC study update is the final FRC Study report (10 copies and a data CD).

SAIC Energy, Environment & Infrastructure, LLC
1001 Fourth Avenue, Suite 2500 | Seattle, WA 98154-1004 | tel: 206.695.4700 | fax: 206.695.4701 | saic.com/EEandI

Additionally, the table below summarizes the changes and our original contract amount:

Original Contract Amount (November 2009)	$58,000
Amendment 1 (May 2010)	19,900
Amendment 2 (June 2011)	20,000
Amendment 3 (September 2011)	9,000
New Contract Amount:	$106,900

Please let me know if you have any questions. I can be reached at (206) 695-4425.

Sincerely,

SAIC Energy, Environment & Infrastructure, LLC

Ann M. Hajnosz, P.E.
Senior Project Manager

AMH/rhm
Enclosure
c: Joy Price, SAIC

SAIC Energy, Environment & Infrastructure, LLC
1001 Fourth Avenue, Suite 2500 | Seattle, WA 98154-1004 | tel: 206.695.4700 | fax: 206.695.4701 | saic.com/EEandI

EXHIBIT A

KAUAI COUNTY DEPARTMENT OF WATER
FACILITY RESERVE CHARGE STUDY

SCOPE OF SERVICES
(Revised September 2011)

SCOPE OF WORK

The following provides a detailed description of the proposed SAIC, Energy, Environment & Infrastructure, LLC (SAIC), tasks for this project related to preparing a study examining facility reserve charges for the Kauai County Department of Water (DOW).

Facility Reserve Charge Study

Professional consulting services necessary to update the Needs Assessment Study and Facility Reserve Charges (FRC) analysis, both previously prepared by SAIC, are proposed to be accomplished through the following tasks:

- **Task 1** – Prepare a data request identifying data needs and review requirements consistent with the Hawaii Revised Statutes involving the calculation of the FRC. Includes a review of the current HRS to determine any new legal requirements.
- **Task 2** – Incorporate updated CIP information into study. This task will include a trip for one SAIC staff to review capital projects that have been completed (both Water Plan 2020 projects and other capital projects) and find out more about future capital plans. This information will be used to revise the Needs Assessment Study. SAIC will discuss with DOW staff the process used by staff to determine assumptions for capital prioritization and cost estimates, recognizing that capital cost estimates should include costs for planning, EIS, design (in-house as well as outside design), land acquisition, construction, construction inspection (in-house as well as outside inspection) and project management. We will also review with staff the need to update the capital costs to reflect inflation or other escalation impacts as appropriate. This task does not include any efforts by SAIC to independently verify or develop capital costs for DOW's CIP.
- **Task 3** – Prepare FRC analysis and proposed FRC schedule of charges based on current rate structure and FRC methodology used in the previous study. This task assumes that the debt service credit used in the analysis will be the same as in the previous analysis since there will not be an opportunity to update the financial model. This task will also assume no changes to the FRC offset policies used in the previous study. In addition a comparison of the proposed FRC with similar charges around the state will be developed.
- **Task 4** – Prepare draft and final report (including Needs Assessment Study) summarizing the key assumptions, methodology, and results of the study.
- **Task 5** – Present a summary of the results to the DOW Board via conference call.

- **Task 6 -** Allowance for Additional Services. In any study of this type, unanticipated additional services and work assignments that cannot be defined at the outset of the project are not uncommon. An allowance for additional services is included to provide for any unanticipated services that may be required to successfully complete the project. The unanticipated additional services may possibly include additional meetings or presentations that would be determined to be necessary by DOW. All services provided under this Task 6 will require prior written authorization from DOW as to the specific task to be performed, anticipated schedule for the task, and negotiated lump sum fee for completion of the task, which shall not exceed, either individually or collectively, the amount budgeted for Task 6 (which is identified in Exhibit "B" to the Contract). Unused funds for this task remaining at the end of project will revert to DOW.

  (Revised June 2011)

  - Additional analyses of the appropriate debt service recovery from Facility Reserve Charge (FRC) Fund.
  - Additional analyses of rate level change at various capital funding scenarios split between FRC and non-FRC projects.
  - Additional analyses of potential rate level changes at various levels of the FRC.
  - Anticipated future analyses as necessary.

  (Revised September 2011)

  - SAIC will update the FRC study to reflect the debt service on the 2005 Bonds, with the assumption that DOW will provide to SAIC a list of the projects which were funded by the 2005 bond proceeds, including project description and location.

- **Task 7 (Revised May 2009)** – Prepare cost estimates for the following:
  (1) Membrane replacement which provides a de facto capacity expansion.
  (2) Replication of the existing plant on the same site to provide a doubling of plant capacity.
- **Task 8 (Revised May 2009)** – Develop preliminary feasibility capital and operating cost estimate for installing solar power to supply the treatment plant under existing operations to doubling of plant capacity.
- **Task 9 (Revised May 2009)** – Review the agreement between Grove Farm and DOW to understand the cost sharing provisions and commitments of the DOW to the operation and future expansion of the Plant and prepare a cost estimate for DOW to continue to purchase water under the existing facility operating agreement and a second cost estimate for DOW to "buy out" the private entity and to operate the facility with its own staff.

Work Products

1. Initial and follow-up data requests, as necessary.
2. Draft analysis and FRC schedule of charges for DOW review and comment.
3. Draft and 10 copies of final report summarizing the results of the analyses, including Data CD.
4. Presentation of final results to the DOW Board.

PROJECT STAFFING

We anticipate that the majority of the work will be completed by Ann Hajnosz, the Project Manager for this effort, and supporting analytical staff from our Seattle Office. Art Griffith will provide overall Quality Control/Quality Assurance for this effort. In addition, Ann Hajnosz will present the final results to the Board via conference call.

SCHEDULE

Based on our experience conducting efforts similar to the Scope of Work listed above, we estimate this effort should take approximately eight to ten months to complete. Assuming we receive notice to proceed along with a signed final contract by November 2nd, and substantially all necessary data requested is provided within three weeks (i.e., by November 20th), we believe that Tasks 1 through 4 (through draft report) can be completed by the end of April 2009. We would suggest that the results of the study be presented at a May 2010 Board meeting. Within 30 days of receiving comprehensive comments from the Board and DOW staff, we will finalize the report.

The following schedule is proposed for this project:

- **Task 1** – Initial and secondary data requests to be provided in early November 2009, following receipt of notice to proceed from DOW; completion of data collection and initial review activities by January 2010.
- **Task 2** – Trip to meet with DOW staff to discuss Water Plan 2020 and other capital projects scheduled before the end of 2009.
- **Task 3** – Complete draft Needs Assessment, FRC analysis and draft FRC schedule of charges by end of March 2010. During the January 20100-March 2010 time period we expect that there will be at least two draft analyses that will require review and feedback from DOW staff prior to agreeing on draft results to be presented to the Board.
- **Task 4** – Complete draft report summarizing the key assumptions, methodology, and results of the study by end of April 2010. Complete final report within approximately 30 days of receipt of final comments from DOW Board and staff on the draft letter report (approximate date for final report is July 2010).
- **Task 5** – Presentation of study results to DOW Board meeting in May 2010 via conference call.

(Revised September 2011)

Assuming approval of Amendment 3 by the Board on September 22, 2011, the Contractor will provide a revised draft of the FRC Report to DOW by October 7, 2011 for review by DOW staff and the Board. The final deliverable will be submitted on November 4, 2011 after addressing comments from DOW staff and Board.

EXHIBIT B

KAUAI COUNTY DEPARTMENT OF WATER

FACILITY RESERVE CHARGE STUDY

FEE SCHEDULE – Revised September 2011

SAIC will provide the services described in Exhibit A (Scope of Work, Facility Reserve Charge Study) on a fixed fee basis, based on the following estimates for each task. SAIC proposes to invoice DOW on a monthly basis using a percentage completion level for each of these tasks.

Facility Reserve Charge Study - Cost Proposal

Task	Labor	Expenses	Total
Task 1-Prepare data request/review HRS	$ 3,200	$ 100	$ 3,300
Task 2-Incorporate CIP into Needs Assessment (Trip 1)	13,800	2,200	16,000
Task 3-Prepare FRC analysis	12,300	400	12,700
Task 4-Prepare draft/final report	10,300	400	10,700
Task 5-Board Presentation via Conference Call	9,700	300	10,000
Excise Tax[1]		300	300
Subtotal	$49,300	$3,700	$53,000
Task 6-Provision for Additional Services (Original Contract)	3,000	2,000	5,000
Task 6-Provision for Additional Services (Amend. 2)	20,000		25,000
Task 6-Update FRC Analysis (Amend. 3)	5,000		5,000
Task 6-Respond to Board & Client RFIs (Cost to Date) (Amend. 3)	3,000		3,000
Task 6-Respond to Board & Client RFIs (Future) (Amend. 3)	1,000		1,000
Task 7-Prepare cost estimates (Amend. 1)	6,000		6,000
Task 8-Develop preliminary feasibility capital and operating cost estimate (Amend. 1) 2,200	2,200		2,200
Task 9-Review agreement and prepare a cost estimate (Amend. 1)	11,700		11,700
Total	$ 101,200	$5,700	$106,900

[1]Equals 4.166% of labor and expenses incurred while In the State of Hawai'i.

This fee schedule includes an allowance for one trip to Kauai to gather CIP information to update the Needs Assessment Study. The results of the FRC study will be presented to the Board via conference call at a yet to be determined Board meeting. If additional trips are required, this would need to be funded from a provision for additional services as approved by DOW. This fee schedule includes all out-of pocket expenses projected to be incurred during this project, including all applicable taxes. Computer costs have also been included based on the estimated personnel time associated with the project. This fee schedule assumes the timely completion of the project and that the required data and meetings set forth in the Exhibit A Scope of Services can be provided in a timely manner.

DEPARTMENT OF WATER

County of Kauai

"Water has no Substitute – Conserve It!"

MANAGER'S REPORT No.12-24

September 22, 2011

Re: EMERGENCY RESERVE FUND

Recommendation: Your approval is requested for the attached proposed Emergency Fund Policy.

Background: During the budget process for FY 12 the Board started setting aside funds for Emergencies. There was a restriction put on the expenditure of funds from the emergency fund until such time as a policy position was taken by the Board. The attached policy is a draft proposal from the Manager and staff.

The policy defines an emergency as the need to protect public health and safety and DOW assets from otherwise unbudgeted events.

The policy allows 1/24th of the current annual labor budget to be expended for labor costs associated with an emergency from the emergency fund if there is an emergency. It also allows use of the emergency fund for services and equipment rental if standby contracts are let prior to an emergency.

All other emergency funding must wait for Board approval.

A time table of a typical year with an emergency is included for your review.

Funding: None

Respectfully submitted,

David R. Craddick, P.E.
Manager and Chief Engineer

Attachment: Draft Board Policy #26

DRC/cab
Mgrrp-Emergency Reserve Fund (9-22-11)

--- 4398 Pua Loke Street, Lihue, Kauai, Hawaii or P. O. Box 1706, Lihue, HI 96766-5706 ---
Phone No. (808) 245-5400 -- Administration FAX No. (808) 246-8628 -- Engineering/Fiscal/Shop FAX No. (808) 245-5813

Board Policy No. 26

RE: EMERGENCY RESERVE FUND

The Department of Water shall establish and maintain an "Emergency Reserve Fund." The purpose of the Reserve is to provide and secure a monetary sum that may be utilized in times of public emergency, natural or man-made disaster, or other severe crises during which times the Department is unable to collect sufficient revenue to pay necessary expenditures and/or debts. The Reserve shall be an element of the Department's Annual Operating and CIP Budget. The total amount of the Reserve to be maintained shall be approximately 25% of the Department's Total Operating Revenues including debt service based on the average of the previous five (5) fiscal years. The Reserve shall be deposited in a separate account which shall be a highly liquid interest bearing fund as allowable by state law requiring two signatures to withdraw funds. The Two signatures shall be from among the Manager or Deputy Manager and Comptroller or Chairperson of the Board.

