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, MAY 26, 2011

10:10 a.m.

Or thereabouts

A. **CALL TO ORDER**

B. **ROLL CALL**

C. **ACCEPTANCE OF AGENDA**

D. **MEETING MINUTES:** Finance Committee Meeting – April 8, 2011
Special Board Meeting – April 26, 2011
Regular Meeting – April 28, 2011

E. **CORRESPONDENCE / ANNOUNCEMENTS**
1. Correspondence from Thomas Hazelton concerning water bill

F. **BOARD COMMITTEE REPORTS**
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.
      i. Attached Proposed Draft Bill No. 2380
      ii. Attached Proposed Draft Bill No. 2401
      iii. Attached Approved Bill No. 2401, Draft 2

2. Report of the Finance Committee of the Kaua'i County Board of Water Supply
   a. *Manager's Report No. 11 -49 -* R.W. Beck Report on Financial Planning Analysis and Water Rate Study

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

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

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

F. BOARD COMMITTEE REPORTS – contd.

a. *Manager's Report No. 11-17 -* Committee Discussion and Possible Action on the Proposed Revised Organizational Chart to organize for future operations

b. Manager's Report No. 11 – 64 - Proposed Budget 2012

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

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

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

4. *Manager's Report No. 11-17 -* Committee Discussion and Possible Action on the Proposed Revised Organizational Chart to organize for future operations

5. *Manager's Report No. 11 – 64 -* Proposed Budget 2012

6. Board Discussion on the 2011 Goals for the Manager

7. *Manager's Report No. 11 – 65 -* Hiring Legal Assistance in negotiating the Kahili High Level Well Right of Entry

H. NEW BUSINESS

1. *Manager's Report No. 11 –69 -* Refunding of the 2001County of Kauai G.O. Bonds, to Series 2011A

2. *Manager's Report No. 11 – 70* - 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)

3. *Manager's Report No. 11 – 71 -* Revision of Private Fire System Use Rate of Part IV of the Rules

4. *Manager's Report No. 11 – 72* - Request Board Approval of Reorganization of the Engineering Section

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H. NEW BUSINESS – contd.

5. *Manager's Report No. 11 – 73* - Request Board Approval to receive and expend funds from the Department of Health Safe Drinking Water Branch to Develop and Initiate Implementation of a Source Water/Wellhead Protection Program (formerly referred to as Wellhead Protection Program) for the County of Kauai

6. *Manager's Report No. 11-74* – Request Board Approval for Reallocation of Funds for Job No. WRP 01 FY 05-06 Kauai Water Use and Development Plan Update

7. *Manager's Report No. 11 – 75* – Request Board Approval of New Budget Line Item for Board Policy #25 – Small Claims Settlement

8. Resolution No. 11 (10-11), Congratulations, 2010 DOW Employee of the Year

9. Board request of review of the evaluation and goals of the Manager and Chief Engineer (may be held in Executive Session if needed)
   a. 2010 Goals attached

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. Deputy Manager'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).

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.

1. Job Performance Evaluation of the DOW Manager and Chief Engineer
   a. 2010 Goals attached

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K. TOPICS FOR NEXT WATER BOARD MEETING

1. Final Budget Approval (*June 2011*)

L. TOPICS FOR FUTURE WATER BOARD MEETINGS

1. Staff Quarterly Updates *(July 2011)*
2. Resolution #1 – Budget for next fiscal year (*August 2011)*
3. Job Performance Evaluation for Manager and Chief Engineer (due to DPS in October) *(August)*

M. UPCOMING EVENTS

1. AWWA National Conference,Washington , D.C., June 12-16, 2011
2. HWWA Conference, Kona, Hawaii, October 12-14, 2011

N. NEXT WATER BOARD MEETING

1. Tuesday, June 21, 2011, 10:00 a.m.
2. Thursday, July 28, 2011, 10:00 a.m.
3. Thursday, August 25, 2011, 10:00 a.m.
4. Thursday, September 29, 2011, 10:00 a.m.
5. Thursday, October 27, 2011, 10:00 a.m.
6. Wednesday, November 23, 2011, 10:00 a.m.

O. ADJOURNMENT

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Draft Minutes

Finance Committee Meeting

April 8, 2011
10:30 a.m.

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

Board Members Present: Roy Oyama, Daryl Kaneshiro

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

Chair Dill called the meeting to order at about 10:35 a.m.

Agenda
Mr. Nishimura moved to accept the Agenda as posted, seconded by Mr. McCormick; by a unanimous vote; motion was carried.

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

The R.W. Beck Report was submitted for 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 M 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 M 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 M 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 making 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.

Finance Committee Meeting
April 8, 2011

DISCUSSION

Chair Dill reported that the Committee would review the conclusions reached at the March 22, 2011 meeting.

Debt Service Coverage

Discussion ensued on Table 9. The various submittals of revised Table 9 were available and numbered 1 through 5, and the pages numbered sequentially. #5 was the most recent submittal from R.W. Beck.

Manager Craddick reviewed the various Table 9s, 1 through 5; #3 contained no discernible leak rebate. Although Table 9 #4 was labeled 50% FRC payback, and Table 9 #5was labeled 40% FRC payback, Manager Craddick updated this where both are actually 40% FRC payback.

What comes out of the FRC is system expansion projects and we have some SRF projects that were expansion related and it is that debt service that is covered in #3; in #4 and #5 we are now covering not only that debt service but also recovering 40% of the BAB debt service. Mr. Nishimura requested that this be put in a report format somehow, as on one it goes up and on another it goes down. It might be an idea to split the FRC and the SRF.

Manager Craddick noted that #4 and #5 are changes by the auditor. Mr. Nishimura asked if we are not using SRF for our FRC, and Manager Craddick confirmed that no, not going into the future, though past projects we have to cover.

The Revert O&M adjustment, Line 47 on page 24 and 46 on all tables is unfunded positions and transfer out of Operations to capital. Historically we have come in lower. Between #3, #4 and #5 we have added the Reserve on Line 63. Manager Craddick stated this would have a material effect on the rates. It is not wise to bring us down to $0 carry-over savings and $0 emergency reserves; the reserve really is working capital. The reserve of $4M is 90 days of operating expenses. Once we spend all the bond funds, then the rates are directly affected by the number of projects we do. They have made a split between the SRF and cash funded projects. Manager Craddick did not originally want any SRF because of the .37 debt to asset ratio; however, they will be putting the ratio in there, the number is creeping up, and utilities across the country are facing this with aging infrastructure and the credit agencies are becoming aware of this and it could go up to .4 or higher. Manager Craddick will be getting a write-up on what it is going up to nationwide.

There is the assumption that we are collecting FRC to reimburse the General Fund for what is expansion related and if we do not collect that money in the FRC we still have to pay the debt service, shown in Line 52. Manager Craddick confirmed to Mr. Nishimura that we are looking at somewhere between #3 and #5. Manager Craddick stated this does not cover the community improvement district, but examples were included, varying from $17 to $23 per month. People have been paying some kind of debt service over the life of them having water service. We would not be able to charge them this full amount. The bottom line is that we would have more money coming into the water fund in order to pay for these line replacements for subdivisions that were built with very small lines, such as 2" lines. We are replacing with up to 6" lines and sometimes 12" lines.

Manager Craddick skipped to Capital Improvement and noted the second scenario gives a total project cost of $3.2 M, 27.9% of that is FRC related so we minus that off. It is replacement of existing and bringing it up to current standard. They should not be burdened with the full requirement as they have

been paying some kind of debt service. We would need a high powered analysis, but this is the worst case scenario. Even at 50% of this you would have additional money coming in. Mr. Dill wondered if fire flow was driving this. Mr. Nishimura asked if, when the water boards were created by HRS, if all lines were required to follow fire flow standards. Manager Craddick stated there is no requirement for us to provide fire flow, either in the County Charter or state laws. Mr. Nishimura asked if the lines were up to our fire flow Water Standards adopted in 1975, and Manager Craddick did not believe so.

Mr. Nishimura had two points:

1. If we were not up to standards then, who is to say what subdivision contributed to the deficiency as it was already sub-standard. The argument about doing a community improvement district may be something to look at if you have districts that already meet all the standards we have and moving forward if we do that you would have to create it. You would be possibly unfairly punishing the rate holders because of what we had in place prior to that.

2. Do we, the Water Board, have the authority to create these community improvement districts or does it have to be authorized by the County Council and, if so, we should not be even looking at this.

Manager Craddick noted that it could involve the Council but nothing would prevent the Board doing this if they wanted to do it. However, Manager Craddick leaned towards Mr. Nishimura's view. It is difficult to isolate these people but the fire standards have been in place since World War II. Very little of this got built that met the fire standards for the insurance companies at the time whether we had standards or not. You would have to look at the history of how these got put in with those size lines.

Mr. Dill asked if they have fire hydrants or 2-1/2" standpipes, and Manager Craddick stated they are probably standpipes and that we would be upgrading to hydrants. Mr. Dill wondered if their insurance reflects insufficient fire protection, so an offset would be if we improve their fire protection, they may have lower insurance. Manager Craddick noted the ratings on an area on Maui were low because there were no fire stations within 5 minutes, and when they built a fire station the rating went from 1 to 6. Beverly Hills has a fire station every 3 minutes, and their rating is 9. You can ask for an insurance re-rating so it is not unheard of, as long as the fire station is near enough.

Mr. Dill asked how Manager Craddick determined the 75 years number. Manager Craddick used 30 years the first time as that was the life of the loan but that was not a good number, but now we are being conservative off 100 years. Mr. Nishimura asked what number we are currently using to depreciate the lines, and to check as it should be close to our depreciated life and if it is only 50 years, we would be behind. Mr. Kaneshiro asked if this was according to the General Plan and any time you increase the capacity you have a potential of more customers on the line. Manager Craddick noted most of these areas are already pretty well built out. Mr. Nishimura asked if there were any numbers for agricultural areas, and Mr. Moises noted most of them are above the high school but Mr. Nishimura noted that Laipo Road is not fully developed and that is the main one.

Mr. Dill did not feel we could incorporate this into our study and he asked that we continue to investigate these options with the County. Manager Craddick stated that you would have to get 25% of the people to agree. Mr. Dill asked how you decide who gets the distribution. Mr. Nishimura was most concerned about Bullet point 3 under Additional Points. He understands the desire to move much of the debt service to the FRC, but if we cannot collect the FRC it is going to come out of our

ratepayers somehow. Manager Craddick stated we could do that with a Borrowing Resolution and borrow from the Water Utility Fund. Mr. Nishimura stated we are artificially lowering what the rate may have to be. Mr. Dill asked how we do the projections on the FRC and has the same concern with Line 69, the ending balance, we are effectively zeroing out. Mr. Nishimura noted that ideally you would be close to zero meaning all of the money has been properly spent and the worst thing is excessive balance, which could act like a rebate, but if we get into deficit going from $35- $57, which is 65% for the 5 year period and then ran short of money in year 4 and then try to collect more, and wanted to consider that aspect. It is hard enough to go from #3, $35-$61 which is almost double but would rather do it for years 4 or 5 and have enough balance and not go forward with the rate increase next year, than try and get more in year 4. It is all hinged on how much FRC is being collected. It is not that we will see applications for 1,000 meters a year. Manager Craddick says it is 100 meters, not 1,000. The AWWA reports that most utilities are up to10-12% per year, four times inflation per average per year for the next 25 years. Mr. Dill inquired if we run the scenario of 2016 and take the $3M and divide it by 22,000, equaling 136 meters, what if we only do half of those. Manager Craddick is assuming about 1% increase of growth per year, and Mr. Dill thought we should take a more conservative approach. Manager Craddick stated we would just wipe out what is debt funded, and make it cash funded. The more we do not borrow and the more we cash fund the more the rates will go up. Mr. Dill wanted to see what the impact would be on rates. Mr. Nishimura noted that the FRC rates will be directly impacted by the 40% or the debt service on the FRC. When we do our FRC, assuming that these debt service numbers are real, it still comes into the FRC charges but for our rates perhaps we should not rely on these monies as it seems like a double whammy.

Manager Craddick drew attention to the highlighted section of his spreadsheet, where the $24,026 M is 40% of the BAB money. There are more projects with zero funding and they are big FRC projects. We do not think we will have enough BAB money left to do this. The numbers in the "encumbered to date" highlighted in pink were not included. The two big projects, the Horizontal Well, and the new building, are not in there.

Manager Craddick felt that 40% is a number that is probably low but we will probably run out of BAB money altogether before we get 40% encumbered that is FRC related. He noted that more money has been invested into Kokolau so we would be concentrating more on that than Akulikuli Tunnel.

Mr. Kahawai noted that all these versions have different percentage increases over 5 years and Manager Craddick concurred stating that the biggest jump is in the third year. Manager Craddick stated that in 2013, we get the full principal and interest on the BAB, right now it is interest only. He noted it all matches our budget now.

Mr. Nishimura asked if the rates on the bottom are based on 10,000 gallons per month and Manager Craddick concurred, but stated it should not state average residential but state 5/8" meters. CPRs are not prevented from getting meters, most have paid the FRC already and just do not want to put in the line for the meter and we have a lot of these.

Mr. Kahawai asked if these are every other month and Manager Craddick stated that it says monthly but we will check on this. Ms. Yano noted we will be switching over to monthly billing in October. Manager Craddick noted it was reflected in the cost and it is in the budget, under "postage and contractual services". Manager Craddick asked if the board wished to see one with the SRF loans zeroed-out and moved into cash and Mr. Dill would like to see that. Mr. Nishimura was concerned

about funding the FRC out of cash, not the other way round; you are taking the FRC debt service out of the rates but what he is concerned about is collecting all the FRC and are still short of paying debt service. Manager Craddick stated that if we take the borrowed SRF and put it into cash then the Board could add a Borrowing Resolution from the Water Utility Fund. The 100 meters a year does not seem an unrealistic number of new meters, but the only issue is how many of these new meters are ones that have already paid the FRC. We would have to ask an attorney, but if all the people who have paid the FRC and have not put a meter in, could we say that if you do not put in your meter in the first year you have to pay 10% of the new FRC charge difference, and the second year – 30%, third year – 50% and graduate that up.

Mr. Kahawai asked if, for the FRC fund for 2016, we do not get $3M coming in, will it get paid out by the Water Utility Fund, or out of SRF. Manager Craddick stated in the negative as the SRF is borrowed money. If you stick with the user pays principle then we would borrow from ourselves with a Borrowing Resolution. Manager Craddick felt it would turn around where the revenue is coming in and FRC fund pays it back to the General Fund with interest.