Purpose:
To assure proper oversight of budgeted Emergency Reserve Funds prior to Board action in an emergency.

Conditions for Disbursement of Emergency Reserve Funds:

1. The Board approves the Department's Annual Operating and Capital Improvement Projects Budget.
2. In the Budget there are funds allocated for use in the event of an emergency.
3. An emergency for purposes of this fund is defined as an event which puts public safety and health or Kaua'i Department of Water assets at risk and for which budgeted funds are insufficient to allow encumbering funds necessary to minimize or reduce the impact of such event.
4. The budgeted funds for labor costs shall be exhausted in any budget year before any monies from the emergency reserve funds are used for the purpose of labor costs. In the event of an emergency occurring between the time of agenda notice for approval of the next fiscal year budget and the end of the current fiscal year funds not to exceed $225,000 may be used for labor costs. The $225,000 may be increase each year by $2,000 from the date of the adoption of this policy. Emergency funds may be utilized for labor costs in the event of a labor strike or other labor crisis in which budgeted Department staff salaries are not exhausted.
5. The staff is encouraged to have bid standby service contracts not to exceed $300,000 for fuel delivery, operated equipment rental, pipeline repair services, water plant operation services, chlorine application services, plant electrical/electronic services, engineering services, accounting services, billing services, legal services, and management services. The $300,000 may be increase each year by $3,000 from the date of the adoption of this policy.

6. The staff is encouraged to have bid standby bare equipment rental contracts not to exceed $300,000 for essential equipment in the event existing Department equipment is inoperable or insufficient. The $300,000 may be increase each year by $3,000 from the date of the adoption of this policy.
7. The staff is encouraged to have bid standby material supply contracts not to exceed $200,000 for essential materials in the event existing Department inventory insufficient. The $200,000 may be increase each year by $2,000 from the date of the adoption of this policy.
8. Funds for the above competitively bid standby emergency contracts may be expended from the emergency reserve fund provided, any specific budgeted funds for services, equipment or materials have been exhausted and the standby emergency contracts have been reported to the Board at the time such contracts were entered into and the Board Chair has signed off on the contracts according to Policy No. 22.
9. Every effort should be taken to follow the procedures should a disaster be declared by the Governor or President so Emergency Reserve Funds that are reimbursable meet FEMA requirements.
10. Should the Emergency Fund be needed for debt service payments disbursements shall be by Board resolution only.
11. No other funds may be appropriated from the Emergency Reserve Fund without Board approval.
12. Twenty percent of unreimbursed funds shall be replaced per year until the Emergency Reserve Fund is 25% of total operating revenues plus debt service.

APPROVED BY:

_____

Chairperson, Board of Water Supply

Dated: September 22, 2011

Effective date: _____

BOARD POLICY #26 ADDENDUM

EMERGENCY RESERVE FUND

Typical KDOW EMERGENCY RESERVE FUNDS USE TIMETABLE

1. Start of new fiscal year ER standby contracts in place for materials, services and equipment. Labor will be utilized as necessary from DOW staff and emergency labor as needed limited to $225,000.

2. Report to the Board any ER standby contracts entered into.

3. Emergency occurs.

4. Board is provided a statement of Expenses and Reimbursements from the ER Standby contracts, amounts invoiced and labor spend down on a monthly basis.

5. Should any contracts be in danger of running short of funds Board approval of contract amendments will be required.

6. Should additional labor be needed beyond $225,000 Board approval will be required.

7. All debt transactions will need Board approval.

DEPARTMENT OF WATER
County of Kaua'i

"Water has no Substitute – Conserve It!"

MANAGER'S REPORT NO. 12-25

September 22, 2011

Re: Wailua Houselots Main Replacement – Job No. 02-15, Wailua, Kauai, Hawaii, Contract No. 403 with R.M. Towill Corporation

RECOMMENDATION:
It is recommended that the Board approve the time extension request of 550 days for Contract No. 403 with R.M. Towill Corporation, for the subject project/contract.

FUNDING:
N/A

BACKGROUND:
This project is "shovel ready" pending approval by the Department of Public Works (DPW). The consultant is requesting additional time for the project due to longer than anticipated governmental review periods (DPW). Upon final project review, the DPW requested that the DOW redesign the plans around dated drainage plans that, to date, the DPW has been unable to provide.

It is DOW staff's opinion that R.M. Towill has made substantial/sufficient progress given the governmental review delays and that canceling this contract would not be in the best interest of the rate payer.

1. 9 month review period by DPW – June 14, 2010 to March 9, 2011
2. Resubmitted revised dwgs to DPW – April 22, 2011
3. Submitted tracings to DOW – May 17, 2011
4. Unofficial response by DPW requesting Wailua Houselots Drainage Plans Phase IVB that both DPW and RMTC do not have – July 7, 2011

Additionally, the official notice to proceed appears to have been given approximately one month after the contract was signed and executed by all parties.

Respectfully submitted,

Aaron Zambo

Aaron Zambo, PE
Project Manager

Concurred:

David R. Craddick
Manager and Chief Engineer

DRC/AZ/cab
Mgrrp_Job 02-15-Wailua Houselots Main Replacement-Wailua, Kauai-Contract No. 403 with R.M. Towill Corporation (9-22-11)

DEPARTMENT OF WATER

County of Kaua'i

"Water has no Substitute – Conserve It!"

Manager's Report No. 12-26

September 22, 2011

Re: Job No. 10-02 – Department of Transportation/Kiewit-Kaumualii Highway Widening, Vicinity of Anonui Road to Vicinity of Lihue Mill Bridge, F.A.P. No. NH-050-1(31)

Recommendation:
Board approval is requested to provide $20K funding from the BAB for approximately 19 feet of concrete jacketed water line under a storm drain at the Puhi Road/Kaumualii Highway intersection area. In addition, Board approval is requested for an additional $50K for contingency.

Due to a conflict of a new drain line with the Department's existing 16-inch waterline located north of the original waterline connection point, the connection point of the 16-inch waterline was required to be relocated further north requiring additional waterline to be installed under the new drain line. The State and the Department are sharing the cost of this unforeseen work with the Department's portion being $20K and the State's portion being over $60K.

The contractor has completed approximately 70% of the waterline work (approximately 4,500 feet of waterline and appurtenances remaining to be installed). The Department is requesting a contingency amount to be approved in the event that any small changes are needed to complete the project. This will help to minimize any delay of job claims by the contractor in the event of unforeseen changes that require additional funds.

FUNDING:
Account No. 201-01 Bond-BAB $21,111,131.24

Job #10-02,	$4,500,000.00
Additional Amount approved by Board at May 2011 Board Meeting	$ 120,000.00
Additional Request	$ 70,000.00
Total	$4,690,000.00

Balance Remaining- Account No. 201-01 Bond-BAB $21,041,131.24

Respectfully Submitted:

Keith Aoki, Engineer
Engineering Division

Concurred:

David R. Craddick, P.E.
Manager & Chief Engineer

DRC/KA/cab
Mgrrp-Job No. 10-02 – DOT/Kiewit-Kaumualii Hwy Widening-Anonui Road- Lihue Mill Bridge (9-22-11):cab

---4398 Pua Loke Street, Lihu'e, Kaua'i, Hawai'i or P. O. Box 1706, Lihu'e, HI 96766-5706---
Phone No. (808) 245-5400 – Administration FAX No. (808) 246-8628 – Engineering/Fiscal/Shop FAX No. (808) 245-5813

DEPARTMENT OF WATER

County of Kaua'i

"Water has no Substitute – Conserve It!"

MANAGERS REPORT 12-27

September 22, 2011

Re: Job No. 04-06, KW-05, Kekaha Well "B" Renovations, Kekaha Water System; Kekaha, Kauai, Hawaii, Change Order #5, Goodfellow Brothers

RECOMMENDATION:

It is recommended that the Board approve the additional funds in the amount of $14,722.24 for Contract #503 with Goodfellow Bros. Inc. for proposed change order #5.

FUNDING:

Original Amount Budgeted:	
Goodfellow Brothers, Inc.	
Job No. 04-06, KW-05, Kekaha Well "B" Renovations,	
Kekaha Water System	$444,000.00
Contingency, approximately 5%	$ 22,200.00
Account No. 101b.CRP, BC683, Kekaha Well "B" Renovations,	
Kekaha Water System Total Available	$466,200.00
Original Contract Amount	$444,000.00
Change Order #1	$ no cost
Change Order #2	$ 21,824.94
Change Order #3	$216,074.00
Change Order #4	$ no cost
Requested Change Order #5	$25,526.24
New Total Contract Amount	$707,425.18
Current Corrected Funded Amount	$<692,702.94>
Additional Funds Requested from Account No. 201- 01 Bond – BAB For Change Order #5	<$14,722.24>

Current Funds Available from Account #201-01 BAB Bond	$21,041,131.24
Available Balance: Account # 201-01 BAB Bond after Change Order #5	$21,026,409.00

BACKGROUND:

The major additional components of this project are:

- Install new thrush air vent
- Install new concrete encased conduit and wires

---4398 Pua Loke Street, Lihu'e, Kaua'i, Hawai'i or P. O. Box 1706, Lihu'e, HI 96766-5706---
Phone No. (808) 245-5400 – Administration FAX No. (808) 246-8628 – Engineering/Fiscal/Shop FAX No. (808) 245-5813

Subsequent to the planning and design of this project, it was discovered that the inlet piping was creating air gaps in the new pipeline between pump cycles which caused the mechanical seals in the pumps to fail. In addition, the existing conduits were rusted and corroded. We recommend installing the air relief system for successful operation and new conduits and wires at this time to avoid emergency work in the near future.

Respectfully submitted,

Dustin Moises
Waterworks Project Manager

CONCURRED:

David R. Craddick, PE
Manager and Chief Engineer

DRC/DM/cab
Mgrrp-Job No. 04-06, KW-05, Kekaha Well "B" Renovations, Kekaha,-Change Order #5-Goodfellow (9-22-11):cab

DEPARTMENT OF WATER

County of Kauai

"Water has no Substitute – Conserve It!"

MANAGER'S REPORT NO. 12-28

September 22, 2011

Re: Request Acknowledgement and Signature of the Board Chair related to KMH LLP Audit Letter

RECOMMENDATION:

It is recommended that the Board acknowledge the correspondence from KMH LLP concerning Audit Standards, with the Board Chair being authorized to sign acknowledgement and receipt of the document.

BACKGROUND:

This document is required under the Statement of Auditing Standards No.114 auditor's communication with those Charged with Governance.

Respectfully submitted,

David R. Craddick, P.E.
Manager and Chief Engineer

DRC/cab
Mgrrp_KMH LLP Audit Letter (9-22-11)

--- 4398 Pua Loke Street, Lihue, Kauai, Hawaii or P. O. Box 1706, Lihue, HI 96766-5706 ---
Phone No. (808) 245-5400 -- Administration FAX No. (808) 246-8628 -- Engineering/Fiscal/Shop FAX No. (808) 245-5813

Staff Reports

DEPARTMENT OF WATER
Budget Status Summary
July 31, 2011

I. WATER UTILITY FUND

	Current Month	Year to Date	
Beginning Balance 07/1/2011			$ 16,914,045.74
Add: Revenues	$ 3,130,723.98	$ 3,130,723.98	$ 3,130,723.98
TOTAL RESOURCES:			$ **20,044,769.72**
Less: Expenditures	$ 3,655,947.24	$ 3,655,947.24	$ 3,655,947.24
TOTAL EXPENDITURES:			$ **3,655,947.24**
Ending Balance			$ **16,388,822.48**

II. FACILITIES RESERVE CHARGE

Beginning Balance 07/1/2011			$ 4,367,931.68
Add: Revenues	$ 5,468.41	$ 5,468.41	$ 5,468.41
TOTAL RESOURCES:			$ **4,373,400.09**
Less: Expenditures	$ -	$ -	$ -
TOTAL EXPENDITURES:			$ -
Ending Balance			$ **4,373,400.09**

III. BOND FUND

Beginning Balance 07/1/2011			$ 401,056.43
Add: Revenues	$ -	$ -	$ -
TOTAL RESOURCES:			$ **401,056.43**
Less: Expenditures	$ -	$ -	$ -
Ending Balance			$ **401,056.43**

IV. WATERWORK BUILD AMERICA PROJECT FUND

Beginning Balance 07/1/2011			$ 42,251,093.01
Add: Revenues	$ -	$ -	$ -
TOTAL RESOURCES:			$ **42,251,093.01**
Less: Expenditures	$ 792,154.70	$ 792,154.70	$ 792,154.70
Ending Balance			$ **41,458,938.31**

TOTAL - ALL FUNDS at July 31, 2011 $ **62,622,217.31**

STATEMENT OF REVENUES AND EXPENDITURES
WATER UTILITY FUND
July 31, 2011

REVENUES:

Cash on hand as of July 1, 2011		**$ 16,914,045.74**
Add: Revenues To Date		$ 3,130,723.98
Sub-Total		**$ 20,044,769.72**
EXPENDITURES:		
Less: Expenditures to Date		$ 3,655,947.24
BALANCE AT THE END OF THE MONTH		**$ 16,388,822.48**

SHORT TERM INVESTMENTS - WATER UTILITY FUND

BANK OF HAWAII

TCD#	8000423145-114	0.20000%	INT. DUE	02/18/11	$	160,000.00

CENTRAL PACIFIC BANK

FIRST HAWAIIAN BANK

	T30020086	0.18000%	INT. DUE	01/20/12	$	500,000.00

MERRILL-LYNCH

CUSIP#	C31331KDM9	0.2800%	INT. DUE	03/09/12	$	1,000,000.00
CUSIP#	C313588LE3	0.2950%	INT. DUE	09/02/11	$	1,994,361.10
CUSIP#	C313384PH6	0.2850%	INT. DUE	11/16/11	$	997,168.88

SUB-TOTAL FOR PAGE A **$ 4,651,529.98**

SUB-TOTAL FROM PAGE A						$	**4,651,529.98**
07/31/11							
SHORT TERM INVESTMENTS - WATER REVENUES							
MULTI-BANK							
CUSIP#	85508VAC3	2.70000%	INT. DUE	11/18/13	98,000.00		
CUSIP#	06610PAR4	4.50000%	INT. DUE	07/27/12	98,000.00		
CUSIP#	3136FP2U0	1.00000%	INT. DUE	01/27/16	652,527.78		
CUSIP#	3136FRTH6	0.75000%	INT. DUE	06/30/16	1,000,000.00		
U B S							
CUSIP#	C3136FPSD0	1.25000%	INT. DUE	10/28/14	1,999,069.44		
CUSIP#	31331G2N8	2.04000%	INT. DUE	04/29/13			
CUSIP#	313588WG6	0.18000%	INT. DUE	05/01/12	$ 998,260.00	$	**4,845,857.22**
TOTAL SHORT-TERM INVESTMENTS - WATER UTILITY						$	**9,497,387.20**
CASH ON HAND WITH TREASURER - COK				07/31/11		$	**1,481,956.84**
CASH ON HAND-BOH Savings				07/31/11		$	**5,804,575.91**
CASH ON HAND - FHB Savings				07/31/11		$	**25,818.58**
LESS:	July Claims Payable-1					$	**(3,188,232.37)**
	3/31/11 Payroll		06/01/11			$	**(20.00)**
	Bank Transfer		07/08/11			$	**2,580,986.27**
	Bank Transfer		07/18/11			$	**185,882.17**
	Due to W/U from BAB					$	**467.88**
	Due to W/U, BAB Fund		06/14/11			$	-
CASH BALANCE AT THE END OF THE MONTH						$	**16,388,822.48**

DEPARTMENT OF WATER
County of Kauai
06/30/11
JULY 1, 2011 TO JUNE 30, 2012
July 31, 2011

WATER UTILITY FUND

% Budget Elapsed 8.33%

CASH RECEIPTS:	BUDGETED RECEIPTS	TOTAL RECEIPTS TO DATE	RECEIPTS FOR THE MONTH	%	BALANCE OF BUDGET OVER TOTAL ACTUAL RECEIPTS
BEGINNING CASH BALANCE	**$ 16,914,045.74**		$ -		**$ 16,914,045.74**
1 Water Sales	$ 20,714,175.00	$ 1,695,331.03	$ 1,695,331.03	8%	$ 19,018,843.97
2 Net Miscellaneous Receipts	$ 111,999.00	$ -	$ -	0%	$ 111,999.00
3 Interest Income	$ 355,000.00	$ 3,830.95	$ 3,830.95	1%	$ 351,169.05
4 County Service Charge	$ 925,133.00	$ -		0%	$ 925,133.00
5 State Revolving Fund	$ 1,431,562.00	$ 1,431,562.00	$ 1,431,562.00	100%	$ -
5a Other Receipts	$ -	$ -	$ -	0%	$ -
5b OTHER - BAB Subsidy	$ 715,616.00	$ -	$ -	0%	$ 715,616.00
5c FRC Debt Service Payback	$ 1,989,115.00	$ -			$ 1,989,115.00
5d Grant, Drought Mitigation	$ 126,500.00	$ -			$ 126,500.00
TOTAL RESOURCES	**$ 43,283,145.74**	**$ 3,130,723.98**	**$ 3,130,723.98**	**7%**	**$ 40,152,421.76**

DISBURSEMENTS:	BUDGETED AMOUNT	TOTAL ACTUAL EXPENDITURES TO DATE	EXPENDITURES FOR THE MONTH	%	BALANCE OF BUDGET OVER TOTAL ACTUAL EXPENDITURES
SALARIES:					
15 salaries over-withdrawn by county Salaries - DOW	$ 5,326,518.00	$ 360,440.55	$ 360,440.55	7%	$ 4,966,077.45
16 Provision for Accrued Vacation	$ 100,000.00	$ -		0%	$ 100,000.00
TOTAL SALARIES:	**$ 5,426,518.00**	**$ 360,440.55**	**$ 360,440.55**	**7%**	**$ 5,066,077.45**
NORMAL EXPENDITURES					
19 **COUNTY SERVICE CHRG**	**$ 925,133.00**	$ -	$ -	**0%**	**$ 925,133.00**
ADMINISTRATIVE OFFICE and ENGINEERING:					
21 Utilities	$ 210,227.00	$ 506.50	$ 506.50	0%	$ 209,720.50
22 Postage and Printing	$ 192,000.00	$ 16,974.54	$ 16,974.54	9%	$ 175,025.46
24 Office Equipment Maintenance	$ 77,710.00	$ -		0%	$ 77,710.00
24b 05/19/06 Con 461 Four Winds Group MMIS Phases I & II	$ 147,300.00	$ -		0%	$ 147,300.00

	ITEM	BUDGETED AMOUNT	TOTAL ACTUAL EXPENDITURES TO DATE	EXPENDITURES FOR THE MONTH	%	BALANCE OF BUDGET OVER TOTAL ACTUAL EXPENDITURES
27	Contractual Services	$ (31,350.00) $ 899,100.00	$ 14,328.06	$ 14,328.06	2%	$ 853,421.94
27a	Con 521 R. W. Beck Inc.	$ 2,008.00	$ -		0%	$ 2,008.00
27b	Con 506 R. W. Beck Inc. FRC Study for DOW	$ 23,570.00	$ 15,500.00	$ 15,500.00	66%	$ 8,070.00
27d	Con 535 Fukunaga & Assoc. WRP 01 FY 05-06, Kauai Water Use & Developmnt Plan update	$ 514,000.00	$ -		0%	$ 514,000.00
27e	USGS Joint Funding Agrmt. Water Monitoring Program for the period 10/1/11-9/30/12	$ 31,350.00	$ -		0%	$ 31,350.00
28	Travel and Incidentals - Board	$ 19,768.00	$ -		0%	$ 19,768.00
29	Travel and Incidentals - Staff	$ 37,780.00	$ 656.48	$ 656.48	2%	$ 37,123.52
30	Collector's Commission	$ -				$ -
31	Miscellaneous	$ 16,000.00	$ 2,202.18	$ 2,202.18	14%	$ 13,797.82
32	Auditing Fee	$ 10,000.00 $ ~~76,000.00~~	$ -		0%	$ 10,000.00
32c	Annual Audit Contract No. 537 KMH, LLP	$ 66,000.00	$ -		0%	$ 66,000.00
33	In-Service Training	$ 59,600.00	$ 6,524.50	$ 6,524.50	11%	$ 53,075.50
34	Supplies - Office & Eng.	$ 38,000.00	$ 13,339.20	$ 13,339.20	35%	$ 24,660.80
35	Operating Reserve Fund	$ 20,000.00	$ -		0%	$ 20,000.00
36	Public Relations	$ 86,500.00	$ 12,286.91	12,286.91	14%	$ 74,213.09
36.1	Grant: The Nature Conservanc	$ 75,000.00	$ 75,000.00	$ 75,000.00		$ -
36.2	Con 531 Limtiaco Co, Inc. Public Relations Services	$ 59,858.80	$ 15,381.77	$ 15,381.77	26%	$ 44,477.03
36.3			$ -			$ -
37	Computer Support and Supplies	$ 84,500.00	$ - $ 2,605.68	$ 2,605.68	3%	$ 81,894.32
38	Microlab Materials and Supplies	$ 20,000.00	$ - $ - $ 294.52	$ 294.52	1%	$ 19,705.48
	TOTAL ADM, OFF & ENG	**$ 2,658,921.80**	$ - **$ 175,600.34**	**$ 175,600.34**	**7%**	**$ 2,483,321.46**