Manager Craddick confirmed to Mr. Dill that the water utility is funded from the rates, it is used in capital projects for replacement and refurbishment. Mr. Nishimura stated he is taking SRF capital and making it cash funded. Manager Craddick explained the funding conditions by drawing a flowchart on the marker board. Upon query from Mr. Kahawai, Manager Craddick stated that the department may not have done this before, but he has done this previously in other utilities. The ending balance, Line 69, was discussed. Mr. Dill noted the $4M reserve fund and Mr. Nishimura did not want this available for Operations as this is for capital, but Manager Craddick stressed it is not for capital, it is for emergencies, for instance not being able to bill for several months. Manager Craddick stated that at end of the budget year there is $1.29M FRC fund balance, $3.57M beginning balance, based on 100 meters. Mr. Kaneshiro asked if the 100 meters is based on historical numbers, or is it capital improvements and then there will be more hook ups, as there are some CIP projects in there.

Mr. Nishimura asked if they were in agreement that we are not going to touch the cost of service for fire and agriculture and Manager Craddick stated that is a board decision. Manager Craddick noted that in the R.W. Beck study, the fire lines will be corrected but it is minor income, not even $100,000. Mr. Nishimura asked if the agriculture came up to the first tier of all categories, and Manager Craddick stated it is about 4% of consumption. After recalculating, Manager Craddick noted it is only $300,000 in revenue if we brought agricultural rates up to par with the first block. Mr. Nishimura did not feel this was worth it at this time.

Mr. Dill wished to see, if the FRC projections turn out to not be what we hoped they would be, what would be the impact on the rates and what we have to borrow from the Water Utility Fund. Manager Craddick noted that borrowing from the Fund, you just do less replacement projects and it has no impact on the rates. Line 58, you would move that down to cash and have those monies available also. Mr. Nishimura asked if we have the capacity to do $6M a year in line replacements. Manager Craddick noted we are doing $20M now but that is because of BAB. It is a function of having the money, not the ability of the staff to do it. Mr. Nishimura offered another option when they look at the BAB projects, perhaps the greater proportion should go to non-FRC projects and go for capital replacement, if we are taking from that fund. Manager Craddick stated we could bring it down to 30% or less. Mr. Moises suggested running this at 30% to be more realistic and conservative on the FRC. Rates would be higher but the FRC collection would be lower, and Mr. Moises gave examples of some

projects falling into the 30% or less range. In essence, the more pipeline you do, the lower the FRC will be.

Mr. Nishimura expressed concern that from 2013 on you want to spend $6M a year which means you have to get those projects designed first. Mr. Moises noted we would have more designs ready than money to spend, we may have to shelve projects because we do not have the money.

Mr. Kahawai wondered if Manager Craddick could generate one at 30%. Manager Craddick confirmed he could and would do another moving the SRF funded to cash. Manager Craddick was requested to do three separate reports, one at 30%, one SRF to cash and a third with both scenarios.

Manager Craddick will complete these scenarios, and then this can continue to be addressed.

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

This report was not discussed.

Adjournment

Mr. Nishimura moved to adjourn the meeting, seconded by Mr. Kahawai; the Finance Committee meeting was duly adjourned at 12 noon.

Respectfully submitted,

Carol A. Beardmore
Secretary

Approved,

Randall Nishimura
Secretary – Board of Water Supply

cab

REGULAR MEETING MINUTES
BOARD OF WATER SUPPLY
Thursday, April 28, 2011

The Board of Water Supply, County of Kaua'i, met in regular meeting at its office in Līhu'e on Thursday, March 24, 2011. Chairperson Roy Oyama called the meeting to order at about 10:28 a.m. On roll call, the following answered present:

BOARD:	Mr. Roy Oyama, Chairperson
	Mr. Michael Dahilig
	Mr. Larry Dill
	Mr. Leland Kahawai
	Mr. Raymond McCormick
	Mr. Randall Nishimura
Absent & Excused:	Mr. Daryl Kaneshiro
STAFF:	Mr. David Craddick
	Mr. William Eddy
	Mr. Keith Aoki
	Mr. Gregg Fujikawa
	Mr. Dustin Moises
	Ms. Faith Shiramizu
	Ms. Marites Yano
	Deputy County Attorney Amy Esaki

Quorum was achieved.

AGENDA:
Chair Oyama asked if there were any adjustments to the Agenda; if not the Agenda would stand .

MINUTES:
Finance Committee Meeting – March 22, 2011
Mr. Kahawai moved to receive the March 22 Finance Committee Minutes, seconded by Mr. Nishimura.
Mr. Dill then requested that on page 5 of the Minutes under Item A, that the word **Counsel** be replaced by **Council**. Mr. Dill moved that the Minutes be approved as amended, seconded by Mr. Nishimura; by a unanimous vote; motion was carried.

Regular Meeting – March 24, 2011
Mr. Dahilig moved to approve the Regular Meeting Minutes of March 24, 2011, seconded by Mr. Kahawai; by a unanimous vote; motion was carried.

Mr. Nishimura requested that all staff reports be included in the Minutes.

CORRESPONDENCE

Re: Correspondence from Thomas Hazelton concerning water bill

Manager Craddick noted that Mr. Hazelton had requested more of a rebate than our Rules allow, we have already given him a rebate of more than half of the bill in two separate rebates. We have gone overboard and have suggested a payment plan. It was confirmed to Mr. Dill that the bill was $940 and we have reimbursed $540. Ms. Yano gave an overview of the adjustments provided and how it was calculated. Mr. Dahilig asked if this triggers a contested case hearing and Ms. Esaki stated that it comes to the Board and this is as far as it goes, as the Rules do not allow any more than 50%. It was confirmed to Mr. Nishimura that this is PVC pipe on the customer's side.

Mr. Nishimura moved to receive the correspondence from Mr. Hazelton dated March 30, 2011, seconded by Mr. Kahawai; by a unanimous vote; motion was carried.

Re: Correspondence from Council Chair Furfaro concerning Procurement for an Independent Financial Audit

Manager Craddick stated that the Council Chair is thinking there may be some cost savings if we go together. He thought they were doing their procurement this way, where we could see the cost and whether to go with them or not. They apparently wrapped it all in and there is no separate pricing for DOW and when we got the correspondence from corp. counsel and did our own procurement, they reworded theirs and took out the DOW. They are doing a three-year procurement, as are we, so we will look at this again.

Chair Oyama asked if we should send a note. Mr. Nishimura suggested we accept the letter but take the discussion off-line with the Council Chair. It could require possible charter changes in order to resolve the financial audit issue. For the record, he was waiving the attorney client privilege from an opinion given to him by the county attorney's office that despite the creation of the auditors' office, the Board of Water Supply is still responsible for the financial audit for our department. If we decide to go through the procurement with the auditor's office, who will be responsible for that audit, and the legal ramifications need to be looked at before we decide whether to go that way or not. Mr. Nishimura stated that we still have to do an audit, by Charter we are still responsible for the audit, and the county auditor has their responsibility which cannot be ignored by either body. He understood consolidating costs, but would not recommend getting rid of our responsibility until it can be resolved.

Mr. Nishimura moved to receive the letter from the Council Chair Jay Furfaro for procurement of an independent financial audit and that further discussions be conducted with the County Council to resolve this issue, seconded by Mr. Dill; by a unanimous vote; motion was carried.

Ms. Esaki requested that we revisit Item E.1, the letter from Mr. Hazelton. Ms. Esaki asked if we are responding to Mr. Hazelton. Manager Craddick will send a letter back to him with the Board's response that there was no action on it, but that he has the option of a payment plan, if he wants to do that.

Re: Communication from Board Member Leland Kahawai regarding his resignation from the Board of Water Supply

Chair Oyama stated that it was with great sorrow and regret that we would accept the resignation of Mr. Kahawai. It is effective today, April 28.

Mr. Nishimura moved to receive the communication from Board Member Kahawai, seconded by Mr. McCormick. On behalf of all the board members, Mr. Nishimura thanked Mr. Kahawai for all his contributions to the Board of Water Supply noting that he had the reins at a difficult time and thanked him for all his help.

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

BOARD COMMITTEE REPORTS

Re: Report of the Rules Committee of the Kaua'i County Board of Water Supply
The Rules Committee met with one item on the Agenda:

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

Chair Dahilig stated the Rules Committee had convened and received the matter for the record. Mr. Nishimura moved to accept the Rules Committee report, seconded by Mr. McCormick; by a unanimous vote; motion was carried.

Re: Report of the Finance Committee of the Kaua'i County Board of Water Supply
The Finance Committee met with two items on the Agenda:

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

Re: *Manager's Report No. 11-28* – Request Board Approval of Facilities Reserve Charge Change
Chair Dill noted that the Finance Committee had met this morning to discuss these two items. They will be meeting again to discuss this in further depth on May 6, 2011.

Mr. Nishimura moved to accept the Finance Committee Report, seconded by Mr. Kahawai; by a unanimous vote; 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

Mr. Nishimura moved to defer action on this item, and recommended to staff that they transmit a copy of their comments to Council that were provided to the Planning Department, seconded by Mr. Kahawai.

Mr. Dahilig stated that, given the proposed rules for adoption does this need to meet the standards of HRS-91, Public Hearing. Manager Craddick noted the Committee would have to make a recommendation back to the Board and from there it goes to the Small Business group and back to the Board, etc. Mr. Dahilig stated this should be started in the form of a Public Hearing. Ms. Esaki noted the process has always been that discussion would be in the Committee first to figure out the language and then transmit to the full Board and then go to the rule-making process. Mr. Dahilig stated that the language should not be to take action then. Manager Craddick stated that the action could be to refer it to public hearing. Ms. Esaki confirmed to Mr. Dahilig that he would rather see "committee discussion on Part III Rules" and delete the word action.

Manager Craddick stated this is how his report was written, asking action from the Board and if you read the report, it says subject to Chapter 91. Mr. Dahilig stated this is more of a notice issue for the Agenda rather than the report and again reiterated his legal viewpoint of the administrative rules process. Manager Craddick suggested leaving this to corp. counsel to figure out the wording this; Ms. Esaki and Ms. Suzuki will work on it.

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

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

Mr. Dill moved to defer this item to the next meeting, seconded by Mr. Nishimura; by a unanimous vote; motion was carried.

Re: *Manager's Report No. 11-28* – Request Board Approval of Facilities Reserve Charge Changes. Request from Special Committee Chair Kahawai to move this item from Special Committee to Finance Committee

Mr. Dill moved to defer this item to the next meeting, seconded by Mr. Kahawai; by a unanimous vote; motion was carried.

Re: Board Discussion on Year 2011 Goals for the Manager

Item No.	Goal	Status	Deadline	Measure
	Goals from Board			
1	**Bond Float and Water Plan 2020**			
	Encumber $37 million in BAB	Manager provided updated figure of $37 million	End of November 2011	
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			

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**			
5	**Fiscal**			

DISCUSSION

Manager Craddick noted the benchmarks were included in the packet and he has numbered them 1 through 25. The data for the graph is accurate though he has not posted this in the Lobby. No data was gathered prior to 2009. It shows industry percentiles in the 25-75 range. He confirmed to Mr. Dill that this was from the AWWA. Manager Craddick crossed out waste water but it could be used for that also.

Mr. Nishimura asked what the proposal was. Manager Craddick stated he had a goal of getting benchmarks to where they are monitored on a regular basis and then the next step is trying to improve upon that. Upon query from Mr. Kahawai, Manager Craddick confirmed that we would work on doing all 25. Mr. Kahawai asked how meeting these benchmarks would improve employee morale. Manager Craddick felt it is better if the staff know what is expected from them and what happens if they change the way they are doing things; it gets the person in competition with other utilities of similar size. Hopefully they would have fun doing it, then the morale goes up.

Mr. Dill supported benchmarking because it creates accountability and clarifies what people are doing and why they are doing it. He thought that this could help morale. Mr. Nishimura agreed with Mr. Dill that from an accountability standpoint it is an effective measure, but from a morale standpoint, he did not see this as a measure of morale. Mr. Dill felt as goals for the manager these are excellent but measurement of morale is a small part of the picture. Mr. Kahawai asked how it improves morale if you do not hit it. Mr. Nishimura felt it should be incorporated as an accountability goal.

Manager Craddick stated that morale is nebulous, it can go one way or another based on something small, such as favored treatment if they are related to someone at the DOW, etc., and what action you would take in that instance. For morale, he felt that may be a Fun Day, if we could get the Operations crew to participate more, that would be an indicator and that could be measurable.

Mr. Dahilig stated that morale is important, it is a clear indicator of the performance of the Manager. He wondered how those goals would translate into an evaluation of the manager's performance and suggested that for the next meeting we would go into Executive Session to talk about the evaluation of the manager's performance in terms of morale.

Manager Craddick stated that if it was the Manager's Goals, he probably would not allow it to go into Executive Session if the Executive Session is talking about individual people. He knows the Board got a letter and was not sure that corp. counsel would allow that letter to be discussed, even in Executive Session. Mr. Dahilig wished to focus on how we take these goals, including the issue of morale which has been openly talked about and how it is translated into an evaluation, and felt the Board should be able to discuss that issue from an evaluation standpoint. He felt the goals are benchmarks for evaluations and it is appropriate for the Board to talk about it for when the evaluation matrix needs to be done, and to have this discussion in Executive Session.

Chair Oyama understood Mr. Dahilig's position and the Manager's morale situation. Chair Oyama noted this is not a personal attack on the Manager, but because of the morale, the challenge would be to get the Manager and Board in support and to look at how we could meet the challenge as a goal in that sense. We need the attorney's guidance. If morale is down there

will not be a lot of energy in the department. This is learning how to work together and help the department to get to a level that we need to be. Chair Oyama stated that this has been going on for quite a long time and stressed that it needs to be worked out.

Manager Craddick stated that if it is about him and his goals he probably would not allow it to go into Executive Session and it would be his choice. Ms. Esaki confirmed that if it was about his evaluation and his goals, if he chooses open session discussion, this is his choice. Chair Oyama then wondered how we would have the morale issue resolved. Manager Craddick stated that we got the letter and if some board member knows more than he knows then it is a personnel matter that can go into Executive Session but he was not sure what the Board could do anyway according to counsel. Manager Craddick can tell the Board Chair what we are doing, under specific instances, but he was not sure what the Board could do about it. Chair Oyama wanted to know how we get teamwork to function.

Mr. Dahilig asked that at the next meeting, we post an Agenda item regarding the evaluation of the manager for public session. Ms. Esaki then reiterated that this is a request to defer any further discussion and that at the next meeting we do an executive session, and Mr. Dahilig noted for public discussion, seconded by Mr. Kahawai.

Mr. Nishimura requested that the motion be repeated, and Mr. Dahilig stated that request was that at the next meeting we post for public session the discussion for the board concerning the evaluation in public session. Mr. Dahilig then added, that the comments today are a waiver of the 92 privilege. Ms. Esaki noted we could still post an executive session agenda item and if the manager waived his right to go into executive session, then it could be discussed in public session.