ITEM		BUDGETED AMOUNT	TOTAL ACTUAL EXPENDITURES TO DATE	EXPENDITURES FOR THE MONTH	%	BALANCE OF BUDGET OVER TOTAL ACTUAL EXPENDITURES
OPERATIONS AND 40724						
40	Vehicle - Materials & Service	$ 107,600.00	$ 13,492.67	$ 13,492.67	13%	$ 94,107.33
41	Vehicle - Fuel	$ 168,000.00	$ 14,517.54	$ 14,517.54	9%	$ 153,482.46
42	Utilities	$ 86,400.00	$ -		0%	$ 86,400.00
43	Meter Parts	$ 8,300.00	$ -		0%	$ 8,300.00
43a	Electrical Parts	$ 20,000.00	$ 310.60	$ 310.60	2%	$ 19,689.40
44	Miscellaneous	$ 5,000.00	$ 509.98	$ 509.98	10%	$ 4,490.02
44a	Misc. - Tapping Team	$ 8,000.00	$ -		0%	$ 8,000.00
44b	Misc. - Drought Mitigation	$ 126,500.00	$ 3,275.00	$ 3,275.00		$ 123,225.00
45	Contractual Services	$ 200,000.00	$ -		0%	$ 200,000.00
47	Materials and Supplies	$ 227,000.00	$ 36,562.66	$ 36,562.66	16%	$ 190,437.34
48	Collective Bargaining Items	$ 24,000.00	$ 814.52	$ 814.52	3%	$ 23,185.48
51	Pump Electrical	$ 3,000,000.00	$ -		0%	$ 3,000,000.00
55	Purchase of Water	$ 2,248,700.00	$ 59.47	$ 59.47	0%	$ 2,248,640.53
58	Chemicals	$ 60,000.00	$ 3,993.92	$ 3,993.92	7%	$ 56,006.08
59	Safe Drinking Water Act Program	$ 50,000.00	$ 178.75	$ 178.75	0%	$ 49,821.25
59g	Contract No. 496 10/08 MWH Laboratories	$ -	$ -		0%	$ -
	TOTAL OPERATIONS:	**$ 6,339,500.00**	**$ 73,715.11**	**$ 73,715.11**	1%	**$ 6,265,784.89**
		$ 6,339,500.00	$ 73,715.11	$ 73,715.11		$ 6,265,784.89
INSURANCE AND EMPLOYEE BENEFITS:						
60	Insurance and Bonds	$ 200,000.00	$ -		0%	$ 200,000.00
60a	Small Claims	$ 10,000.00	$ -		0%	$ 10,000.00
61	Workmen's Compensation Insurance	$ 150,000.00	$ -		0%	$ 150,000.00
62	Retirement System	$ 826,676.00	$ 52,523.95	$ 52,523.95	6%	$ 774,152.05
63	FICA Taxes - Employer's	$ 407,479.00	$ 25,434.13	$ 25,434.13	6%	$ 382,044.87
64	Health, Life, & Dental (EUTF)	$ 493,780.00	$ 31,483.79	$ 31,483.79	6%	$ 462,296.21

	ITEM	BUDGETED AMOUNT	TOTAL ACTUAL EXPENDITURES TO DATE	EXPENDITURES FOR THE MONTH	%	BALANCE OF BUDGET OVER TOTAL ACTUAL EXPENDITURES
67	Health & Life Insurance - Retirees & OPEB	$ 1,655,855.00	$ -		0%	$ 1,655,855.00
	TOTAL INSURANCE & EMPLOYEE BENEFITS	**$ 3,743,790.00**	**$ 109,441.87**	**$ 109,441.87**	**3%**	**$ 3,634,348.13**
	TOTAL NORMAL EXPENDITURES:	**$ 13,667,344.80**	**$ 358,757.32**	**$ 358,757.32**	**3%**	**$ 13,308,587.48**
		$ 13,667,344.80	$ 358,757.32	$ 358,757.32		$ 13,308,587.48
	DEBT SERVICE REQUIREMENT:					
80	SRF Loan Job 97-5 Hanapepe River Crossing	$ 96,555.50	$ 48,530.35	$ 48,530.35	50%	$ 48,025.15
81	SRF Loan Job 97-6 Hanapepe 27" Steel Pipe	$ 53,810.09	$ 27,045.81	$ 27,045.81	50%	$ 26,764.28
82	SRF Loan Job 98-33 WK-21 Wailua Hmstds Well #3	$ 31,005.96	$ -		0%	$ 31,005.96
83	SRF Loan Job 97-2 PLH-31 Lihue Steel Tanks 1 & 2	$ 98,692.86	$ 49,608.98	$ 49,608.98	50%	$ 49,083.88
84	SRF Loan Job 98-6 WK-07 Omellas 0.2 MG Tank	$ 63,803.49	$ -		0%	$ 63,803.49
85	SRF Loan Job 97-11 WK-03 16" W/L Along Kuhio Hwy	$ 181,669.20	$ 91,323.68	$ 91,323.68	50%	$ 90,345.52
86	DOW Bond 2005 Issue	$ 214,950.00	$ 140,625.00	$ 140,625.00	65%	$ 74,325.00
87	DOW Bond 2005 Series, Partial Refund 2001 Series A	$ 149,987.50	$ 74,993.75	$ 74,993.75	50%	$ 74,993.75
88	SRF Loan Job 98-2 KP-07 KP-08 16" W/L on Poipu Rd	$ 405,375.85	$ 203,754.57	$ 203,754.57	50%	$ 201,621.28
89	SRF Loan Job WK -42 PH I Stable 1.0 MG Tank	$ 611,331.29	$ -		0%	$ 611,331.29
90	SRF Loan Job KW -27 Kaumualii Hwy 12" Main Repl	$ 20,270.97 $ 313,502.00	$ -		0%	$ 333,772.97
91	SRF Loan Job K -7, LO-13 Waha, Wawae & Niho Rds	$ 153,883.08	$ 77,315.68	$ 77,315.68	50%	$ 76,567.40
92	DOW Bond Series 2010A	$ 2,920,880.60	$ 1,460,440.30	$ 1,460,440.30	50%	$ 1,460,440.30
93	FmHa $300,000 @5% 20 year Bond	$ 18,825.00	$ -		0%	$ 18,825.00
94	SRF Loan Job Kapilimao 0.5 MG Tank	$ 162,415.87 $ 145,847.00	$ 154,878.18	$ 154,878.18	106%	$ 153,384.69
95	DOW 2011A Series 2005A(2001A Refnd)	$ 440,830.00	$ 356,680.00	$ 356,680.00		$ 84,150.00
97	DOW Bond 2001A Issue Series 2005A Refunded	$ (440,830.00) $ 672,819.00	$ -		0%	$ 231,989.00
98	SRF Loan Job 97-1 Kokolau Tunnel Repairs	$ 128,168.93	$ 64,429.33	$ 64,429.33	50%	$ 63,739.60
99	SRF Loan Job 96-4 Kapilimao Valley Well	$ 69,136.62	$ -		0%	$ 69,136.62
	rounding	$ (382.78)				
	Job KW-27	$ (20,270.97)				
	Kapilimao 0.5 MG Tank	$ (162,415.87)				
	SRF Loan	$ 320,000.00				$ 136,930.38
	TOTAL DEBT SERVICE REQ	**$ 6,649,861.19**	**$ 2,749,625.63**	**$ 2,749,625.63**	**41%**	**$ 3,900,235.56**
		$ 6,649,861.19 $ -	$ 2,749,625.63	$ 2,749,625.63		$ 3,900,235.56
	TOTAL SALARIES, NORMAL EXPENDITURES, AND DEBT SERVICE REQUIREMENTS:	**$ 25,743,723.99**	**$ 3,468,823.50**	**$ 3,468,823.50**	**13%**	**$ 22,274,900.49**
	PROOF	$ 25,743,723.99	$ 3,468,823.50	$ 3,468,823.50		$ 22,274,900.49

ITEM	BUDGETED AMOUNT	TOTAL ACTUAL EXPENDITURES TO DATE	EXPENDITURES FOR THE MONTH	%	BALANCE OF BUDGET OVER TOTAL ACTUAL EXPENDITURES
06/30/11					
101 Capital Improvements	$ 435,000.00	$ -		0%	$ 435,000.00
101b Capital Rehabilitation	$ 3,216,244.00	$ -		0%	$ 3,216,244.00
102 Misc. Other Capital Expenditures, OPS	$ 550,000.00	$ 26,622.70	$ 26,622.70	5%	$ 523,377.30
103 (Lease Computers) Office and Engineering	$ 621,701.00	$ 4,225.08	$ 4,225.08	1%	$ 617,475.92
105 Recording Meters	$ -	$ -		4%	$ -
106 Vehicles and Equipment	$ 328,000.00	$ 11,914.71	$ 11,914.71	4%	$ 316,085.29
106b CIP Reserve Fund	$ 7,938,428.20	$ -		0%	$ 7,938,428.20

	ITEM	BUDGETED AMOUNT	TOTAL ACTUAL EXPENDITURES TO DATE	EXPENDITURES FOR THE MONTH	%	BALANCE OF BUDGET OVER TOTAL ACTUAL EXPENDITURES
107	Purchase of Meter and Meter Boxes	$ 160,000.00	$ -		0%	$ 160,000.00
370	7/15/1993 **WK-23** Con #259, Job 93-1 Nishimura, Katayama, .25 MG Walua Tank	$ 53,751.00	$ -		0%	$ 53,751.00
401	8/8/1994 Contract #37348,Job 91-13 R.M. Towill Corp., Drill Hanamaulu Well #1 (Kalepa Well #2)	$ 645.08	$ -		0%	$ 645.08
464	11/20/02 (106b) Contract #309, Job 97-1 **PLH-02** SSFM Engineers, Repair Kokolau Tunnel	$ 118,381.66	$ -		0%	$ 118,381.66
499	8/2/1999 Contract #346, Job 97-7 **KP-06a** Wagner Eng. Replace Lawai Rd. 8" W/L	$ 4,900.00	$ -		0%	$ 4,900.00
519	6/2/2000 **KP-01** Con. #355 Okahara & Assoc., Inc Job 92-4 Koloa Well "F" Pump	$ 6,638.00	$ -		0%	$ 6,638.00

	ITEM	BUDGETED AMOUNT	TOTAL ACTUAL EXPENDITURES TO DATE	EXPENDITURES FOR THE MONTH	%	BALANCE OF BUDGET OVER TOTAL ACTUAL EXPENDITURES
	1/17/2001					
540	Contract #368 (103) Century Computers Job 98-17 Fin. Acctg.	$ 12,245.67	$ -		0%	$ 12,245.67
	(02/06/02)					
561	Con 384 (101) **LO-07** Fukunaga & Assoc. Job 99-8 Drill Omao Well No. 1	$ 64,600.00	$ -		0%	$ 64,600.00
	(9/23/02) 101b					
578	Con 397 PAREN, Inc. **KW-14, KW-15** Job 02-03 12" W/L Along Waimea Canyon/Kaumualii	$ 3,150.00	$ -		0%	$ 3,150.00
	12/24/02 (101)					
586	Con 401 Control Mfg. Co. Job 94-4 SCADA Systems	$ 93,516.54	$ -		0%	$ 93,516.54
	1/14/03 (101b, 106b)					
587	Con 403 RM Towill Corp **WK-28** Job 02-15 Wailua Hslts W/L Repl	$ 84,337.00	$ -		0%	$ 84,337.00
	1/14/03 (101b, 106b)					
588	Con 404 Fukunaga & Assoc. **WK-32** Job 02-18 Kapaa Hmstds W/L Repl	$ 51,100.00	$ -		0%	$ 51,100.00
	2/05/03 (101b, 106b)					
591	Con 408 Wagner Eng. Inc. **H-01 H-02 H-03** Job 02-17 Maka Ridge Deepwell, Tank	$ 29,599.20	$ -		0%	$ 29,599.20
	2/12/03 (101b, 106b)					
592	Con 409 Esaki Surveying **WK-36** Job 02-16 Ohana Anolani & Kuamoo Rds	$ 101,425.00	$ -		0%	$ 101,425.00
	9/03/03 (101b)					
601	Con 420 Hawaii Pacific Eng, Job 02-08 **HE-08** Eleele Twin 0.4 MG Tanks	$ 8,326.68	$ -		0%	$ 8,326.68
	12/05/03 (101)					
607	Con 425 HI Pacific Eng. Job 02-21**PLH-37** Rehab & Deepen Existing Wells	$ 3,149.00	$ -		0%	$ 3,149.00