Mr. Nishimura asked, if we vote on this motion does that mean that all other discussions relating to the goals would have to cease at this point. Ms. Esaki was hearing this as a request to defer discussion because it goes into the evaluation, then based on that all discussion would be deferred.

Deputy Eddy noted the proposed goals #2 from the Board actually says to improve employee morale, employee survey, so maybe an employee survey would be a good tool to give all the employees a chance to do an organized survey and give management a chance to put together an action plan.

Chair Oyama noted that two meetings ago when we started the staff were asked for goals for the manager and no more were submitted. Deputy Eddy wanted all the employees to have an opportunity for input in a survey format.

Manager Craddick noted in the first benchmark, organizational and best practices, #7 is the Continuous Improvement Program and that could possibly involve a survey. We could send that out to staff, it would be a part of the evaluation. At the end of last year in an employee meeting, a voting form was given out to the employees and there were about 28 or so responses. In reviewing #7, Mr. Dill did not see anything relating to employee morale. Mr. Nishimura asked if it would be possible for our HR person to provide us some options for potential surveys that are available for measuring employee morale and include that at the next meeting. Ms. Shiramizu indicated the survey that Manager Craddick mentioned was not very clear when employees did it, in terms of accuracy. They filled out the form not totally understanding what they were doing and felt it needed to be done in a more structured manner as it was vague. Mr. Nishimura asked

if the end result of the survey had been explained to people, and Manager Craddick indicated that they were talking about benchmarks at the meeting.

Mr. Dill felt an employee survey would be valuable and to have for the session and wanted the results of the survey before the next meeting; or should the Board look at the survey questions first.

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

Re: *Manager's Report No. 11 – 64* - Proposed Budget 2012

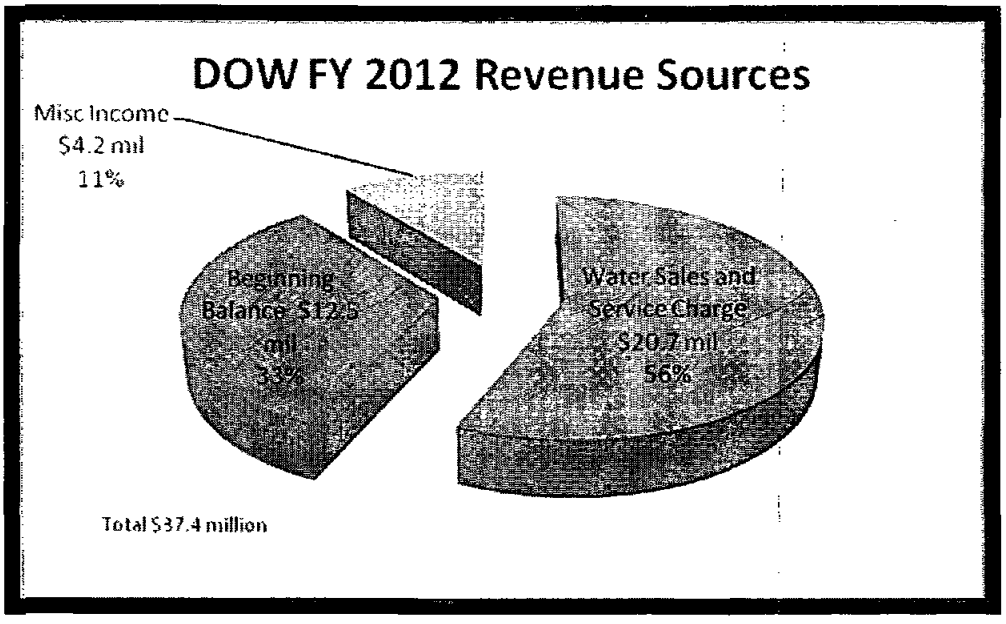
Board review, requested changes and approval is required by June 30th 2011.

A summary of the proposed budget was shown in graphic form.

REVENUES

The revenues incorporate a 1.7% increase not yet approved by the Board and will be subject to what the Board finally approves for a rate increase during rate deliberations. The assumption is a 3.4% yearly increase implemented in January or halfway through the fiscal year. This does reflect a transfer of 30% or $0.9 million of the debt requirements for the BAB and $1.1 million for SRF and other bond debt from the FRC account to pay for expansion related projects in keeping with the User Pays principle. This can happen for only one and portion years if the FRC charges are not changed to reflect these costs.

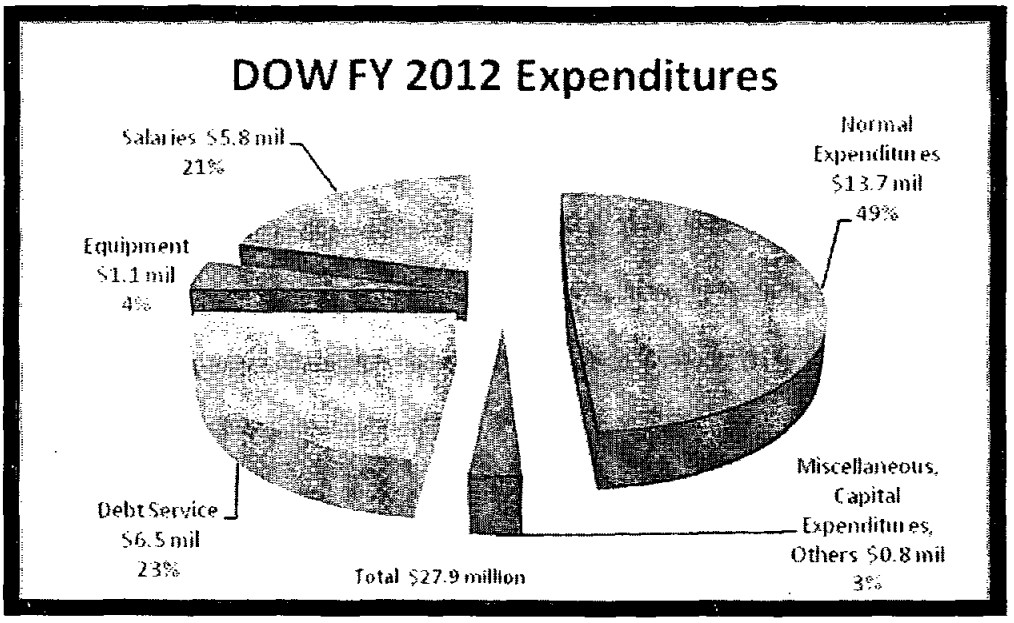
Labor costs to review and manage construction of projects that will require or provide additional resources from FRC related projects are not included in these costs and can be covered by a review charge should the Board move to a clean user pay. Due to the potential increase of the FRC charges these labor costs are left for future review. The engineering labor costs are capitalized in any case and are taken out of operational costs during the audit but must be included in the budget as the engineering labor costs are real expenses.



We are showing a potential for revenues of $22 million for FY2011 based on December financials which were used to prepare this budget. To do this will incorporate a 2.5% increase in consumption which may not be realized. As we go through the budget and we are able to get more current numbers the revenue projection may, however, be increased.
At this time, however, we are proposing a more conservative number as second half of the year revenues are usually less than the first half of the year.

EXPENDITURES

Salaries are budgeted to be about $0.3 million above last year as positions that were vacant for some of last year are now filled. Part of the jump in normal expenditures is related to fully funding employee retirement and medical costs, including a proportional amount of past years that were underfunded. This amount is about $1.3 million over the previous year where this was not budgeted for but adjusted during the audit. Contractual expenses are up because the Water Use and Development Plan required by the CWRM are included this year. Funds were budgeted this current year and there is a chance of coming to the Board to encumber the funds this year, even though the current budgeted number is less than needed if we get a final contract prepared. If this happens the FY 2012 budget will be $0.9 million less than proposed. The largest items in the normal expenditures are the water purchases and the power purchases and these are out of our control unless the Board decides to purchase less water by purchasing the facilities. This would cut about $1 million from the operating budget while adding a $6 million capital purchase that has not been budgeted.



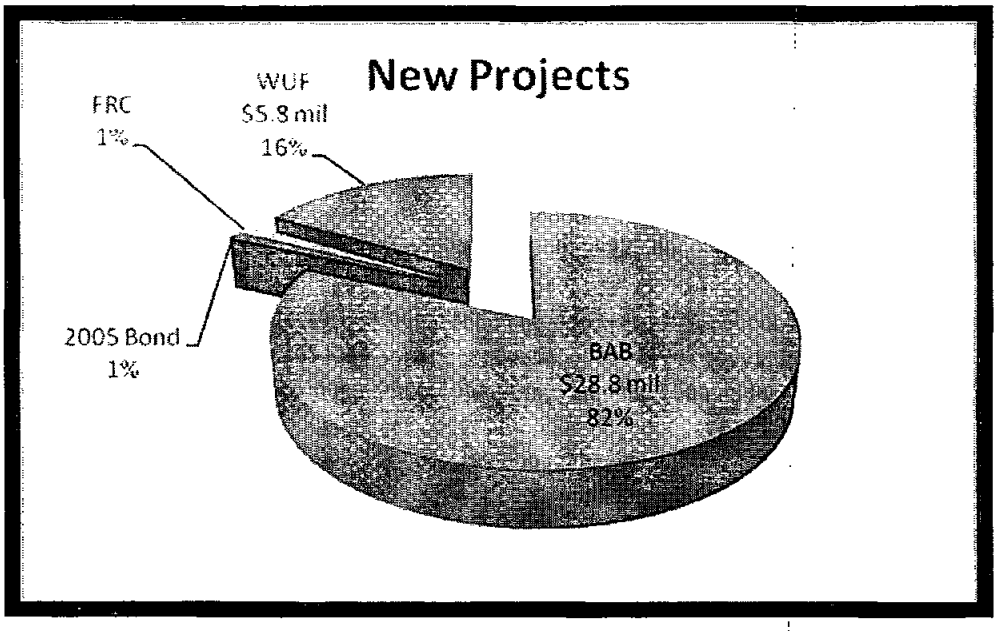
Debt service has also jumped by about $0.9 million due to a full year of payment on the interest for the BAB's. The remaining items are the capital projects which are increasing about $1.9 million. In addition to the operating costs there is a substantial capital budget.

CAPITAL IMPROVEMENTS

The revenues for the capital projects come from bonds, revenues and FRC charges. There are new projects that we expect to encumber this year, expected payments on existing contracts and remaining reserves.

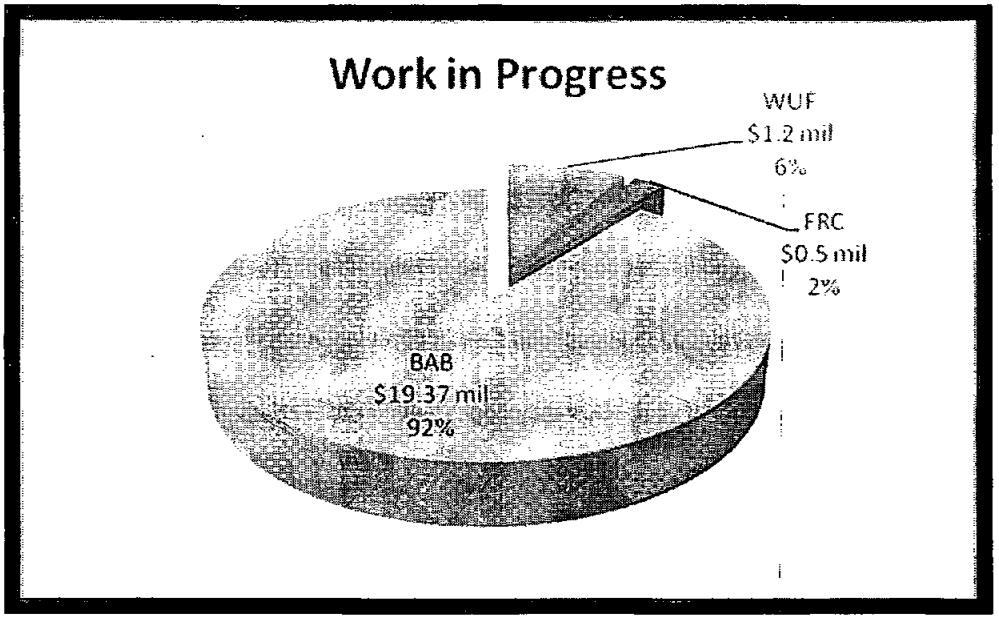
All of the unencumbered BAB funds of $28.8 million are budgeted to be encumbered. Two of the remaining projects, the DOW building and high level well, could use most of the remaining balance. We will be working closely with the Board on these two projects as more is known. There is a possibility of getting some grant funds which is not shown. The Water Utility Fund has expansion projects totaling

$1.8 million which will not be taken from the WUF without a borrowing resolution. The remaining $3.7 million are replacement projects.



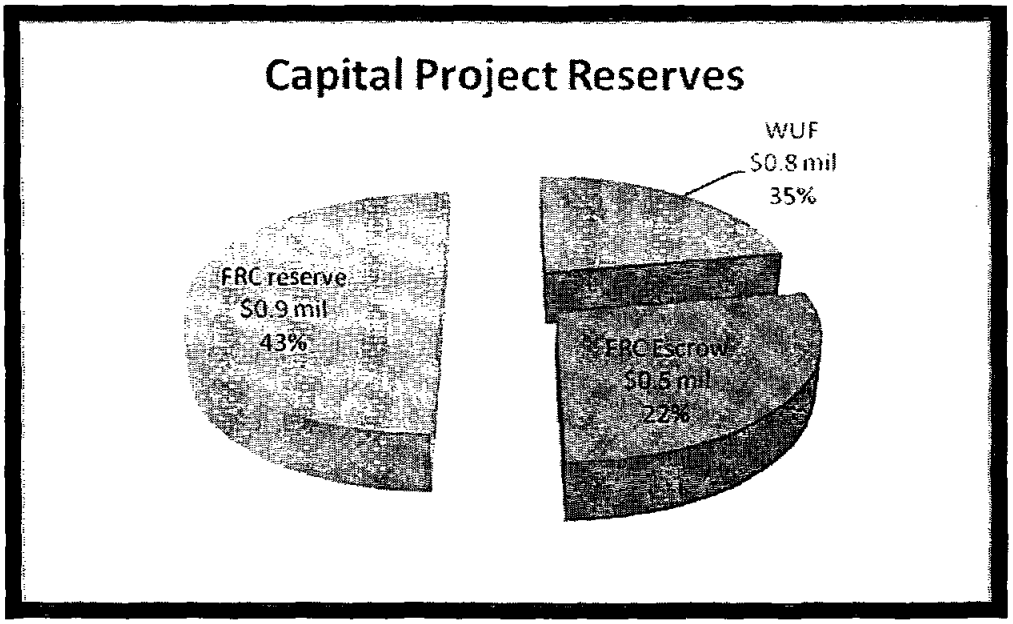
WORK IN PROGRESS

The BAB again is the lion's share of the spend-down. The WUF is older engineering projects.



CAPITAL PROJECT RESERVES

The FRCs go to a restricted fund used only for system source, storage and transmission improvements. The FRC reserve will be needed for FY 2013 debt service payments which will total about $2.5 million. Expansion projects are very much underfunded at this time and time is running out to generate additional funds. The Board is reviewing the FRC charges and we expect this to be completed in early FY 2012. The FRC escrow is for projects that have paid FRC charges and are building the facilities needed, thus will qualify for refunds. The largest of this class of projects was Kukui'ula which has been paid back. The WUF reserve is subject to changes as the budget process moves forward.



Thank you for your attention to this matter and we look forward to working with you to refine the proposed budget.

DISCUSSION

Manager Craddick noted that at the Committee meeting revised numbers were distributed so this is the report based on those numbers.

Mr. Nishimura noted that Mr. Kaneshiro asked that the Finance Committee meet and do further work on the rate study as there may be impacts to the budget for next year. Pending results of the next Finance Committee meeting, he would like another budget meeting scheduled.

Mr. Nishimura moved to defer this item, seconded by Mr. Dahilig; by a unanimous vote; motion was carried.

Re: *Manager's Report No. 11 – 65-* Hiring Legal Assistance in negotiating the Kahili High Level Well Right of Entry

Board approval was requested to hire legal assistance in negotiating the Kahili High Level Well Right of Entry.

The Kahili High Level Well project, as is any exploratory drilling project is highly speculative in nature and carries a high level of financial risk. As a result it usually does not warrant giving away the results before they are known. Additionally, DOW must have an unfettered right to develop what it finds as a result of its exploration.

The draft agreement reserves rights which we feel go to the risk taker. No one is prevented from joining in the risk and enjoying the fruits of the risk. The publics rights must be protected in this matter and we feel specialized legal assistance is needed in the negotiation of this Right of Entry.

Cost for this would be in the range of $8K-$16K or 40 hours at $200 to $400 per hour.

After the budget amendment request in Manager's Report No. 11-60, there will be $40 K remaining in the legal assistance and liaison funds budget.

Mr. Nishimura moved to defer this item to the next meeting, seconded by Mr. McCormick; by a unanimous vote; motion was carried.

NEW BUSINESS

Re: *Manager's Report No. 11 – 66* - Facility Reserve Charge Study – Request Board Approval for Contract Amendment No. 2 with R.W. Beck, Inc.

RECOMMENDATION:
It is recommended that the Board approve Contract Amendment No. 2 for Contract No. 506 with R.W. Beck, Inc., an SAIC company, in the amount of $20,000.00.

FUNDING:

Account 27, Contractual Services			**$**	**48,500.00**
R.W. Beck, Inc	$	(58,000.00)		
Contract Amendment 1		(19,900.00)		
Proposed Contract Amendment 2		(20,000.00)		
Proposed Total	$	(97,900.00)		
Total Funds Approved and Certified		77,900.00		
Additional Funds Requested, Account No. 27			$	(20,000.00)
Account 27, Contractual Services, Remaining Balance			**$**	**28,500.00**

BACKGROUND:
We have negotiated a contract with R. W. Beck, Inc. to provide professional consulting services necessary to update the Department's previous Needs Assessment Study and Facility Reserve Charges (FRC) analyses that was completed on July, 2004.

During the review process for the above mentioned FRC study, additional services were provided by R.W. Beck, Inc. to do additional analyses from FRC debt service recovery, additional analyses of rate level changes at various capital funding scenarios, additional analyses of potential rate level changes at various levels of the FRC and other anticipated future analyses as necessary.

The consultant R.W. Beck, Inc. proposed $20,000.00 for this amendment and it appears to be reasonable.

DISCUSSION
Manager Craddick noted we did one amendment for the surface water treatment plant but the interest cost was not included. We thought that there would be enough money left over in the rates portion but there is not, hence the change order. Mr. Nishimura asked if there were further changes that need to be made to this contract and if so, for what purpose. Manager Craddick indicated only if we do not get down to a solution. Every time they run a model if costs us money, each FRC or rate run model is about $6,000 and confirmed to Mr. Nishimura that the request was for $20,000. Ms. Yano noted it came from administration and fiscal budget, part of

the contractual services, we did a reallocation to fund the difference of the unfunded OPEB. $28,500 is what is left in the contractual services budget for this year.

Mr. Kahawai asked if there are more changes to the FRC it would come from this and Manager Craddick concurred. Ms. Yano confirmed to Mr. Kahawai that the first contract amendment was in May 2010, but Mr. Kahawai noted that our budget year is July to June. Ms. Yano stated that this is to show the contract amendment carried forward and then the amendment in May 2010 under this contract but rolled forward to 2011. Mr. Nishimura asked if it is reflected in the Budget Status, and Ms. Yano stated it is in Line 27b.

Mr. Dill moved to approve Manager's Report No. 11 – 66 - Facility Reserve Charge Study – Contract Amendment No. 2 with R.W. Beck, Inc., seconded by Mr. Dahilig; by a unanimous vote; motion was carried.

Re: Managers Report No. 11-67 - Part IV Rule Changes to Correct Billing Blocks for Monthly Use and Addition of Late Fees

RECOMMENDATION

Board approval of the attached Part VI Rules changes to correct billing blocks for monthly use and the addition of late fees was requested.

The proposed rule changes are not intended for the purpose of generating income. The Rate Blocks are being revised to show monthly charges instead of bi-monthly charges. No additional income is generated should this request be approved. It simply takes half of the current bi-monthly blocks and changes the title to monthly blocks.

The proposed addition of a new Section XI for the addition of late fee's states as follows:

"A late payment charge may be applied to any delinquent balance payable to the Department. The late payment charge shall be assessed at the rate of half a percent (.5%) for each month or fraction thereof against the delinquent balance, beginning 30 days after the date of the bill. For the purposes of this section, 'delinquent balance' includes any loan, fee, charge, or other liquidated sum which is 30 days past due to the Department, regardless of whether there is an outstanding judgment for that sum, and whether the sum has accrued through contract, subrogation, tort, operation of law, or administrative order."

DISCUSSION

Manager Craddick reported that, as we are going to monthly billing, we are changing the blocks from bi-monthly to monthly, there is no expected rate increase though he had made some typographical errors. A public hearing would have to be scheduled. On the last page there is a new section regarding Late Charges where we are asking for ½% each month 30 days after the past due date of the bill. We would get some income from this.

Mr. Dill inquired if we have late charge now, but Manager Craddick noted that we do not, we just turn off the water. Our delinquencies are not high, and he noted some people go on a payment plan. Honolulu Board of Water Supply, and Maui, both charge 1% but he chose ½% and he thought 1% was too high. We usually disconnect after about 45 days and only charge for hook-up if it is after hours. After we finish with all the rate studies, we could possibly do a permit fee. Manager Craddick indicated he would have to redo some of the numbers. Again Mr. Dahilig

asked if this had gone to the Small Business people and Manager Craddick stated it does not go to Small Business until the Board makes some recommended action and Manager Craddick described the process.

Mr. Dahilig moved to receive this item with the understanding that there will be numerical changes and ordered that a public hearing be posted prior to the May 26, 2011 meeting at 10:00 a.m., seconded by Mr. McCormick; by a unanimous vote; motion was carried.

Re: *Manager's Report No. 11 – 68* - Authorizing the County Attorney to Investigate, Settle and Pay Small Claims Against The Board of Water Supply, County of Kauai

Board approval was requested to authorize the County Attorney to investigate, settle and pay small claims against the Board of Water Supply, County of Kauai.

This policy is designed to authorize the County Attorney to settle small claims, without the necessity to come to the Board and go into Executive Session for minor claims. Any claims in the amount above $10,000 would still come to the Board for approval.

DISCUSSION

Manager Craddick noted there are a few small claims pending. We thought that the Board had approved this in the past as there were claims for small amounts, but in review of our policies we could not find one like this so we are proposing that the Board approve something like this. Right now the County is $5,000 with workers compensation at $10,000. The amount is at the Board's discretion.

Ms. Esaki confirmed the county attorney's limit is $5,000 and up to $10,000 workers compensation County amounts to Mr. Kahawai. In the past when there was a claim, the department came to the Board on the claim and sometimes the Board would instruct a counter-offer.

Mr. Nishimura asked if we have a special account to settle claims and Ms. Yano stated that we did not in the current budget. Mr. Dill noted that the policy states that provided there are "sufficient appropriations", so we would need a fund. Manager Craddick stated that we could add something in the budget, and Mr. Nishimura stated it should be moved, not added. Ms. Esaki asked if this was for the next fiscal year as there currently is not anything in the budget so for the claims that are pending they would still have to come to the board.

Mr. Nishimura then moved that we approve Manager's Report No. 11-68 and that the Department be directed to establish an account to be set up in an amount of not less than $10,000 for the remainder of this fiscal year and to provide such adjustments to the 2011-2012 budget, seconded by Mr. Dill.

Mr. Dill asked Ms. Esaki historically how much and how many claims we have seen in the past and Ms. Esaki noted there were only about three, less than $1,000. Mr. Nishimura stated that if we authorize up to $10,000 then we should fund it for $10,000. With no further discussion, by a unanimous vote; motion was carried.

Re: Request Board Approval of Resolution No. 10, *(10/11)*, Mahalo and Aloha Leland Kahawai

It was requested that the Board approve Resolution No. 10 *(10/11)*, Mahalo and Aloha Leland Kahawai, who has resigned from the Board of Water Supply, and whose last Board Meeting will be April 28, 2011.

The resolution was not included in the agenda packet; however, it was available and read at the April 28, 2011 Board Meeting.

Mr. Nishimura moved to approve of Resolution No. 10, *(10/11)*, Mahalo and Aloha Leland Kahawai, seconded by Mr. Dahilig; by a unanimous vote; motion was carried.

Re: Appointment of Replacement Board Vice Chair

Mr. Nishimura nominated Daryl Kaneshiro as Board Vice Chair; Mr. Dahilig moved to close the nominations.

STAFF REPORTS

Re: Statement of Kaua'i County Water Department's Revenues and Expenditures for February 28, 2011

Manager Craddick noted that on Page 3, Utilities, and Chemicals are high. We have switched to hypochlorite solution which is more expensive than chlorine but will reduce the risk of chlorine leaks in those populated areas. We will budget enough for this in the new budget. Utilities just keeps going up.

Mr. Dahilig moved to receive the February 28, 2011 report, seconded by Mr. Dill; by a unanimous vote; motion was carried.

Re: Public Relations Specialist's Monthly Update Regarding DOW Public Relations Activities for the month of March, 2011

Public Relations Services: Joy and I met with Ruth and Jan from the Limtiaco Company to review our progress and discussed our plans going forward. We also had a preview of the new micro-website. We were joined by David and Bill and later Dustin to discuss our status and set up a plan to send out a monthly update on the status of our WP2020 projects. We will continue to move forward with laying the groundwork for sharing the Story of Water.

Fun Committee: They're at it again! This time, it's miniature golf! The date is tentatively set for May 14th.

On March 25th, a brave group of 13 enjoyed the thrill of Ziplining. Mahalo to the Fun Committee for organizing this event. The 13 brave souls that enjoyed the thrill of gliding through the air were, Keith Aoki, Joy Buccat, Daren Delgado, MJ Garasi and Cale Valenciano Akuna, Darren and Kyle Kiyotsuka (husband and son of Amy), Margie and Damien Loo, board member Randy Nishimura and the Shiramizu Ohana, Curtis, Ty and myself.

Source Water Protection Plan: Continue to work with Dan and Erin on our application for the Source Water Protection Plan grant through the Department of Health.

WaterSense: The winner of our Fix a Leak Challenge to the 4th graders of all our public schools is Kilauea Elementary School with 39% participation. Kudos again to Joy for putting this new program together and making it happen. She is currently making arrangements for their Subway lunch and prize presentation. Sadly, only 2 schools participated so we are soliciting feedback from teachers at the different schools and looking at ways to improve the communication and implementation for next year.

Community Events: On March 22nd, Carl, our Microbiologist did a fantastic job of presenting information and addressing questions from the seniors at the Lihue Neighborhood Center regarding the need to use water filters.

On March 24th, we hosted 2nd graders from King Kaumualii Elementary School. Their field trip topic was "Goods and Service". They sent a thank you folder with letters, one of which specifically stated that she "liked to see the board room members".

On April 11th, Joy and I set up a table at King Kaumualii Elementary School for their PTSA sponsored "Go Green" night. The wheel was a popular place to be, as students were required to tell us how they save water at home to get a chance at spinning the wheel for a prize. It was good to see young children understanding the need to conserve water and actually practicing water conservation measures in their home. In addition, parents demonstrated that they also understood this and are teaching their children to be better stewards of this precious resource.

We will be at Koloa Elementary School on April 27th for Career Day.

Loihi: Attended Loihi workshops.

Foodbank : Funds and groceries were collected and turned in with the County of Kauai Food Drive. Congratulations to our operations division for having 100% participation!

Service Award Banquet: The County Service Awards Committee has just sent out the nomination forms for the department, 2010 Employee of the Year. A selection committee will be formed to review the nominations along with the 4 Employee of the Quarters from our WATER Bucks program. Deadline to submit name and write up to the Awards Committee is May 13th.

DISCUSSION

Ms. Shiramizu reported that the Loihi workshops, organized by Ms. Yano, were for the new billing program that will be in place in October. Manager Craddick noted that Loihi is the name for the new customer accounting program in Honolulu and they had meetings here to get some of our processes straightened out. It was a week-long training and the staff attended certain portions. This would prepare Public Relations for the letters that will be going out to the customers.

Mr. Dill moved to receive the March Public Relations Update, seconded by Mr. Kahawai, by a unanimous vote; motion was carried.

Re: Deputy Manager's Summary Report on Monthly Operational Maintenance for the month of March, 2011

Deputy Eddy reported that a few more Operations positions had been filled. A candidate for the Chief of Operations was interviewed last week.

The Labor Report now shows a two-year period on the chart. Next month will show a spike in overtime as there were some major repairs in March.

The Leak Report shows leaks in service laterals increasing, and a lot of construction projects going on and service laterals tend to get broken during new mainline pipeline installations. This also includes repair of those service laterals, most of which are pvc though the new standard is copper.

Upon query from Mr. Nishimura, Deputy Eddy stated that when contractors break the line, we fix it, but charge the contractor. Manager Craddick reported that this is provided we properly laid out the line in the first place. We need to work on this and they have a test tool but more training is needed on how to use it, and we need a metal detector. However, Deputy Eddy indicated that we have one for the west side and one for the east side.