	ITEM	BUDGETED AMOUNT	TOTAL ACTUAL EXPENDITURES TO DATE	EXPENDITURES FOR THE MONTH	%	BALANCE OF BUDGET OVER TOTAL ACTUAL EXPENDITURES
609	2/19/04 (101b) Con 428 Brown Caldwell Job 03-02 **HW-02, HW-03 A-04, KW-06** Renovations: Wainiha Booster, Haena Steel Tank, Anahola 0.15 MG Tank, Kekaha Shaft	$ 31,460.40	$ -		0%	$ 31,460.40
610	2/27/04 (101) Con 429 Esaki Surveying **M-01, M-02** Job 02-11 Moloaa 50,000 Gal SS Storage Tank	$ 125,200.00	$ -		0%	$ 125,200.00
618	9/30/04 (101) **PLH-41** Contract 52243 Earthworks Pacific, Inc. Ulaula & Uliuli Rds; PRV, BP & 6" Main, Lihue	$ 40,058.47	$ -		0%	$ 40,058.47
630	6/30/05 (101b, 106b) Con 447 Fukunaga & Assoc **WK-14** Job 04-02 Vivian Heights Main Repl	$ 5,791.00	$ -		0%	$ 5,791.00
634	10/20/05 (101b) **WK-30** Con 450 ParEn Inc. Job 04-03 Waipouli-Olohena Rd. Pipeline	$ 136,280.00	$ -		0%	$ 136,280.00
635	9/07/05 (101b) Con 449 HI Pacific Eng Inc **KW-16** Job 05-01 Waimea Main Replacement	$ 12,147.25	$ 6,269.25	$ 6,269.25	52%	$ 5,878.00

	ITEM	BUDGETED AMOUNT	TOTAL ACTUAL EXPENDITURES TO DATE	EXPENDITURES FOR THE MONTH	%	BALANCE OF BUDGET OVER TOTAL ACTUAL EXPENDITURES
636	10/25/05 (101b, 106b) Con 451 Bow Eng & Dev **PLH-12** Job 05-06 Eiwa, Umi, Akahi, Elua, Hardy St. 8" Main Replacement	[redacted]	$ -		0%	$ 26,404.10
638	11/16/05 (101b, 106b) Con 453 Belt Collins HI **PLH-30** Job 05-05 Nawiliwili, Niumalu & Kupolo Main	[redacted]	$ -		0%	$ 24,978.00
645	5/19/06 (101, 106b) Con 460 Brown & Caldwell **KW-25** Job 05-03 Kapilimao 0.5 MG Tank	$ 5,775.00	$ -		0%	$ 5,775.00
647	06/10/06 (101b) Con 462 Eng Solutions Inc **KW-05 KW-20** Job 04-06 Waimea Well A & Kekaha B	[redacted]	$ -		0%	$ 30,964.00
651	9/21/06 (101b) Con 466 Brown & Caldwell **KW-28** Job 06-01 Amfac Shaft Renovation, State Well No.5842-02 Phase 1A	$ 159,946.39	$ -		0%	$ 159,946.39
668	01/14/08 (101) Con 484 Wagner Eng. Services Job 02-01 Kukuiolono Tank Site Exchange, Kalaheo	$ 5,210.47	$ -		0%	$ 5,210.47

	ITEM	BUDGETED AMOUNT	TOTAL ACTUAL EXPENDITURES TO DATE	EXPENDITURES FOR THE MONTH	%	BALANCE OF BUDGET OVER TOTAL ACTUAL EXPENDITURES
676	11/28/08 (101) Con 497 Kauai Builders Ltd. KW-25 Job 05-03 Kapilimao 0.5 MG Storage Tank	$ 221,268.15	$ -		0%	$ 221,268.15
683	7/31/09 (101b) Con 503 Goodfellow Bros. Job 04-06 KW-05 Kekaha (Waipao) Well "B" Renovations	$ 375.06	$ -		0%	$ 375.06
690	2/28/2010 Con 510 SSFM International, Inc. Job No. 05-03, KW-25 Kapilimao 0.5 MG Tank & Job No. 03-03	$ 3,515.49	$ -		0%	$ 3,515.49

	ITEM	BUDGETED AMOUNT	TOTAL ACTUAL EXPENDITURES TO DATE	EXPENDITURES FOR THE MONTH	%	BALANCE OF BUDGET OVER TOTAL ACTUAL EXPENDITURES
	4/30/2010					
693	USGS Joint funding Agrmt. Water Monitoring Program for the Period 10/1/09 to 3/31/10 & Y10/1/10-9/30/11	$ 7,650.00	$ -		0%	$ 7,650.00
	3/24/2011					
687	Con 507, Koga Engineering & Construction, Job 02-03, KW-14 12" W/L Kaumualii Hwy, Waimea	$ 817,259.94	$ 138,092.00	$ 138,092.00	17%	$ 679,167.94
xxx	Install Electrical Saving Device	$ 800,000.00	$ -			$ 800,000.00
			$ -			$ -
		$ -	$ -		0%	$ -
		$ -	$ -	$ -		$ -
		$ -	$ -	$ -	0%	$ -
		$ -	$ -	$ -	0%	$ -
TOTAL CAPITAL EXPENDITURES:		**$ 17,539,421.75**	**$ 187,123.74**	**$ 187,123.74**		**$ 17,352,298.01**
TOTAL SALARIES, NORMAL EXPENDITURES, DEBT REQUIREMENTS AND CAPITAL EXPENDITURES:		$ 17,539,421.75 $ - **$ 43,283,145.74**	$ 187,123.74 $ - **$ 3,655,947.24**	$ 187,123.74 **$ 3,655,947.24**	**8%**	$ 17,352,298.01 $ - **$ 39,627,198.50**

STATEMENT OF REVENUES AND EXPENDITURES
FACILITIES RESERVE CHARGE FUND
July 31, 2011

REVENUES:

Cash on hand as of July 1, 2011							**$ 4,367,931.68**
Add: Revenues To Date							$ 5,468.41
Sub-Total							**$ 4,373,400.09**

EXPENDITURES:

Less: Expenditures To Date							$ -
BALANCE AT THE END OF THE MONTH							**$ 4,373,400.09**

SHORT TERM INVESTMENTS-FRC
BANK OF HAWAII

CUSIP#					$	-	

CENTRAL PACIFIC BANK

CUSIP#					$	-	

FIRST HAWAIIAN BANK

CUSIP#	T30020090	0.15000%	INT. DUE	02/16/12	$	500,000.00	
CUSIP#							

MERRILL LYNCH

CUSIP#	313396LT8	0.35400%	INT. DUE	09/15/11	$	498,812.50	

MULTI-BANK

CUSIP#	402194CU6	2.50000%	INT. DUE	12/23/13	$	240,000.00	
CUSIP#	70455AAG5	2.30000%	INT. DUE	12/31/12	$	245,000.00	
CUSIP#	36160VCH2	5.00000%	INT. DUE	08/06/13	$	97,000.00	
CUSIP#	89214PAJ8	5.00000%	INT. DUE	08/13/13	$	97,000.00	
CUSIP#	92705SAE3	1.50000%	INT. DUE	06/17/03	$	248,000.00	
CUSIP#	70153RGT9	1.50000%	INT. DUE	09/09/13	$	249,000.00	
CUSIP#	02004MN74	1.50000%	INT. DUE	09/03/13	$	248,000.00	

TDI (CSA)

CUSIP#							

VINING SPARKS

TOTAL SHORT-TERM INVESTMENTS - FRC							**$ 2,422,812.50**
CASH ON WITH TREASURER - COK				07/31/11	$	200,225.69	
CASH ON HAND - FHB Savings (30-288435)				07/31/11	$	1,750,361.90	
Due from BAB Bond Fund					$	-	
Less: CLAIMS PAYABLE PAID ON				07/31/11	$	-	**$ 1,950,587.59**
CASH BALANCE AT THE END OF THE MONTH							**$ 4,373,400.09**

DEPARTMENT OF WATER
County of Kauai
06/30/11
JULY 1, 2011 TO JUNE 30, 2012
July 31, 2011

FACILITIES RESERVE CHARGE

% Budget Elapsed 8.33%

CASH RECEIPTS	BUDGETED RECEIPTS	ACTUAL RECEIPTS TO DATE	RECEIPTS FOR THE MONTH	%	BALANCE OF BUDGET OVER ACTUAL RECEIPTS
BEGINNING CASH BALANCE	**$ 4,367,931.68**	$ -	$ -		$ 4,367,931.68
(FRC Refunds) 4a Facilities Reserve Charge	$ 504,000.00	$ 4,600.00	$ 4,600.00	1%	$ 499,400.00
5a Interest Earned	$ 43,750.00	$ 868.41	$ 868.41	2%	$ 42,881.59
5b BAB Subsidy	$ 306,692.00			0%	$ 306,692.00
TOTAL RESOURCES	**$ 5,222,373.68**	**$ 5,468.41**	**$ 5,468.41**	0%	**$ 5,216,905.27**

CAPITAL EXPENDITURES	BUDGETED AMOUNT	TOTAL ACTUAL EXPENDITURES TO DATE	EXPENDITURES FOR THE MONTH	%	BALANCE OF BUDGET OVER TOTAL ACTUAL EXPENDITURES
301 FRC CIP	$ 500,000.00	$ -	$ -	0%	$ 500,000.00
301b FRC Fund Balance	$ 2,170,461.48	$ -		0%	$ 2,170,461.48
301c FRC Offset Refund -	$ 1,989,115.00	$ -		0%	$ 1,989,115.00
10/12/98 302 Contract #322 GMP Assoc, Inc. Job 87-1 Poipu Storage Tank	$ 2,050.00	$ - $ -	$ -	0%	$ 2,050.00
08/01/99 304 **WK-21** Contract # 345 Fukunaga & Assoc. Job 98-33 Wailua Well 3	$ 10,500.00	$ -	$ -	0%	$ 10,500.00
6/28/04 (301, 301b) 314 **LO-04** Con #436 Fukunaga & Assoc Inc Job 02-02 Omao 0.5 MG Tank	$ -	$ -		#####	$ -
3/8/06 (301, 301b) 318 Con 457 Kodani & Assoc Inc **H-8 HW-12** Job 05-02 Drill & Test Wainiha Well No. 4	$ 285,340.00	$ -		0%	$ 285,340.00
		$ -			$ -

	CAPITAL EXPENDITURES	BUDGETED AMOUNT	TOTAL ACTUAL EXPENDITURES TO DATE	EXPENDITURES FOR THE MONTH	%	BALANCE OF BUDGET OVER TOTAL ACTUAL EXPENDITURES
321	1/17/2007 (301) Con 471 PORTech Eng. **WK-23** Job 93-1 Wailua 250,000 MG Tank Survey	$ 28,187.00	$ -	$ -	0%	$ 28,187.00
322	7/19/07 (301, 301b) Con 475 TOMCO Corp **A-11** Pump,Controls, Pmp Stn & Pipeline-Anahola Well #	$ 72,294.00	$ -		0%	$ 72,294.00
324	03/31/08 (301, 301b) Con 488 HDR Engineering **WK-39** Kapaa Hmstds Well No. 4 Drill & Test	$ 138,843.30	$ -		0%	$ 138,843.30
325	7/2/2008 (301) Con 492 Earthworks Pacific **WK-42** Phase II Offsite Waterline on Kaapuni Road for Stable Tank	$ 25,582.90	$ -		0%	$ 25,582.90
		$ -	$ -			$ -
		$ -	$ -			$ -
		$ -	$ -			$ -
		$ -	$ -			$ -
		$ -	$ -			$ -
	TOTAL EXPENDITURES	$ 5,222,373.68	$ -	$ -		$ 5,222,373.68

STATEMENT OF REVENUES AND EXPENDITURES
BOND FUND
July 31, 2011

REVENUES:

Cash on hand as of July 1, 2011		$ 401,056.43
Add: Revenues To Date		$ -
Sub-Total		**$ 401,056.43**
EXPENDITURES:		
Less: Expenditures To Date		$ -
BALANCE AT THE END OF THE MONTH		**$ 401,056.43**

SHORT TERM INVESTMENTS - BOND

BANK OF HAWAII

FIRST HAWAIIAN BANK

CUSIP#	1062110	2.2080%	INT. DUE	06/15/10	$ -	
TOTAL SHORT-TERM INVESTMENTS - BOND						$ -
CASH ON HAND WITH TREASURER - COK				07/31/11	$ 401,056.43	
LESS CLAIMS PAYABLE ON					$ -	$ 401,056.43
BALANCE AT THE END OF THE MONTH						**$ 401,056.43**

0.00

DEPARTMENT OF WATER
County of Kauai
STATUS OF THE BUDGET
JULY 1, 2011 TO JUNE 30, 2012
July 31, 2011

BOND FUND **% Budget Elapsed 8.33%**

CASH RECEIPTS:	BUDGETED RECEIPTS	TOTAL ACTUAL RECEIPTS TO DATE	RECEIPTS FOR THE MONTH	%	BALANCE OF BUDGET OVER TOTAL ACTUAL RECEIPTS
BEGINNING CASH BALANCE	**$ 401,056.43**	**$ -**	**$ -**		**$ 401,056.43**
	$ -	$ -	$ -	0%	$ -
TOTAL RESOURCES	**$ 401,056.43**	**$ -**	**$ -**	**0%**	**$ 401,056.43**
CAPITAL EXPENDITURES:	**BUDGETED AMOUNT**	**TOTAL ACTUAL EXPENDITURES TO DATE**	**EXPENDITURES FOR THE MONTH**	**%**	**BALANCE OF BUDGET OVER TOTAL ACTUAL EXPENDITURES**
201 Bond - CIP		$ -	$ -	#####	$ -
326 Con 518, Unlimited Builders, LLC Job 02-02, Piwai 677" 0.5 MG Storage Tank & Connecting Pipeline, Lawai (part BAB)	$ 401,056.43			0%	$ 401,056.43
	$ -	$ -	-	0%	$ -
	$ -	$ -	$ -	0%	$ -
	$ -	$ -	$ -	0%	$ -
TOTAL EXPENDITURES	**$ 401,056.43**	**$ -**	**$ -**	**0%**	**$ 401,056.43**

STATEMENT OF REVENUES AND EXPENDITURES
BOND - BAB FUND
July 31, 2011

REVENUES:

Cash on hand as of July 1, 2011	$ 42,251,093.01
Add: Revenues To Date	$ -
Sub-Total	**$ 42,251,093.01**

EXPENDITURES:

Less: Expenditures To Date	$ 792,154.70
BALANCE AT THE END OF THE MONTH	**$ 41,458,938.31**

SHORT TERM INVESTMENTS - BOND

BANK OF HAWAII

FIRST HAWAIIAN BANK

CUSIP#	1062140	1.1340%	INT. DUE	10/31/13	$ 43,000,000.00	
TOTAL SHORT-TERM INVESTMENTS - BOND						**$ 43,000,000.00**
CASH ON HAND WITH TREASURER - COK				07/31/11	(748,439.11)	
Due fr W/U - BAB				05/31/11	(467.88)	
LESS CLAIMS PAYABLE ON				06/30/11	(792,154.70)	**$ (1,541,061.69)**
BALANCE AT THE END OF THE MONTH						**$ 41,458,938.31**

DEPARTMENT OF WATER
County of Kauai
STATUS OF THE BUDGET
JULY 1, 2011 TO JUNE 30, 2012
July 31, 2011

BUILD AMERICA BONDS (BABs) - FUND — % Budget Elapsed 8.33%

CASH RECEIPTS:	BUDGETED RECEIPTS	TOTAL ACTUAL RECEIPTS TO DATE	RECEIPTS FOR THE MONTH	%	BALANCE OF BUDGET OVER TOTAL ACTUAL RECEIPTS
BEGINNING CASH BALANCE	**$ 42,251,093.01**	**$ -**	**$ -**		**$ 42,251,093.01**
Bond Proceeds	$ -	$ -	$ -	0%	$ -
Interest Income	$ -			#####	$ -
TOTAL RESOURCES	**$ 42,251,093.01**	**$ -**	**$ -**	**0%**	**$ 42,251,093.01**

CAPITAL EXPENDITURES:	BUDGETED AMOUNT	TOTAL ACTUAL EXPENDITURES TO DATE	EXPENDITURES FOR THE MONTH	%	BALANCE OF BUDGET OVER TOTAL ACTUAL EXPENDITURES
201-01 BOND - BAB, CIP	$ 8,028.00 $ 10,911,347.89	$ -		0%	$ 10,919,375.89
201-01 BOND - BAB, CIP	$ 11,600,008.00			0%	$ 11,600,008.00
218 5/11/2010 CON 513 Jennings Pacific, LLC Job No. 02-18, WK - 32 Kapaa Hmstds Pipe Repl	$ 966,251.51	$ 318,601.11	$ 318,601.11	33%	$ 647,650.40
219 5/11/10 CON 514 Earthworks Pacific Job No. 04-02, WK-14, Pipeline Repl for Vivian hts	$ 615,642.01	$ -		0%	$ 615,642.01
220 6/30/10 CON 516 Unlimited Builders, LLC Job No. 03-02, HW-02, Wainiha Booster Pump Stn	$ 2,011,069.79	$ -		0%	$ 2,011,069.79
684 8/11/09 Con 504 Goodfellow Bros., Inc. Job 05-01 KW-16 Waimea Main Replacement	$ 112,544.24	$ -		0%	$ 112,544.24
687 12/18/09 Con 507 Koga Engineering & Const. Job 02-03, KW-14 12" WL Waimea Canyon Drive	$ 1,276,268.06	$ -		0%	$ 1,276,268.06
221 9/30/10 Con 520 (201-01) Fukunaga & Associates Job # 10-01, Ani-01a Pipeline Repl - Anini RD	$ 665,360.00	$ -		0%	$ 665,360.00
222 9/30/10 Con 519 (201-01) Park Engineering Job # 10-02, Upsizing of the Kaumualii Hwy. 16"	$ 14,102.70	$ -		0%	$ 14,102.70
TOTAL EXPENDITURES	**$ 28,180,622.20**	**$ 318,601.11**	**$ 318,601.11**	**1%**	**$ 27,862,021.09**

DEPARTMENT OF WATER
County of Kauai
STATUS OF THE BUDGET
JULY 1, 2011 TO JUNE 30, 2012
July 31, 2011

BUILD AMERICA BONDS (BABs) - FUND **% Budget Elapsed 8.33%**

	CAPITAL EXPENDITURES:	BUDGETED AMOUNT	TOTAL ACTUAL EXPENDITURES TO DATE	EXPENDITURES FOR THE MONTH	%	BALANCE OF BUDGET OVER TOTAL ACTUAL EXPENDITURES
223	10/31/10 Con 523 (201-01) BCP Constr. Of Hawaii Job 06-06, P:H-25 Eiwa, Umi, Akahi.. 8" ML Repl	$ 2,027,665.69	$ -		0%	$ 2,027,665.69
224	10/31/10 Con 524 (201-01) Koga Eng. & Constr., Inc. Job 02-16, WP 2020 Proj WK 36, Pipeline Repl along Wailua Ohana, Anolani & Kuamoo Rds.	$ 1,045,800.00	$ -		0%	$ 1,045,800.00
225	Con 405 3rd n 4th Amm Kodani & Associates, Inc. Job 02-19, KW-12 Waipouli Main Repl Wailua-Kapaa	$ 13,540.00	$ -		0%	$ 13,540.00
227	Con 525 KW-20 R. Electric Waimea Well A Renovations	$ 529,053.35	$ 35,653.12	$ 35,653.12	7%	$ 493,400.23
326	Con # 518 (LO-04) Unlimited Builders, LLC Job # 02-02, Piiwai 677" 0.5MG Storage Tank and Connecting Pipeline - Lawai	$ 725,382.16	$ -		0%	$ 725,382.16
592	6/28/11 Con 409 Esaki Surveying & Mapping, Inc.; Job 02-16, WK-36, P/L replace - Wailua	$ 100,000.00	$ -			$ 100,000.00
230	Con 529 (201-01) Oceanic Company, Inc. Job 02-08, HE-08 Rehabilitation of Eleele Twin 0.4 MG Steel Tanks	$ 1,718,184.96	$ 163,179.47	$ 163,179.47	9%	$ 1,555,005.49
621	Con 440 Kodani & Associates, Inc. Kilauea 1.0 MG Tank and Pipeline, Ph I (fr W/U)	$ 88,325.00	$ -			$ 88,325.00
230	Con 436 Fukunaga & Associates Job 02-02 (LO-04) Omao 0.5 MG Tank (fr FRC)	$ 62,996.00	$ -			$ 62,996.00
SUB - TOTAL		$ 6,310,947.16	$ 198,832.59	$ 198,832.59		$ 6,112,114.57

DEPARTMENT OF WATER
County of Kauai
STATUS OF THE BUDGET
JULY 1, 2011 TO JUNE 30, 2012
July 31, 2011

BUILD AMERICA BONDS (BABs) - FUND

% Budget Elapsed 8.33%

	CAPITAL EXPENDITURES:	BUDGETED AMOUNT	TOTAL ACTUAL EXPENDITURES TO DATE	EXPENDITURES FOR THE MONTH	%	BALANCE OF BUDGET OVER TOTAL ACTUAL EXPENDITURES
231	Con 530 (201-01) Earthworks Pacific Job 02-19, WK-12 Waipouli Main Replacement	$ 2,045,000.00	$ 274,721.00	$ 274,721.00	13%	$ 1,770,279.00
232	Con 427 (201-01) Belt Collins Hawaii, Ltd. Job 02-14, Kapaa Hmstds 0.5 MG Storage Tank & Kapahi 1.0 MG Storg Tank	$ 74,965.54	$ -		0%	$ 74,965.54
608	Con 427 (201-01) Belt Collins Hawaii, Ltd. Job 02-14, Kapaa Hmstds 0.5 MG Storage Tank & Kapahi 1.0 MG Storg Tank	$ (8,028.00) $ 33,950.00	$ -	$ -		$ 25,922.00
233	Con 533 (201-01) Belt Collins Hawaii, Ltd. Job K-01, K-12, Kalaheo 1111' and 1222' Water System Improvements	$ 971,715.72	$ -		0%	$ 971,715.72
683	Con 503 (201-01) Goodfellow Brothers, Inc. Job 04-06, KW-05, Kekaha Well "B"" Renovations	$ 262,036.12	$ -		0%	$ 262,036.12
235	Con 534 (201-01) Goodfellow Brothers, Inc. Job 05-05, PLH-30, Niumalu & Kupolo 6-inch, 8-inch and 12" Main Replacement PH I	$ 3,202,500.00	$ -		0%	$ 3,202,500.00
236	Job 10-02, MOA Dept of Transportation/Kiewit-Kaumualii Hwy widening, Anonui Rd and Lihue Mill Bridge.	$ 151,027.27	$ -		0%	$ 151,027.27
237	6/28/2011 (201-01) Con 536, Esaki Surveying & Mapping, Inc., Job 11-02, PLH-01a Replace Grove Farm Tanks #1 & #2	$ 229,658.00	$ -		0%	$ 229,658.00
692	6/28/11 Con 512 - Architects Hawaii, Ltd., Job No. PLH-39; Lihue Baseyard Improvements for DOW	$ 129,603.00 $ 667,096.00	$ -		0%	$ 796,699.00
	TOTAL EXPENDITURES	**$ 42,251,093.01**	**$ 792,154.70**	**$ 792,154.70**		**$ 41,458,938.31**

PR SPECIALIST REPORT

September 22, 2011

Public Relations Services:

- Talk Story Sessions with community organizations continue to be set up for David.
- David spoke at all four of the Mayor's Holo Holo Community Meetings. They were held at Kilauea, Waimea, Lihue and Kalaheo. Reports were given from each department in the county following an overview by the Mayor. It was a great opportunity to get our message out there, however the message was somewhat diluted since it was just a small portion of the entire meeting and attention and discussions were spread out as such.
- Kudos to David for taking it upon himself to attend other community meetings to provide a DOW presence as well as be available if any water questions came up. He has also been very diligent in getting our brochures out.