Mr. Nishimura stated that the Kalaheo Well was supposed to be finished last month. Deputy Eddy stated that Well #2 was put on line this month, they are both up and running. He indicated seeing an improved efficiency with the new motors.

Mr. Dill moved to receive the March Deputy Manager's Summary Report, seconded by Mr. McCormick; by a unanimous vote; motion was carried.

MANAGER'S UPDATE for MARCH 2011 to APRIL 2011

CONTRACTS AWARDED BY THE MANAGER:

Re: Job No. 05-05, Water Plan 2020 Project PLH-30, Nawiliwili, Niumalu, and Kupolo 6-Inch, 8-Inch and 12-Inch Main Replacements (Phase I),

Contract was awarded to **Goodfellow Bros., Inc. in the amount of $3,050,000.00**

FUNDING:

Account No. 201-01 Bond -BAB		$28,402,138.36
Contractor, Goodfellow Bros., Inc	$ 3,050,000.00	
Contingency, approximately 5%	$ 152,500.00	
Total		< $3,202,500.00>
BALANCE REMAINING		
Account No. 201-01 Bond – BAB		$25,199,638.36

PUMP INSTALLATION PERMITS SIGNED BY MANAGER:
None

WAIVER, RELEASE AND INDEMNITY AGREEMENTS SIGNED BY THE MANAGER:
None

PERSONNEL MATTERS UPDATE:
Updated April 12, 2011

RECRUITMENT & POSITION CHANGES

Ops Division:
1. Lead Pipefitter selection to be filled, effective April 18, 2011.
2. Water Field Operations Superintendent. DOW submitting request to DPS for the list of eligibles.
3. Chief of Operations interviews scheduled for April 21, 2011.

Fiscal Division:
1. Accountant III interview to be scheduled.

Engineering and Special Projects Divisions:
1. Civil Engineer II (Engineering Division). DOW submitted to DPS for new list of eligibles.

Administration Division:
1. Reallocate Commission Support Clerk to Board Secretary. Pending DPS review.
2. Private Secretary position duties clarified to show Private Secretary / Admin. Office Manager position duties. Pending DPS review.
3. Deputy-Manager Secretary interview to be scheduled.

SUMMARY OF WARRANT VOUCHERS PAID – March 31, 2011
Warrant vouchers were paid in the amount of $1,736,813.39.
Please see attached Warrant Vouchers Report.

STAFF REPORTS - FY 11 – 4:
Conveyance of Water Facility:

1.	Beyer	TMK: (4) 2-3-002:10 Kalaheo	$73,027.20

WATER QUALITY REPORT – FIRST QUARTER 2011
1. Sample site work order for Kuamoo Rd. submitted in September, but no work yet. Operations requested a different site be selected. Currently using the old Poliahu State Park site since they have constructed a new bathroom. Considering using the old site indefinitely.
2. New sites chosen for routine sampling to replace sites that were hard to access or have been removed. More old sites need to be changed. Ongoing.
3. Main break monitoring on hold, pending finalizing procedures and follow up between both the Lab and Operations. In the meantime, Peggy is informally checking on mainline breaks. Operations informs Lab of major breaks or installation of new infrastructure so that we can sample/monitor water quality.
4. Decided to go with Triggered Monitoring Plan for the new GWR. Plan submitted to SDWB (accepted by SDWB). One hit so far. Monitoring plan seems to be workable.

5. Sampling sources to see if any will present problems with fecal indicators if triggered monitoring is required. So far only Garlinghouse Tunnel seems to be problematic. On going.
6. Kalaheo, Lawai/Omao and Koloa have to be one system under the GWR. We propose to call it Kalaheo/Koloa System #434. The proposed system has been submitted to SDWB. We are awaiting approval. Has been approved as of 12/1/09.
7. Keith Aoki has taken the initiative to require developers to install sampling stations in future subdivisions. They will be installing the same kind of stations we already have in use.

AFFORDABLE HOUSING UPDATE:
Update will be provided after the next Task Force Meeting is held.

DISCUSSION
Manager Craddick briefly reviewed highlights of his report.

On the Affordable Housing Update, he noted that the Board had asked about Eleele and he reported that one group is putting in a small line. We have asked Housing, but we are telling the contractor to upsize the line. We have asked them to price it and then pending what Housing tells us, if we have the budget we will do it.

Mr. Nishimura asked on the reallocation to the Board secretary who would be responsible for supervision, and Manager Craddick indicated it would be the administration office secretary, the reallocation.

Upon query from Mr. Nishimura, on the Water Quality report, Manager Craddick would have to report back on when we expect the new sites to be completed.

Mr. Kahawai asked for clarification about #6 on the Water Quality Report and combining the systems into one, it states it has been approved since 2009. Deputy Eddy thought it was approved so it will be deleted from the report.

Manager Craddick confirmed to Mr. Kahawai that contractually we have contracted about $34M of the $60M in the BAB. Manager Craddick stated the next job is Maka Ridge, and then Wailua. Manager Craddick hoped that will get us to the $37M. Mr. Moises noted that Kupolo came in under our estimate.

Mr. Nishimura wants a report from the manager on the proposed projects to replace the High Level Water and the Facility Expansion, the new building. If those fall down, with what would they be replaced. Manager Craddick noted that even if you take those out, there are still some $60M of projects left, mostly tanks but they are not ready to go yet. Mr. Nishimura would like this to be on the spend-down sheet.

Mr. McCormick moved to accept the Manager's Update, seconded by Mr. Nishimura; by a unanimous vote; motion was carried.

STAFF REPORTS

QUARTERLY

Re: Project Status Update

DISCUSSION

Mr. Nishimura noted that he has received a lot of positive comments on the Vivian Heights project in Kapaa.

Upon query from Mr. Nishimura, Mr. Moises noted that for Waipouli/Hauiki the scope was redefined with some additional pipeline work. There may be a contract amendment forthcoming. A lot of projects have been added based on Operations needs. The proposals for Kahili were opened and are being reviewed. Mr. Moises reported to Mr. Dill that two proposals were received from mainland firms but they both have Hawaii teams.

Mr. Moises gave a brief overview of the projects in the Update.

Mr. Nishimura asked if we were close to the number in the BAB. Mr. Moises indicated that one of the proposals was vague and we need to give them time to provide something finite, as we need to compare apples to apples.

Mr. Nishimura asked if we have CWRM permission to do this but Manager Craddick stated the consultant has to get the permit. Manager Craddick stated the contract may be phased with engineering and permits in the first phase and construction in another phase. Mr. Moises noted that a finite cost is needed. If we cannot get an EIS completed and not be able to construct, we would know in the first phase.

Mr. Kahawai moved to receive the Project Status Update, seconded by Mr. Nishimura; by a unanimous vote; motion was carried.

Re: Affordable Housing Update

Mr. Moises noted that Kapilimao was completed.

Mr. Kahawai moved to receive the Affordable Housing Update; seconded by Mr. Dahilig; by a unanimous vote; motion was carried.

TOPICS FOR NEXT WATER BOARD MEETING

1. Employee of the Year Resolution *(May 2011)*

TOPICS FOR FUTURE WATER BOARD MEETINGS

1. Final Budget Approval *(June 2011)*
2. Resolution #1 – Budget for next fiscal year *(July 2011)*
3. Review of Board Policy #24 – Delegation of Responsibility for Conveyance of Water Facilities and Grants of Easement *(August 2011)*

UPCOMING EVENTS

1. AWWA National Conference, Washington, D.C., June 12-16, 2011

NEXT WATER BOARD MEETING

1. Thursday, May 26, 2011, 10:00 a.m.
2. Tuesday, June 21, 2011, 10:00 a.m.

3. Thursday, July 28, 2011, 10:00 a.m.
4. Thursday, August 25, 2011, 10:00 a.m.
5. Thursday, September 29, 2011, 10:00 a.m.

EXECUTIVE SESSION

Mr. Dahilig moved to go into Executive Session to review the Executive Session Minutes of March 24, 2011, seconded by Mr. McCormick.

Pursuant to H.R.S. §92-7(a), the Commission 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).

By a unanimous vote; motion was carried.

Ms. Esaki confirmed that there is a Judge Valenciano ruling that for Executive Sessions, only the Board and the attorneys may be present. Non-attorneys and non-Board members can only stay if invited by the Board. Ms. Esaki remained for the Executive Session, all other staff was excused.

The meeting then went into Executive Session at about 12:13 p.m.

The Regular Meeting reconvened at about 12:22 p.m.

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 from March 24, 2011

The Minutes were reviewed and approved in Executive Session.

ADJOURNMENT

Mr. McCormick moved to adjourn, seconded by Mr. Kahawai; by a unanimous vote; motion was carried.

There being no further business, the meeting was adjourned at about 12:23 p.m.

Respectfully submitted,

Carol A. Beardmore
Secretary

Approved,

Randall Nishimura
Secretary – Board of Water Supply

cab

SPECIAL BOARD MEETING MINUTES
BOARD OF WATER SUPPLY
Tuesday, April 26, 2011

The Board of Water Supply, County of Kaua'i, met in Special Board meeting at its office in Līhu'e on Tuesday, April 26, 2011. Chairperson Roy Oyama called the meeting to order at about 11:59 a.m. On roll call, the following answered present:

BOARD:	Mr. Roy Oyama, Chairperson
	Mr. Larry Dill
	Mr. Daryl Kaneshiro
	Mr. Randall Nishimura
Absent & Excused:	Mr. Michael Dahilig
	Mr. Leland Kahawai
	Mr. Raymond McCormick
STAFF:	Mr. David Craddick
	Mr. Gregg Fujikawa
	Mr. Dustin Moises
	Ms. Faith Shiramizu
	Ms. Marites Yano

Quorum was achieved

AGENDA:
Mr. Nishimura moved to approve the Agenda, seconded by Mr. Dill; by a unanimous vote; motion was carried.

NEW BUSINESS
Re: Appointment of Chair of the Committee of the Whole
Mr. Oyama appointed Mr. Kaneshiro as the Chair of the Committee of the Whole and, hearing no objections, Mr. Kaneshiro was so appointed.

Re: Proposed Budget 2012 – Refer to Committee of the Whole
Mr. Nishimura moved to refer the Proposed Budget 2012 to the Committee of the Whole, seconded by Mr. Dill; by a unanimous vote; motion was carried.

ADJOURNMENT
There being no further business, the meeting was adjourned at about 12:02 p.m.

Respectfully submitted,

Carol A. Beardmore
Secretary

Approved,

Randall Nishimura
Secretary – Board of Water Supply

cab

Correspondence

March 30, 2011

11 APR -5 A8:55

DEPT. OF WATER
COUNTY OF KAUAI

Mr Roy Oyama
Chairman
Board of Water
County of Kauai

RE: Official Review Request

Dear Mr Oyama,

I am writing to you specifically to request your review of my formal appeal for an additional adjustment in a 2010 water department bill. As you will note from the enclosed documents, I received a denial of said additional adjustment from Mr. Craddick, as he cited Section IX of the Department of Water Rules and Regulations. However, I find it extremely difficult to understand how it is not possible to make an exception to these rules when very powerful mitigating circumstances are present.

Please carefully consider these circumstances. Due to my wife's serious medical condition , we had to temporarily (~7 weeks) relocate to Oahu in order for her to receive proper therapy. During a significant portion of this time period the underground leak slowly progressed/worsened to the point of being a major loss of water. Although we were still on Oahu, we learned of the leak via a neighbor, and then were able to make arrangements to have it repaired (see Sept 20' 10 letter to Mr. Craddick).

Since we have an automatic bill payment service the exceptionally high bimonthly charges were paid in full, with the payment being $940.00 higher than our historical average for the two billing cycles in question (see aforementioned letter). In essence, the leak was undetectable while we were still in residence, and then gradually worsened while we were off island, thereby resulting in markedly higher than normal water meter readings and associated water loss.

How is it not possible to adjust a bill for citizens who pay automatically, and who were compelled to be off island for severe illness and accompanying treatments? If ever there were a fully documented example of a situation whereby an exception should be made secondary to "extreme misfortune", this is such a case. I ask that the Board of Water review my request and grant a further adjustment of a $400.00 credit to my bill. Mahalo for your kind attention and consideration.

Respectfully Yours,

Thomas Hazelton

Thomas Hazelton

Encl: 2

Department of Water
County of Kaua'i

December 14, 2010

Mr. Thomas Hazelton
4326D Punee Rd.
Koloa, HI 96756

Dear Mr. Hazelton,

This is in reply to your letter requesting further adjustments to your water bill due to excessive water usage.

After a thorough review of your letter with the attached Exhibits, I regret to inform you that we cannot further extend the adjustment already given on your water bill.

I understand our Accountant Mr. Mel Yamase of the Department of Water already exercised Section IX – ADJUSTMENT OF BILLS FOR UNDECTECTED LEAKS AND UNFORSEEN DAMAGES to give you the adjustment as provided for under the Rules and Regulations of the Department of Water. This is the maximum we can give you to decrease your water bill. We have to follow these Rules and Regulations as formulated by the Board of Water Supply and adopted by the Department of Water.

Please don't hesitate to call this office if you have any other questions.

Sincerely Yours,

DAVID R. CRADDICK, PE
Manager & Chief Engineer

MPY

4398 Pua Loke St., P.O. Box 1706, Lihue, HI 96766 Phone: 808-245-5400
Engineering and Fiscal Fax: 808-245-5813, Operations Fax: 808-245-5402, Administration Fax: 808-246-8628

Sept. 20, 2010

Mr. D. K. Craddic
Department Mgr. & Chief Engineer
Kauai Water Department
4398 Pua Loke St.
Lihue, HI 96766-1600

RE: Formal Appeal of Water Billings; Acct No. 1017018-1005829

Dear Mr. Craddic,

This letter is my formal request for an additional adjustment of Kauai Water Department billings for the period 4/5/10 thru 8/2/10. The primary reasons for this appeal are the major mitigating circumstances impacting the water leak, and the fact that Mr. Mel Yamase informed me that he had done everything possible to decrease/adjust my bills.

Some background details will undoubtedly prove to be illuminating and instructive. Historically, for the timeframe of 4/09 to 4/10 my bimonthly water bill was, on average, $88.32 (see enclosed Exhibit A). Sometime during the period of 4/5/10 to 8/1/10 a slow but progressively worsening leak developed in our primary water line, with early detection being virtually impossible secondary to its location--under concrete driveway leading to property. As demonstrated by the Water Department billings dated 6/2/10 and 8/2/10 (enclosed Exhibit B), the leak gradually worsened during this roughly four (4) month period (4/5/10 to 7/29/10), resulting in these two billing cycles being approximately $470.00/ bimonthly period higher than the aforementioned one year historical average. Unfortunately for me, since I have an automatic bill payment service via my local bank, the full amount of those two (2) bills--$1117.10—was paid to the Kauai Water Department. Mr Yamase was kind enough to adjust the billing dated 8/2/10 downward by $498.34, but this still leaves an exceptionally high charge, and payment, for the two billing periods in question, of $618.76, or roughly $221.00/bimonthly billing cycle higher than the historical average of $88.32.