Waimea Project Dedication: The Waimea Canyon Drive Main Replacement Dedication was held on August 27th at the West Kaua'i Technology and Visitor Center. There was excellent coverage in The Garden Island (thanks to Dennis Fujimoto). Our release also appeared in the Star Advertiser and MidWeek.
It was a very positive event which demonstrated how valuable teamwork is. Speakers at the dedication were, Board Chair Oyama, Governor Abercrombie, Senator Kouchi, Representative Morikawa and Aletha Kaohi.

Source/Wellhead Protection Plan: The contract is being reviewed at the DOW and should be signed and sent back to the Department of Health Safe Drinking Water Branch for their signatures and finalization. The RFP has been drafted and being reviewed so it will be ready to go once the contract is finalized.

Mayor's Annual Report for FY 11: The department's portion for the Mayor's Annual Report was completed and sent in before the deadline that was set. Thank you to all of the division heads that submitted their portions of the report so it could be completed in time.

McGruff: The Kauai McGruff Coalition completed its first school assembly on September 8th at King Kaumuali'i School. The assembly was a huge success, with two students participating in a skit to demonstrate how to wave down help from utility workers that have a McGruff sticker on their vehicles. The coalition was well represented as this is truly a coalition and we were all very excited to finally get this program back into active commission. All schools have been sent invitations to contact us if they are interested in getting set up with an assembly.

Annual Report: Now that the Mayor's Annual Report is complete, work on the Department of Water Annual Report will resume.

Various Requests: Responded to the following:

- Researched the availability and process to provide an In Home Display (IHD) unit for a customer that wants to monitor his water usage from his home to avoid the surprise of a huge water bill caused by an undetected leak.

Mahalo and Aloha Outgoing Board Members: Coordinated a Mahalo and Aloha dinner for our outgoing board members (Donald Fujimoto, Ian Costa, Dee Crowell and Leland Kahawai). David expressed his appreciation for their time and energy dedicated to the department during their time of service on the board.

Safe Drinking Water Projects: Applications for loans for PLH03 High Level Water Development and Job No. 02-15, WK-28 Wailua Houselots Main Replacement, Phase I were submitted to the Department of Health. I am currently working with Alain and Jan from the DOH on the items that need to be submitted to secure our Interim Loan Agreement.

Water Conservation Advisory Group: The Water Conservation Advisory Group (WCAG) held its second meeting on August 25th in the board room of the Department of Land and Natural Resources offices on O'ahu. Due to the workload here, I elected to attend the meeting by conference call. Because it is a meeting that requires participation in discussions, and only two of us opted to call in, this format did not work. The next meeting will be sometime in November.

Water Utility Collaboration: The four counties have been meeting regularly regarding water conservation and leak detection. This department has benefited by gaining knowledge and experience shared by the other counties. Because of this group, we have now been offered the opportunity to collaborate on different water conservation programs spearheaded by the Honolulu Board of Water Supply. We are currently working out details on how we can collaborate and provide a unified message statewide.

Project WET: Joy and I will be attending the Annual Project WET Conference in Bozeman Montana, where they will be unveiling and providing training for the second edition of the Project WET Curriculum and Activity Guide.

Our 8th Annual Make a Splash with Project WET Water Festival will be held on September 29th. If you haven't volunteered, and you have a little time, please feel free to stop by and check it out.

Mayor's Program: The Mayor will be attending our Make a Splash event and will be taping his Hoike program, highlighting this event as well as using it as a background for an interview with Dustin as he provides an update of our projects.

Respectfully submitted,

Faith Shiramizu
DOW Public Relations Specialist

Mgrrp/PR Specialist Report (9-22-11):cab

Operations Division Report for the Month of August 2011

Personnel

- Operations Division personnel attended Safety Workshop with topics including Confined Space Entry, Fall Protection, and Chemicals Handling.

- Please see the attached labor report for Operations Division as compiled by the Fiscal Division.

Source and Storage

- Our maintenance crews have completed repair of the Koloa Well "A" roof.

- Completed the conversion of Puhi Well #3 and Garlinghouse from Chlorine to Hypochlorite.

Distribution

- Operations crew performed numerous overnight works with contractor of Lihue Water Plan 2020 project for tying-in the new mainline with the existing mains.

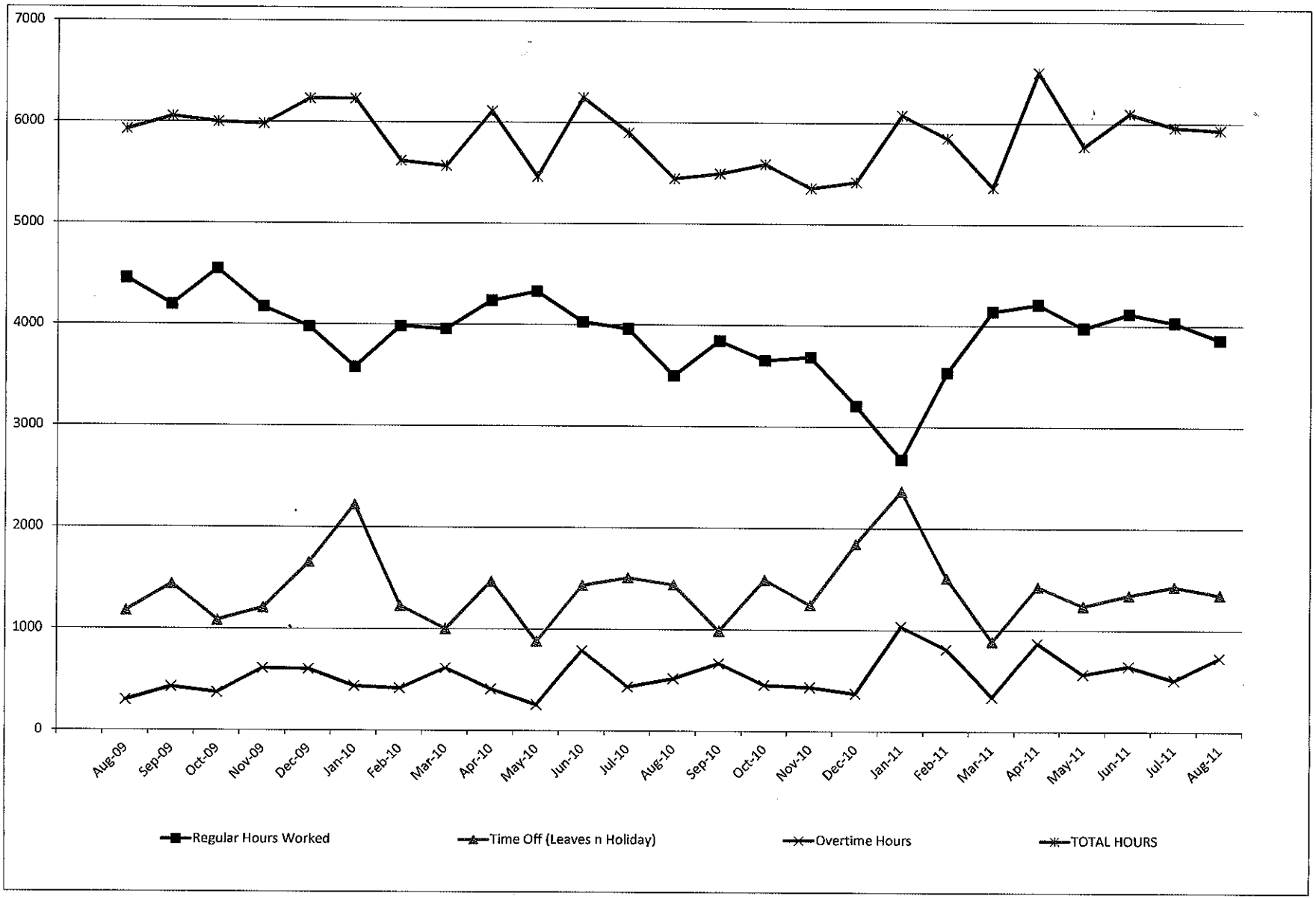
- Both East and West crews are kept very busy by trouble calls regarding contractor damaged leaking mainline and service laterals.

- Seventeen (17) new residential water meters were installed.

Fleet, Inventory, Warehouse and Baseyard Area

- Maintenance crew repaired/replaced baseyard fence and installed sliding gate on the southwesterly area of the baseyard.