If further evidence of exceedingly high water useage is required, please consider the fact that my wife and I (the only occupants of the main house) were on Oahu, for medical reasons (see Exhibit C), for all but 2 weeks during the time frame noted above (6/1 to 8/2). Therefore, this absence greatly reduced water useage, and significantly hindered detection of the progressive nature of the leak, which was finally made known to us via a neighbor while we were on Oahu. Although still residing on Oahu, we finally were able to arrange for repair of said leak, which was accomplished on August 2, and due to the location, required very notable time, effort, and monetary resources ($1258.49; see Exhibit D).

Secondary to the circumstances highlighted above, I formally request that the Kauai Water Department reduce my next bill by an additional $400.00, as I firmly believe these mitigating circumstances dictate.

Mahalo for your kind attention and assistance in this important matter.

Respectfully Yours,

Thomas Hazelton

Thomas Hazelton
742-2022

Encl: 4

Old Business

BOARD REPORT

May 26, 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 Finance Committee of the Kaua'i County Board of Water Supply

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

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

Larry Dill
Chair – Finance Committee

cab
Mgrrp/Board- Finance Committee Report (5-26-11):cab

DEPARTMENT OF WATER
County of Kaua'i

"Water has no Substitute – Conserve It!"

Managers Update to the Finance Committee

May 6, 2011

It is my understanding based on the discussions I had with R.W. Beck that the following questions need to be addressed so that R.W. Beck can run the rate scenarios;

1. Level of Cash Reserves:
   - 1.1 Should a separate Emergency Reserve Fund be set aside equal to 90 or 120 days of O & M?
   - 1.2 What level of cash reserves should the Revenue Fund keep?

   It would be my recommendation as Manager if the committee wants to increase cash reserves to deal with low FRC collections to increase the emergency reserves and approve a policy as to how the reserves are expended.

2. FRC Revenues:
   - 2.1 What level of Revenues should FRC be increased by?

Respectfully submitted,

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

DRC/MY/cab

Mgrp-Managers Update for Finance Committee Meeting (5-6-11):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' Update to Finance Committee

May 20, 2011

Re: Manager's Report No. 11-49, RW Beck Report on Financial Planning Analysis and Water Rate Study

Presented are scenarios from RW Beck called #6 through#11 with rates according to the condition.

#6 is 30% FRC payback on BABs with leveled rates no target. Total rate increase 33.2%
#7 is 40% FRC payback on BABs with leveled rates no target. Total rate increase 31.2%
#8 is 30% FRC payback on BABs without leveled rates, meets coverage target. Total rate increase 35.5%
#9 is 30% FRC payback on BABs with leveled rates meeting coverage target, deferring CIP. Total rate increase 32.4%
#10 is current FRC payback no target. Total rate increase 44.8%
#11 no FRC payback Level Rates No Target. Total rate increase 52%

Of these scenarios we recommend #9 using the conservative FRC payback with deferral of some system replacement CRP. This also meets debt coverage goals.

Thank you for your attention to this matter.

Respectfully submitted

David Craddick PE
Manager and Chief Engineer

DRC
May 2011 Bd. Mtg./cb

---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

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

Finance Committee Meeting

April 8, 2011
10:30 a.m.

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

Board Members Present: Roy Oyama, Daryl Kaneshiro

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

Chair Dill called the meeting to order at about 10:35 a.m.

Agenda
Mr. Nishimura moved to accept the Agenda as posted, seconded by Mr. McCormick; by a unanimous vote; motion was carried.

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

The R.W. Beck Report was submitted for 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 M 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 M 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.

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DISCUSSION

Chair Dill reported that the Committee would review the conclusions reached at the March 22, 2011 meeting.

Debt Service Coverage

Discussion ensued on Table 9. The various submittals of revised Table 9 were available and numbered 1 through 5, and the pages numbered sequentially. #5 was the most recent submittal from R.W. Beck.

Manager Craddick reviewed the various Table 9s, 1 through 5; #3 contained no discernible leak rebate. Although Table 9 #4 was labeled 50% FRC payback, and Table 9 #5was labeled 40% FRC payback, Manager Craddick updated this where both are actually 40% FRC payback.

What comes out of the FRC is system expansion projects and we have some SRF projects that were expansion related and it is that debt service that is covered in #3; in #4 and #5 we are now covering not only that debt service but also recovering 40% of the BAB debt service. Mr. Nishimura requested that this be put in a report format somehow, as on one it goes up and on another it goes down. It might be an idea to split the FRC and the SRF.

Manager Craddick noted that #4 and #5 are changes by the auditor. Mr. Nishimura asked if we are not using SRF for our FRC, and Manager Craddick confirmed that no, not going into the future, though past projects we have to cover.

The Revert O&M adjustment, Line 47 on page 24 and 46 on all tables is unfunded positions and transfer out of Operations to capital. Historically we have come in lower. Between #3, #4 and #5 we have added the Reserve on Line 63. Manager Craddick stated this would have a material effect on the rates. It is not wise to bring us down to $0 carry-over savings and $0 emergency reserves; the reserve really is working capital. The reserve of $4M is 90 days operating expenses. Once we spend all the bond funds, then the rates are directly affected by the number of projects we do. They have made a split between the SRF and cash funded projects. Manager Craddick did not originally want any SRF because of the .37 debt to asset ratio; however, they will be putting the ratio in there, the number is creeping up, and utilities across the country are facing this with aging infrastructure and the credit agencies are becoming aware of this and it could go up to .4 or higher. Manager Craddick will be getting a write-up on what it is going up to nationwide.

There is the assumption that we are collecting FRC to reimburse the General Fund for what is expansion related and if we do not collect that money in the FRC we still have to pay the debt service, shown in Line 52. Manager Craddick confirmed to Mr. Nishimura that we are looking at somewhere between #3 and #5. Manager Craddick stated this does not cover the community improvement district, but examples were included, varying from $17 to $23 per month. People have been paying some kind of debt service over the life of them having water service. We would not be able to charge them this full amount. The bottom line is that we would have more money coming into the water fund in order to pay for these line replacements for subdivisions that were built with very small lines, such as 2" lines. We are replacing with up to 6" lines and sometimes 12" lines.

Manager Craddick skipped to Capital Improvement and noted the second scenario gives a total project cost of $3.2 M, 27.9% of that is FRC related so we minus that off. It is replacement of existing and bringing it up to current standard. They should not be burdened with the full requirement as they have

been paying some kind of debt service. We would need a high powered analysis, but this is the worst case scenario. Even at 50% of this you would have additional money coming in. Mr. Dill wondered if fire flow was driving this. Mr. Nishimura asked if, when the water boards were created by HRS, if all lines were required to follow fire flow standards. Manager Craddick stated there is no requirement for us to provide fire flow, either in the County Charter or state laws. Mr. Nishimura asked if the lines were up to our fire flow Water Standards adopted in 1975, and Manager Craddick did not believe so.

Mr. Nishimura had two points:

1. If we were not up to standards then, who is to say what subdivision contributed to the deficiency as it was already sub-standard. The argument about doing a community improvement district may be something to look at if you have districts that already meet all the standards we have and moving forward if we do that you would have to create it. You would be possibly unfairly punishing the rate holders because of what we had in place prior to that.

2. Do we, the Water Board, have the authority to create these community improvement districts or does it have to be authorized by the County Council and, if so, we should not be even looking at this.

Manager Craddick noted that it could involve the Council but nothing would prevent the Board doing this if they wanted to do it. However, Manager Craddick leaned towards Mr. Nishimura's view. It is difficult to isolate these people but the fire standards have been in place since World War II. Very little of this got built that met the fire standards for the insurance companies at the time whether we had standards or not. You would have to look at the history of how these got put in with those size lines.

Mr. Dill asked if they have fire hydrants or 2-1/2" standpipes, and Manager Craddick stated they are probably standpipes and that we would be upgrading to hydrants. Mr. Dill wondered if their insurance reflects insufficient fire protection, so an offset would be if we improve their fire protection, they may have lower insurance. Manager Craddick noted the ratings on an area on Maui were low because there were no fire stations within 5 minutes, and when they built a fire station the rating went from 1 to 6. Beverly Hills has a fire station every 3 minutes, and their rating is 9. You can ask for an insurance re-rating so it is not unheard of, as long as the fire station is near enough.

Mr. Dill asked how Manager Craddick determined the 75 years number. Manager Craddick used 30 years the first time as that was the life of the loan but that was not a good number, but now we are being conservative off 100 years. Mr. Nishimura asked what number we are currently using to depreciate the lines, and to check as it should be close to our depreciated life and if it is only 50 years, we would be behind. Mr. Kaneshiro asked if this was according to the General Plan and any time you increase the capacity you have a potential of more customers on the line. Manager Craddick noted most of these areas are already pretty well built out. Mr. Nishimura asked if there were any numbers for agricultural areas, and Mr. Moises noted most of them are above the high school but Mr. Nishimura noted that Laipo Road is not fully developed and that is the main one.

Mr. Dill did not feel we could incorporate this into our study and he asked that we continue to investigate these options with the County. Manager Craddick stated that you would have to get 25% of the people to agree. Mr. Dill asked how you decide who gets the distribution. Mr. Nishimura was most concerned about Bullet point 3 under Additional Points. He understands the desire to move much of the debt service to the FRC, but if we cannot collect the FRC it is going to come out of our

ratepayers somehow. Manager Craddick stated we could do that with a Borrow Resolution and borrow from the Water Utility Fund. Mr. Nishimura stated we are artificially lowering what the rate may have to be. Mr. Dill asked how we do the projections on the FRC and has the same concern with Line 69, the ending balance, we are effectively zeroing out. Mr. Nishimura noted that ideally you would be close to zero meaning all of the money has been properly spent and the worst thing is excessive balance, which could act like a rebate, but if we get into deficit going from $35- $57, which is 65% for the 5 year period and then ran short of money in year 4 and then try to collect more and wanted to consider that aspect. It is hard enough to go from #3, $35-$61 which is almost double but would rather do it for years 4 or 5 and have enough balance and not go forward with the rate increase next year, than try and get more in year 4. It is all hinged on how much FRC is being collected. It is not that we will see applications for 1000 meters a year. Manager Craddick says it is 100 meters, not 1,000. The AWWA reports that most utilities are up to10-12% per year, four times inflation per average per year for the next 25 years. Mr. Dill inquired if we run the scenario of 2016 and take the $3M and divide it by 22,000, equaling 136 meters, what if we only do half of those. Manager Craddick is assuming about 1% increase of growth per year, and Mr. Dill thought we should take a more conservative approach. Manager Craddick stated we would just wipe out what is debt funded, and make it cash funded. The more we do not borrow and the more we cash fund the more the rates will go up. Mr. Dill wanted to see what the impact would be on rates. Mr. Nishimura noted that the FRC rates will be directly impacted by the 40% or the debt service on the FRC. When we do our FRC, assuming that these debt service numbers are real, it still comes into the FRC charges but for our rates perhaps we should not rely on these monies as it seems like a double whammy.

Manager Craddick drew attention to the highlighted section of his spreadsheet, where the $24,026 M is 40% of the BAB money. There are more projects with zero funding and they are big FRC projects. We do not think we will have enough BAB money left to do this. The numbers in the "encumbered to date" highlighted in pink were not included. The two big projects, the Horizontal Well, and the new building, are not in there.

Manager Craddick felt that 40% is a number that is probably low but we will probably run out of BAB money altogether before we get 40% encumbered that is FRC related. He noted that more money has been invested into Kokolau so we would be concentrating more on that than Akulikuli Tunnel.

Mr. Kahawai noted that all these versions have different percentage increases over 5 years and Manager Craddick concurred stating that the biggest jump is in the third year. Manager Craddick stated that in 2013, we get the full principal and interest on the BAB, right now it is interest only. He noted it all matches our budget now.

Mr. Nishimura asked if the rates on the bottom are based on 10,000 gallons per month and Manager Craddick concurred, but stated it should not state average residential but state 5/8" meters. CPRs are not prevented from getting meters, most have paid the FRC already and just do not want to put in the line for the meter and we have a lot of these.

Mr. Kahawai asked if these are every other month and Manager Craddick stated that it says monthly but we will check on this. Ms. Yano noted we will be switching over to monthly billing in October. Manager Craddick noted it was reflected in the cost and it is in the budget, under "postage and contractual services". Manager Craddick asked if the board wished to see one with the SRF loans zeroed-out and moved into cash and Mr. Dill would like to see that. Mr. Nishimura was concerned

about funding the FRC out of cash, not the other way round; you are taking the FRC debt service out of the rates but what he is concerned about is collecting all the FRC and are still short of paying debt service. Manager Craddick stated that if we take the borrowed SRF and put it into cash then the Board could add a Borrow Resolution from the Water Utility Fund. The 100 meters a year does not seem an unrealistic number of new meters, but the only issue is how many of these new meters are ones that have already paid the FRC. We would have to ask an attorney, but if all the people who have paid the FRC and have not put meter in, could we say that if you do not put in your meter in the first year you have to pay 10% of the new FRC charge difference, and the second year – 30%, third year – 50% and graduate that up.

Mr. Kahawai asked if, for the FRC fund for 2016, we do not get S3M coming in, will it get paid out by the Water Utility Fund, or out of SRF. Manager Craddick stated in the negative as the SRF is borrowed money. If you stick with the user pays principle then we would borrow from ourselves with a Borrowing Resolution. Manager Craddick felt it would turn around where the revenue is coming in and FRC fund pays it back to the General Fund with interest.

Manager Craddick confirmed to Mr. Dill that the water utility is funded from the rates, it is used in capital projects for replacement and refurbishment. Mr. Nishimura stated he is taking SRF capital and making it cash funded. Manager Craddick explained the funding conditions by drawing a flowchart on the marker board. Upon query from Mr. Kahawai, Manager Craddick stated that the department may not have done this before, but he has done this previously in other utilities. The ending balance, Line 69, was discussed. Mr. Dill noted the $4M reserve fund and Mr. Nishimura did not want this available for Operations as this is for capital, but Manager Craddick stressed it is not for capital, it is for emergencies, for instance not being able to bill for several months. Manager Craddick stated that at end of the budget year there is $1.29M FRC fund balance, $3.57M beginning balance, based on 100 meters. Mr. Kaneshiro asked if the 100 meters is based on historical numbers, or is it capital improvements and then there will be more hook ups, as there are some CIP projects in there.

Mr. Nishimura asked if they were in agreement that we are not going to touch the cost of service for fire and agriculture and Manager Craddick stated that is a board decision. Manager Craddick noted that in the R.W. Beck study, the fire lines will be corrected but it is minor income, not even $100,000. Mr. Nishimura asked if the agriculture came up to the first tier of all categories, and Manager Craddick stated it is about 4% of consumption which actually comes to 1.6. After recalculating, Manager Craddick noted it is only $300,000 in revenue if we brought agricultural rates up to par with the first block. Mr. Nishimura did not feel this was worth it at this time.

Mr. Dill wished to see, if the FRC projections turn out to not be what we hoped they would be, what would be the impact on the rates and what we have to borrow from the Water Utility Fund. Manager Craddick noted that borrowing from the Fund, you just do less replacement projects and has no impact on the rates, and referenced cash funded, Line 59, cash financed capital. Line 58, you would move that down to cash and have those monies available also. Mr. Nishimura asked if we have the capacity to do $6M a year in line replacements. Manager Craddick noted we are doing $20M now but that is because of BAB. It is a function of having the money, not the ability of the staff to do it. Mr. Nishimura offered another option when they look at the BAB projects, perhaps the greater proportion should go to non-FRC projects and go for capital replacement, if we are taking from that fund. Manager Craddick stated we could bring it down to 30% or less. Mr. Moises suggested running this at 30% to be more realistic and conservative on the FRC. Rates would be higher but the FRC collection would be lower, and Mr.

Moises gave examples of some projects falling into the 30% or less range. In essence, the more pipeline you do, the lower the FRC will be.

Mr. Nishimura expressed concern that from 2013 on you want to spend $6M a year which means you have to get those projects designed first. Mr. Moises noted we would have more designs ready than money to spend, we may have to shelve projects because we do not have the money.

Mr. Kahawai wondered if Manager Craddick could generate one at 30%. Manager Craddick confirmed he could and would do another moving the SRF funded to cash. Manager Craddick was requested to do three separate reports, one at 30%, one SRF to cash and a third with both scenarios.

Manager Craddick will complete these scenarios, and then this can continue to be addressed.

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

This report was not discussed.

Adjournment

Mr. Nishimura moved to adjourn the meeting, seconded by Mr. Kahawai; the Finance Committee meeting was duly adjourned at 12 noon.

Respectfully submitted,

Carol A. Beardmore
Secretary

Approved,

Randall Nishimura
Secretary – Board of Water Supply

cab

Beardmore, Carol

From: Craddick, David
Sent: Friday, April 08, 2011 9:51 AM
To: 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. Similar 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

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DEPARTMENT OF WATER
County of Kaua'i

"Water has no Substitute – Conserve It!"

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.

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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.

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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.

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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

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

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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

February 10, 2011

11 FEB 10 P12:25

DEPT. OF WATER
COUNTY OF KAUAI

R·W·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.

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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 Miyahira Hajnosz, P. E.
Project Manager

Enclosure
c: A. Baker, R. W. Beck

December 14, 2010

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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.

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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 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

Model Updated by R. W. Beck, Inc. in 2010
Kauai County DOW Run Date: December 14, 2010

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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%).

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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)	Budget	Projected (3)				2011-2016 Annual
1	Customer Accounts	2008	2009	2010	Growth	2011	2012	2013	2014	2015	2016	Growth
2												
3	General Use											
4	5/8"	18,872	18,676	18,553	-0.9%	18,757	18,963	19,172	19,383	19,596	19,814	1.1%
5	3/4"	86	85	83	-2.1%	83	84	85	86	87	90	1.6%
6	1"	201	198	187	-3.7%	189	191	193	195	197	200	1.1%
7	1 1/2"	200	199	197	-0.8%	199	201	203	205	207	210	1.1%
8	2"	170	174	160	-3.1%	161	163	165	167	169	171	1.2%
9	3"	47	47	51	3.7%	51	52	53	54	55	56	1.9%
10	4"	23	22	15	-19.2%	15	15	15	15	15	15	0.0%
11	6"	20	20	10	-29.3%	10	10	10	10	10	10	0.0%
12	8"	15	15	3	-55.3%	3	3	3	3	3	3	0.0%
13	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%
14												
15												
16	Agricultural											
17	5/8"	377	375	394	2.2%	398	402	406	410	416	422	1.2%
18	3/4"	2	5	5	58.1%	5	5	5	5	5	5	0.0%
19	1"	13	11	12	-3.9%	12	12	12	12	12	12	0.0%
20	1 1/2"	3	3	3	0.0%	3	3	3	3	3	3	0.0%
21	2"	2	1	1	-29.3%	1	1	1	1	1	1	0.0%
22	Total Agricultural	397	395	415	2.2%	419	423	427	431	437	443	1.1%
23												
24												
25	Private Fire Protection											
26	2"	35	57	57	27.6%	58	59	60	61	62	63	1.7%
27	3"	2	5	5	58.1%	5	5	5	5	5	5	0.0%
28	4"	12	22	22	35.4%	22	22	22	22	22	22	0.0%
29	6"	18	44	44	56.3%	44	44	44	44	44	44	0.0%
30	8"	27	49	50	36.1%	51	52	53	54	55	56	1.9%
31	Total Private Fire Protection	94	177	178	37.6%	180	182	184	186	188	190	1.1%
32												
33												
34	Total System											
35	5/8"	19,249	19,051	19,947	-0.8%	19,155	19,365	19,578	19,793	20,012	20,236	1.1%
36	3/4"	88	90	88	-0.3%	88	89	90	91	92	95	1.5%
37	1"	214	209	199	-3.7%	201	203	205	207	209	212	1.1%
38	1 1/2"	203	202	200	-0.7%	202	204	206	208	210	213	1.1%
39	2"	207	232	218	2.5%	220	223	226	229	232	235	1.3%
40	3"	49	52	56	6.4%	56	57	58	59	60	61	1.7%
41	4"	35	44	37	2.8%	37	37	37	37	37	37	0.0%
42	6"	38	64	54	19.2%	54	54	54	54	54	54	0.0%
43	8"	42	64	53	12.3%	54	55	56	57	58	59	1.8%
44	Total System	20,125	20,008	19,850	-0.7%	20,067	20,287	20,510	20,735	20,964	21,202	1.1%
45												

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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	106,300	107,500	108,700	109,900	111,100	1.12%
	1 1/2"	305,337	318,055	319,126	2.2%	322,600	326,100	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	-8.3%	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	2,459,977	-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	-8.6%	115,500	116,800	118,100	119,400	120,700	122,000	1.10%
	1 1/2"	309,641	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	4,597,358	4,659,453	-4.3%	4,510,400	4,560,000	4,610,000	4,660,800	4,712,100	4,763,900	1.10%

Notes:
(1) Per 'Rate Study Tables with Data ORC 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).

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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
3	5/8"	$2,161,400	$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
4	3/4"	13,400	14,300	13,900	1.8%	13,944	14,112	14,280	14,448	14,616	15,120
5	1"	45,800	47,500	44,800	-1.1%	45,360	45,840	46,320	46,800	47,280	48,000
6	1 1/2"	90,000	95,500	94,600	2.5%	95,520	96,480	97,440	98,400	99,360	100,800
7	2"	117,300	125,300	114,800	-1.1%	115,920	117,360	118,800	120,240	121,680	123,120
8	3"	62,000	67,700	72,700	8.3%	73,440	74,880	76,320	77,760	79,200	80,640
9	4"	49,000	50,200	34,200	-16.5%	34,200	34,200	34,200	34,200	34,200	34,200
10	6"	82,200	86,400	43,200	-27.5%	43,200	43,200	43,200	43,200	43,200	43,200
11	8"	99,000	104,400	20,900	-54.1%	20,880	20,880	20,880	20,880	20,880	20,880
12	Total General Use	$2,710,100	$2,832,400	$2,665,400	-0.8%	$2,693,304	$2,722,512	$2,752,080	$2,781,888	$2,811,936	$2,843,640
13											
14	Agricultural										
15	5/8"	$61,100	$67,500	$70,900	7.7%	$71,600	$72,400	$73,100	$73,800	$74,900	$76,000
16	3/4"	400	1,200	1,200	73.2%	1,200	1,200	1,200	1,200	1,200	1,200
17	1"	4,200	4,000	4,300	1.2%	4,300	4,300	4,300	4,300	4,300	4,300
18	1 1/2"	1,800	2,000	2,000	5.4%	2,000	2,000	2,000	2,000	2,000	2,000
19	2"	1,900	1,100	1,100	-23.9%	1,100	1,100	1,100	1,100	1,100	1,100
20	Total Agricultural	$69,400	$75,800	$79,500	7.0%	$80,200	$81,000	$81,700	$82,400	$83,500	$84,600
21											
22	Private Fire Protection										
23	2"	$3,800	$6,800	$7,500	40.9%	$7,700	$7,800	$7,900	$8,100	$8,200	$8,300
24	3"	400	1,100	1,200	73.2%	1,200	1,200	1,200	1,200	1,200	1,200
25	4"	3,700	8,100	9,200	57.7%	9,200	9,200	9,200	9,200	9,200	9,200
26	6"	13,000	35,600	20,800	74.5%	39,600	39,600	39,600	39,600	39,600	39,600
27	8"	35,600	72,000	87,000	56.8%	82,600	84,200	85,900	87,500	89,100	90,700
28	Total Fire Protection	$56,500	$123,600	$138,500	56.6%	$140,300	$142,000	$143,800	$145,600	$147,300	$149,000
29											
30	Total System										
31	5/8"	$2,212,600	$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
32	3/4"	13,800	15,500	15,100	4.6%	15,144	15,312	15,480	15,648	15,816	16,320
33	1"	50,000	51,500	49,100	-0.9%	49,660	50,140	50,620	51,100	51,580	52,300
34	1 1/2"	91,800	97,500	96,600	2.6%	97,520	98,480	99,440	100,400	101,360	102,800
35	2"	123,000	133,200	123,400	0.2%	124,720	126,260	127,800	129,440	130,980	132,520
36	3"	62,400	68,500	73,900	8.8%	74,640	76,080	77,520	78,960	80,400	81,840
37	4"	52,700	58,300	43,400	-9.3%	43,400	43,400	43,400	43,400	43,400	43,400
38	6"	95,200	122,000	82,800	-6.7%	82,800	82,800	82,800	82,800	82,800	82,800
39	8"	134,600	176,400	101,900	-13.0%	103,480	105,080	106,780	108,380	109,980	111,580
40	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
41											
42	Adjusted Revenues (4)					$3,046,100	$3,079,200	$3,112,800	$3,146,500	$3,180,900	$3,217,000
43											
44	Actual (5)	$2,769,917	$3,009,416	$3,087,800		$3,046,100					
45	% Difference	-2.33%	-0.74%	7.09%		4.54%					
46	Actual HBoW	$2,483,438	$2,915,100	$2,939,842							
47											

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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	189,600	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%	$358,900	$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%	$1,389,600	$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	$1,664,600	$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	$15,750,000		15,598,300					
76	% Difference	3.03%	[illegible]	0.16%							
77	Actual BoWS Historical (7)	$13,005,582	$13,757,500	$15,038,200							
78	Actual HBoW	$9,379,098	$14,496,761	$15,718,076							
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	4,800	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	236,900	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

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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)				
	Usage Charge Revenues	**2008**	**2009**	**2010**	**Growth**	**2011**	**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%	$20,230,189	$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					$19,848,100	$20,062,500	$20,281,000	$20,502,200	$20,725,900	$20,954,100
112											
113			Actual (5)		2008-2010 Annual	Budget (6)		Projected (8)			
114	**Other Revenues**	**2008**	**2009**	**2010**	**Growth**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
115	Miscellaneous Receipts	$116,619	$175,333	$149,855	13.4%	$112,000	$112,000	$112,000	$112,000	$112,000	$112,000
116	Interest Earned (9)	817,557	562,949	275,535	-41.9%	260,000	260,000	260,000	260,000	260,000	260,000
117	Fire Hydrant Service Charge	736,888	817,839	925,133	12.0%	923,600	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	0.0%	$871,800	$ 860,000	$ 850,000	$ 840,000	$ 830,000	$ 820,000
120	Other	107,354	608,262	[illegible]40	-49.1%	2,500,000	0	0	0	0	0
121	Other - SRF Loan	488,549	59,081	14,713,024	449.3%	10,315,542	0	0	0	0	0
122	Total	$3,274,275	$3,548,830	$17,561,437	131.6%	$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	$3,087,800	5.6%	$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	14,272,311	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	$16,770,435	$17,360,111	4.2%	$19,360,701	$20,062,500	$20,281,000	$20,502,200	$20,725,900	$20,954,100
128											
129	Other Revenue	3,274,275	3,548,830	17,561,437	131.6%	16,243,942	3,664,257	3,765,151	3,866,175	3,867,330	3,868,619
130	Total Revenue	$19,268,088	$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 times 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 2 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

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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	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	$5.00	$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

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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

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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%	55.76%	21.89%	11.31%	5.04%
8"	14.41%	28.83%	48.33%	8.42%	0.00%

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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
1	**Source of Supply**											
2	Salaries - Wtr Resource & Planning	$319,778	$335,438	$437,920	17.0%	$452,300	$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	335,602	7.37%
4	Water Purchase (5)	2,061,278	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	$2,256,754	-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	$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	$936,360	$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%	464,950	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%	$1,373,950	$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%	$814,930	$892,232	$929,275	$957,146	$985,847	$1,015,441	7.27%
19	Chemicals	32,895	33,667	34,600	2.6%	35,700	36,800	37,900	39,000	40,200	41,400	3.01%
20	Microlab Material & Supply	16,459	17,666	12,493	-12.9%	19,255	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%	$2,293,835	$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	$1,207,239	$1,125,000	-5.0%	$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	328,465	$ 365,500	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	$1,535,703	$1,490,500	-1.6%	$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	935,819	1,311,523	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	$2,496,677	$2,471,522	$3,802,023	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	$353,600	$390,024	$474,137	14.1%	$478,790	$491,100	$505,800	$521,000	$536,600	$552,700	3.00%
35	Benefits (4)	154,681	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	9,018	8,000	116.8%	8,300	8,400	8,500	8,600	8,700	8,800	1.18%
37	Subtotal - Customer Services	$520,281	$610,602	$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												