Total Hours for the Month
Operations: Plant & Field Divisions
For the Period: August 2009 to August 2011



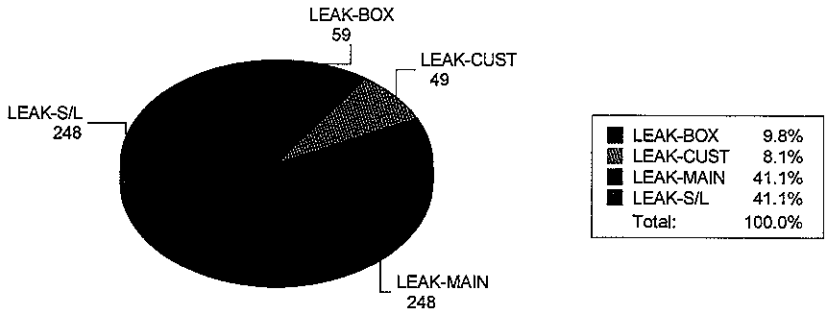
09-Sep-2011

Work Orders by Job Reason Code for Selected Date Range

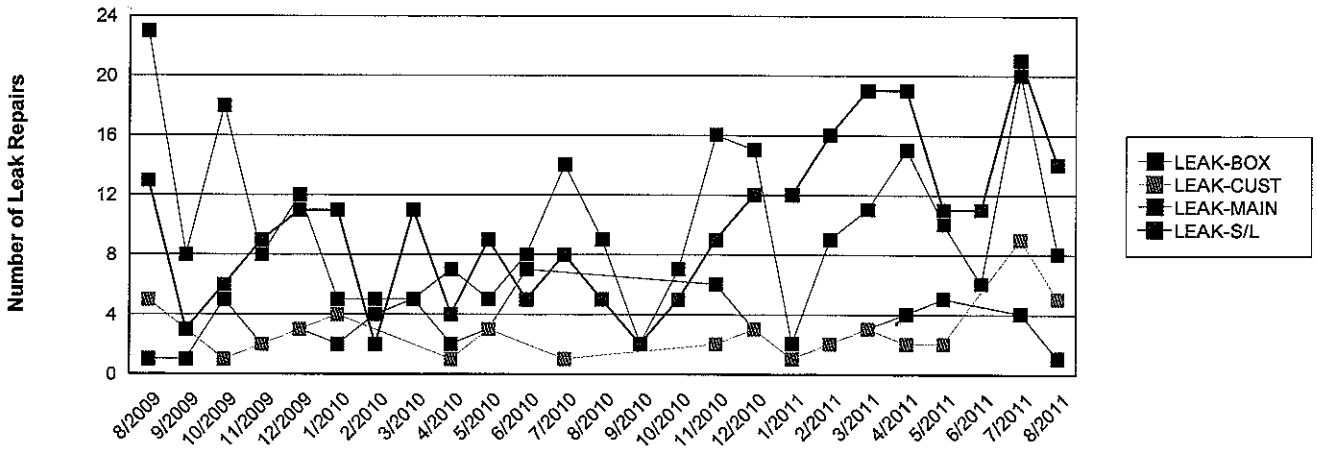
08/01/2009 **to** 08/31/2011

# of W/O's	Job Reason Code	Description
59	LEAK-BOX	Meter Box Leak Repair
49	LEAK-CUST	Customer-Side Leak Repair
248	LEAK-MAIN	Mainline Leak Repair
248	LEAK-S/L	Service Lateral Leak Repair

Work Orders by Job Reason Code



Number of Leak Repairs per Month



DEPARTMENT OF WATER

County of Kauai

"Water has no Substitute – Conserve It!"

MANAGER'S UPDATE

September 22, 2011

MANAGER'S UPDATE for AUGUST 2011 to SEPTEMBER 2011

Board Request for additional information on previous Manager Reports

Manager's Report 12-13 - Kahili Mountain High Level Well funding

Follow up on Board member Randy Nishimura's concern over funding priority for the stated project.

The State DOH Safe Drinking Water Branch head Joanna Seto said that grant funds would be spent down first, then the loan funds would be spent down in the case when not all the funds are used or a decision is made before completion of the EIS to cancel the balance of the EIS for the Kahili Mountain High Level Exploratory Well. We will follow this up in writing with DOH.

CONTRACTS AWARDED BY THE MANAGER:

RE: Provide Professional Services on an "As-Needed" basis for General Surveying Services
Contract was awarded to Esaki Surveying and Mapping, Inc. for Job No. 11-05, As-Needed Surveying Services in the amount not to exceed (NTE) $30,000.00.

FUNDING:
Job No. 11-05, As-Needed Surveying Services (NTE)..... $30,000.00
Contingency (N/A) .....$ 0.00
Total Requested from Account 101, Capital Improvements –W/U Fund.....$30,000.00

RE: Provide Professional Services on an "As-Needed" basis for Construction Management Services
Contract was awarded to SSFM International, Inc. for Job No. 11-01, As-Needed Construction Management Services in the amount not to exceed (NTE) $50,000.00.

FUNDING:
Job No. 11-01, As-Needed Construction Management Services (NTE).....$50,000.00
Contingency (N/A) .....$ 0.00
Total Requested from Account 101, Capital Improvements –W/U Fund.....$50,000.00

Re: Job No. 02-17, Water Plan 2020 Project H-01, H-02, H-03, Maka Ridge Facilities Rehabilitation Plan and Princeville System Interconnection Plan, Hanalei Water System, Hanalei, Kaua'i, Hawai'i
Contract was awarded to MEI Corporation in the amount of $2,357,017.00.
Job No. 02-17, Water Plan 2020 Project H-01, H-02, H-03, Maka Ridge Facilities Rehabilitation Plan and Princeville System Interconnection Plan

FUNDING:

Account No. 201-01 Bond -BAB		$23,611,131.24
Contractor, MEI Corporation	$ 2,357,017.00	
Contingency, approximately 5%	$ 142,983.00	
Total		< $2,500,000.00>
BALANCE REMAINING		
Account No. 201-01 Bond – BAB		$21,111,131.24

Re: Job No. 11-03, WP 2020 Project No. MO-03, Land and Well Acquisition, Molaa and Waimea, Kauai

Contract was awarded to Oceanit Laboratories, Inc. for Water Plan 2020 Job No. M-02, Moloa'a Tank (Well site acquisition), Kauai, Hawaii in the amount of $105,000.00.

FUNDING:

Water Plan 2020 Job No. M-02, Moloa'a Tank, Kauai, Hawaii	$ 105,000.00
Contingency (~10%)	$ 10,500.00
Total Requested from Account 201-01 Bond (BAB)	$ 115,500.00

Re: Water Plan 2020 Job No. LO-10, Omao-Lawai Pipeline, Kauai, Hawaii

Contract was awarded to Honua Engineering, Inc. for Water Plan 2020 Job No. LO-10, Omao-Lawai Pipeline, Kauai, Hawaii in the amount of $86,750.00

FUNDING:

Water Plan 2020 Job No. LO-10, Omao-Lawai Pipeline, Kauai, Hawaii	$ 86,750.00
Contingency (~10%)	$ 8,675.00
Total Requested from Account 201-01 Bond (BAB)	$ 95,425.00

Re: Job No. 11-11, Water Plan 2020 Job No. K-17, WK-02, PLH-42, Construct Kalaheo, Kokolau, Akulikuli Surface Water Treatment Facilities, Kauai, Hawaii

Contract was awarded to AECOM Technical Service, Inc. for Job No. 11-11, Water Plan 2020 Job No. K-17, WK-02, PLH-42, Construct Kalaheo, Kokolau, Akulikuli Surface Water Treatment Facilities, Kauai, Hawaii in the amount of $117,701.19.

FUNDING:

Water Plan 2020 Job No. K-17, WK-02, PLH-42, Construct Kalaheo, Kokolau, Akulikuli Surface Water Treatment Facilities, Kauai, Hawaii

Funds Available from Account 101b - CRP, Construct Kalaheo Surface Water Treatment Facility		$300,000.00
AECOM Technical Service, Inc.	$117,701.19	
Contingency	$11,770.00	

Total Funding Required:	$129,471.19
Available Balance from Account 101b - CRP, Construct Kalaheo Surface Water Treatment Facility	$170,528.81

PUMP INSTALLATION PERMITS:
None

WAIVER, RELEASE AND INDEMNITY AGREEMENTS SIGNED BY THE MANAGER:
None

PERSONNEL MATTERS UPDATE:

Updated September 9, 2011

RECRUITMENT AND POSITION CHANGES

Operations Division

1. Pipefitter Helper interviews to be scheduled pending receipt of the referred list of qualified applicants from the Department of Personnel Services (DPS).
2. Pipefitter positions to include Distribution System Operator Grade I certification. Department of Personnel Services is reviewing request.
3. Equipment Operator IV-Temporary as Needed position. DOW to notify DPS of position creation.
4. Water Service Investigator II. Department of Water to proceed with filling vacancy.
5. Water Field Operations Superintendent position is vacant. There is no action at this time.

Fiscal Division

1. Accountant III interviews scheduled for September 14 and 15, 2011.
2. Billing Section positions being updated due to upcoming implementation of new billing system.

Engineering Division and Special Projects Division

1. Civil Engineer VI (Special Projects Division Head) to be reallocated to Construction Management Officer.
    a. Special Projects Division would then be called the Construction Management Division.
2. Civil Engineer II (Engineering Division). Reference checks nearing completion.
3. Civil Engineer II (Water Resources and Planning Division) is vacant. Referred list of qualified applicants to be requested.
4. Civil Engineer III (Water Resources and Planning Division). DOW awaiting referred list of qualified applicants.
5. Waterworks Inspector III. DOW awaiting referred list of qualified applicants.

Administration

1. Reallocation of Commission Support Clerk to Board Secretary is being reviewed by DPS.
2. Reallocation of Private Secretary to Private Secretary/Administration Office Manager is being reviewed by DPS.
3. Secretary vacancy. DOW is preparing for the interviews.

SUMMARY OF WARRANT VOUCHERS PAID – August 31, 2011
Warrant vouchers were paid in the amount of **$ 2,264,698.49.**
Please see attached Warrant Vouchers Report.

FEMA UPDATE:

Background:

The Department applied for FEMA disaster relief funding after the December 2008 Flood was declared a disaster. Below is a list of the funding granted and amount received by the Department.

PW No.	Title	Federal Eligible Amount	Federal Share (75% of Federal Eligible Amount) & Amount Paid to Department of Water	Ineligible & Amount to Repay FEMA
13	Roads & Culverts – West Contract	$29,470.00	$22,102.50	$20,452.50
15	Road Erosion – Menehune Road	$25,191.75	$18,893.81	--
23	Hanapepe River Crossing & Kekaha	$2,140.35	$1,605.26	--
24	Waimea Valley Exposed Pipeline	$1,605.90	$1,204.43	--
28	Kalaheo Nursery Deep Well Cross Country 6" CI Water Main	$2,410.57	$1,807.93	--
	TOTAL	$60,818.57	$45,613.93	$20,452.50

Total funding in the amount of $45,613.93 was made by State Civil Defense and received by the Department. A total of $25,161.43 was expended and documented per FEMA requirements. The balance of $20,452.50 is now due to reimburse the State Civil Defense.

STAFF REPORTS - FY 12:
Conveyance of Water Facility:

1.	E. Andrew Matyas Living Trust / Anna-Marie Franklin	TMK: 2-3-07:011, 012, 026	Kalaheo	$77,671.00
2.	James Family Properties, LLC	TMK: 2-7-05:051	Omao	$ 5,800.00
3.	Patrick Ibbs Subdivision (S-2010-6)	TMK: 4-4-04:003, 028, 053	Wailua	$14,500.00
4.	Jesse Layaoen/Abalos	TMK: 5-1-04:003	Kilauea	$10,890.56
5.	Jose L. and Cristeta G. Layaoen Living Trust	TMK: 5-1-06:006	Kilauea	$12,614.50
6.	Caroldean H.A Marston Revocable Living Trust	TMK: 5-1-05:013	Kilauea	$22,000.00

AFFORDABLE HOUSING UPDATE:

Update will be provided after the next Task Force Meeting is held.

Respectfully submitted,

David R. Craddick, P.E.
Manager and Chief Engineer

DRC:cab
Mgrrp/Manager's Update (9-22-11):cab

DEPARTMENT OF WATER

County of Kaua'i

"Water has no Substitute – Conserve It!"

September 22, 2011

Re: EXECUTIVE SESSION

Pursuant to H.R.S. §92-7(a), the Board may, when deemed necessary, hold an executive session on any agenda item without written public notice if the executive session was not anticipated in advance. Any such executive session shall be held pursuant to H.R.S. §92-4 and shall be limited to those items described in H.R.S. §92-5(a).

1. Review of Executive Session Minutes: August 18, 2011

cab
Mgrrp/Executive Session (9-22-11):cab

---4398 Pua Loke Street, Lihu'e, Kaua'i, Hawai'i or P. O. Box 1706, Lihu'e, HI 96766-5706---
Phone No. (808) 245-5400 – Administration FAX No. (808) 246-8628 – Engineering/Fiscal/Shop FAX No. (808) 245-5813