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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%	$656,196	$833,605	$864,410	$896,364	$929,530	$963,907	8.00%
46	Utilities	203,680	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	5,669	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%	32,500	33,000	33,500	34,000	34,500	35,000	1.49%
52	Collectors Commission	-	-	-		20,000	20,000	20,000	20,000	20,000	20,001	0.00%
53	Miscellaneous	23,410	14,658	12,713	-26.3%	16,000	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	81,400	83,800	86,300	88,900	91,600	3.00%
55	In-Service Training	47,289	56,832	32,466	-17.1%	53,100	53,600	54,100	54,600	55,100	55,700	0.96%
56	Supplies - Office & Eng	25,194	32,934	31,474	9.6%	33,000	33,300	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%	346,000	129,071	130,400	131,700	133,000	134,300	-17.27%
59	Computer Supplies	48,798	60,055	25,059	-28.3%	84,500	85,800	87,100	88,400	89,700	91,000	1.49%
60	Subtotal - Total Admin & Eng	$2,782,432	$2,475,297	$2,513,490	-5.0%	$3,122,800	$3,647,773	$3,765,710	$3,887,764	$4,014,330	$4,145,408	0.11%
61												
62	**County Service Charge**	$738,898	$817,639	$925,532	12.1%	$833,856	$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	11.6%	126,000	128,500	131,100	133,700	136,400	139,100	2.00%
67	Subtotal - Vehicles	$184,373	$207,307	$183,874	-0.1%	$233,600	$237,200	$240,900	$244,600	$248,400	$252,200	1.54%
68												
69	**Other Operating Expenses**											
70	Utilities	$58,860	$56,[illegible]	$55,[illegible]	-3.2%	$56,100	$57,200	$58,300	$59,500	$60,700	$61,900	1.99%
71	Electrical Parts	25,011	15,[illegible]	[illegible]	-30.5%	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	14,748	-32.3%	408,000	412,100	416,200	420,400	424,600	428,800	1.00%
75	Steel Tank Maintenance Fund		[illegible]	0	n/a	-	-	-	-	-	-	n/a
76	Materials & Supplies	199,[illegible]82	214,0[illegible]	179,[illegible]92	-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	$359,2[illegible]	$415,079	$417,380	7.8%	$743,100	$751,200	$759,300	$767,600	$775,900	$784,300	1.09%
80												
	Total Unaudited	$14,252,745	[illegible]52[illegible]	$14,884,817								
81	**Budgeted Operating Expenses**	14,202,745	13,552,886	14,684,817	2.4%	18,475,119	18,343,973	19,154,642	19,955,355	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												

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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
89	**Total Operating Expenditures**	$14,100,598	$13,374,990	$13,447,131	-2.3%	$16,475,119	$16,343,873	$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[illegible]	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 and 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.

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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
1	**Planned Capital Encumbrances ($000s)**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**Total**
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	139,946	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 Kukuiolono 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

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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
	Planned Capital Encumbrances ($000s)	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**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								**6-Year**
52	**Bond Fund**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**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								**6-Year**
62	**Facilities Reserve Fund**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**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	

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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

								6-Year
68	**Sources of Funds**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**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								6-Year
77	**Allocation of Sources**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**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%

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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	70,541	69,136	67,817	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 - Wailua 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	98,693	96,089	94,475	92,352	90,218
9	SRF Loan - *Ornellas 0.2 VG Tank Refurbish*	65,138	63,803	62,452	61,112	59,753	58,388
10	SRF Loan - 16" Waterline along Kuhio Highway	185,578	181,669	177,754	173,832	169,906	165,971
11	SRF Loan - 16" Waterline along Poipu Road	413,900	405,376	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	145,648	143,081	140,304	137,516	134,714
14	SRF Loan - Kaumualiʻi Highway 12-inch Main Replaceme	319,593	313,592	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	672,619	678,359	676,188	113,094	313,688
17	*2005A Gen Obligation Bonds*	217,450	214,950	212,309	209,628	265,631	265,213
18	2001A Gen Obligation Bonds- Refunded Portion	149,988	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)	201,554	392,044	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							
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'. #6 tab.
(3) No new SRF Loans are projected.

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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	$ 16,707,779	$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	$18,283,300	$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	$21,362,500	$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	275,635	260,000	260,000	260,000	260,000	260,000	260,000
12	Fire Hydrant Svc. Charge	736,888	817,839	925,133	933,500	932,257	943,151	954,175	965,330	976,619
13	Other (2)	107,354	508,262	27,140	1,500,000	0	0	0	0	0
14	Other - SRF Loan (3)	488,549	59,081	14,713,074	10,215,843	0	0	0	0	0
15	Cost of Power Adjustment	1,007,308	1,325,366	1,470,700	1,361,200	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	$17,561,437	$15,792,143	$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	$35,152,843	$24,166,757	$23,196,151	$23,528,375	$23,763,230	$24,002,719
19										
20	Additional Revenue Required									
21		% of Water	Months							
22	Year	Sales Revenue	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	$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	$27,517,157	$26,961,751	$30,325,075	$30,689,230	$31,480,319

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Notes:
(1) See Table 3 for details.
(2) Includes grant funds for Waimea project in FY 2011.
(3) Includes SRF Loan proceeds.

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	2,527,732	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	3,743,430	3,300,658	3,465,749	3,639,028	3,820,987
37	Customer Services	520,281	610,600	762,749	733,295	812,724	836,899	861,894	887,543	914,012
38	Administrative & Engineering	2,782,432	2,475,297	2,513,490	4,122,800	3,617,773	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	736,886	817,839	925,532	833,856	842,200	850,600	859,100	867,700	876,400
41	Vehicles	184,373	207,307	183,874	233,600	237,200	240,900	244,600	248,400	252,200
42	Other Operating Expenses	359,215	415,079	417,380	743,100	751,200	759,300	767,600	775,900	784,300
43	Adjustments (5)	(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)
44	Total Operating Expenditures	$14,100,598	$13,374,990	$13,447,131	$16,675,119	$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	$18,677,724	$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	$6,761,343	$8,362,182	$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)	$412,687	$	$	$800,700	$965,950	$411,800	$411,800	$411,800	$411,800
53	Property & Supply (8)	677,436	463,947	1,195,541	903,314	1,003,970	778,800	778,800	778,800	778,800
54	SRF Financed Capital (8)	2,185,574	781,289	5,410,800	5,665,094	0	0	0	0	0
55	Cash Financed Capital (8)	3,439,413	4,200,176	12,041,995	0	0	6,999,000	4,236,000	4,338,000	6,338,000
56	Total Capital Costs Charged to Ops	$6,715,112	$5,893,861	$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	$22,760,470	$25,523,567	$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)	($6,708,302)	($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	$9,011,095	$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	$4,116,800	$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

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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.

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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					2011	2012	2013	2014	2015	2016
24	Year / % of Water Sales Revenue / Months Effective									
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	$0	$0	$0	$1,685,300	$3,550,300	$3,589,000	$3,628,200	$3,668,100
31										
32	Total Revenue	$19,268,088	$19,319,265	$34,921,548	$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
33	**REVENUE REQUIREMENTS**									
34	Operating Expenditures (5)									
35	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
36	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
37	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
38	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
39	Customer Services	520,281	610,600	762,749	733,295	812,724	836,899	861,894	887,543	914,012
40	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
41	Manager's Office	0	0	0	0	0	0	0	0	0
42	County Service Charge	736,888	817,839	925,133	833,856	842,200	850,600	859,100	867,700	876,400
43	Vehicles	184,373	207,307	183,874	233,600	237,200	240,900	244,600	248,400	252,200
44	Other Operating Expenses	359,215	415,079	417,380	743,100	751,200	759,300	767,600	775,900	784,300
45	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)
46	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
47										
48	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
49	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
50										
51	Debt Service Requirement									
49	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
50	Proposed Debt Service (8)	0	0	0	0	0	508,200	688,400	872,400	1,129,900
51	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
52	FRC Debt Service Payback (9)				($2,304,241)	($2,573,291)	($2,552,449)	($3,459,808)	($3,496,302)	($3,478,573)
53	Total Debt Service Requirement				$3,646,044	$4,018,135	$4,495,035	$5,568,178	$5,473,057	$5,520,310
54										
55	Capital Costs Charged to Operations									
56	Equipment (10)	$412,887	$451,949	$215,969	$800,700	$965,950	$360,300	$360,300	$360,300	$360,300
57	Property & Supply (10)	677,438	463,447	423,994	780,000	1,003,970	521,600	521,600	521,600	521,600
58	SRF Financed Capital (10)	2,185,874	4,781,289	5,410,800	3,980,000	0	6,907,200	2,449,000	2,500,000	3,500,000
59	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
60	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
61										
62	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
63										
64	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)
65										
66	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
67										
68	Reserve Target (11)	N/A	N/A	N/A	$3,361,700	$4,118,800	$4,086,000	$4,291,200	$4,463,800	$4,643,500
69										
70	Debt Service Coverage w/o FRC Payback	2.41	2.62	2.71	1.06	1.44	1.54	1.16	1.12	1.06
71	Debt Service Coverage w/ FRC Payback (12)				1.73	2.36	2.41	1.89	1.84	1.73
72										
73	Minimum Debt Service Coverage (13)	N/A	N/A	N/A	1.50	1.50	1.50	1.50	1.50	1.50
74										
75	Average Residential Bill ($/month) (14)	$30.00	$30.00	$30.00	$30.00	$32.52	$35.25	$35.25	$35.25	$35.25
76	Increase			$0.00	$0.00	$2.52	$2.73	$0.00	$0.00	$0.00
77						8.4%	8.4%	0.0%	0.0%	0.0%
78										
79	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 2006. Projected staff levels per DOW Staff.

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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	[illegible]	3,079,607	3,113,483	3,147,731	3,182,356
8	Total Operating Revenues	$15,993,813	$15,770,435	$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	[illegible]	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	[illegible]	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					2011	2012	2013	2014	2015	2016
25	Year / % of Water Sales Revenue / Months Effective									
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	$0	$0	$0	$161,000	$2,994,400	$5,871,300	$6,369,600	$7,961,200
32										
33	Total Revenue	$19,268,088	$19,319,265	$34,921,548	$25,968,664	$23,000,339	$29,347,731	$31,023,423	$31,796,813	$34,614,979

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	[illegible]	[illegible]	(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	[illegible]	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
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, 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		% of Water	Months			2011	2012	2013	2014	2015	2016
25	Year	Sales Revenue	Effective								
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.

Table
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	$11,214,002	$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.

Table
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	$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			2011	2012	2013	2014	2015	2016
25	Year Sales Revenue	Effective								
26	FY 2012 1.7%	6				$162,800	$329,300	$332,900	$336,600	$340,300
27	FY 2013 8.9%	12					1,753,100	1,772,400	1,791,900	1,811,600
28	FY 2014 13.5%	12						2,927,800	2,960,000	2,992,600
29	FY 2015 1.6%	12							398,200	402,600
30	FY 2016 1.9%	12								485,700
31	Total Additional Revenue Required		$0	$0	$0	$0	$162,800	$2,082,400	$5,033,100	$5,486,700
32										
33	Total Revenue		$19,268,088	$19,319,265	$34,921,548	$25,968,664	$22,710,085	$27,948,519	$30,386,616	$31,117,688

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.

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

Tabl
County ıai
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.

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]											
	Upgraded Pipe Size											
Existing 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]													
		Upgraded Pipe Size											
		4"	6"	8"	10"	12"	14"	16"	18"	20"	24"	30"	36"
Existing Pipe Size	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]											
		Upgraded Pipe Size											
		4"	6"	8"	10"	12"	14"	16"	18"	20"	24"	30"	36"
Existing Pipe Size	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	[illegible]									95,000
1980 FmHA Loan	Interest (5%)			4,050	3,325	2,550	1,750	[illegible]	$ -								18,975
1980 FmHA Loan Total				18,550	18,825	18,550	18,750	[illegible]									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		-	5,630,000
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	-	-	8,122,110
2001A	2001A Gen Obligation Bonds- Refunded 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	100.00%		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	[illegible]		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	0.00%		0	0	0	1,875,000	1,915,000	1,970,000	2,030,000	2,100,000	2,185,000	2,275,000	13,055,000	16,915,000	15,670,000	60,000,000
2010A	Interest	[illegible]		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	48,877,814
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	23,853,109	23,866,125	17,390,719	108,877,814
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	3,172,687	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	100.00%		293,360	293,453	294,275	295,012	295,779	296,525	297,342	298,094	298,859	299,630	1,508,982	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	126,164	115,314	105,800	96,080	333,719	89,125		1,817,845
DW400-0001 Total				490,000	480,469	470,925	461,356	451,761	442,142	432,498	422,649	413,134	403,415	1,870,393	1,317,830	-	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	36,818	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			61,654	62,267	62,882	63,503	64,138	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	15,938	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	75.00%	46,169	46,826	47,118	47,586	48,067	48,548	49,051	49,542	50,044	51,871	102,864	-		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		18,570	17,165	15,646	14,111	12,561	10,994	9,413	7,814	8,200	4,570	4,182	-		121,327
DW406-0001 Total			70,541	69,137	67,617	66,082	64,532	62,966	61,384	59,786	58,171	57,864	108,144	-	-	746,423
DW406-0003	SRF Loan - kapilimao 0.5MG Tank															-
DW406-0003	Principal	100.00%	41,326	85,012	85,367	85,727	86,088	86,450	86,812	87,178	87,545	87,913	445,139	456,694		1,720,255
DW406-0003	Interest		4,658	6,961	6,605	6,245	5,885	5,522	5,160	4,794	4,428	4,059	14,724	5,277		74,318
DW406-0003	Loan Fee		27,954	53,875	51,109	48,332	45,543	42,742	39,929	37,105	34,269	31,420	113,959	40,937		567,173
DW406-0003 Total			73,940	145,847	143,082	140,304	137,515	134,714	131,902	129,077	126,241	123,393	573,822	501,908	-	2,361,746
DW406-0005	Kaumualii Hwy 12" Main Replacement - Puhi to Rd to Huakai Rd.															-
DW406-0005	Principal		187,401	187,697	188,290	188,697	189,562	190,112	190,715	191,329	191,942	192,558	972,089	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 Replace															-
DW408-0002	Principal		282,189	282,609	283,028	283,450	283,872	284,295	284,716	285,141	285,565	285,991	1,336,351	537,367		4,514,574
DW408-0002	Interest		7,118	6,897	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	84,635	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 Repair															-
DW410-0001	Principal	100.00%	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	6,768	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	16,058	13,087	10,076	7,023	4,719	-		207,488
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	-	-	1,332,857
DW410-0005	SRF Loan - Rehab Lihue Steel Tank															-
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	81,588	375,350	-	-	1,287,807
DW413-0002	SRF Loan - Wailua Homesteads Well No. 2															-
DW413-0002	Principal	100.00%	20,567	20,675	20,783	20,902	21,015	21,127	21,245	21,358	21,473	21,588	87,489			298,230
DW413-0002	Interest		1,583	1,475	1,357	1,248	1,135	1,023	905	792	676	561	1,066			11,820
DW413-0002	Loan Fee		8,525	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			31,675	31,008	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 - Kuhio Hwy															-
DW413-0006	Principal	33.33%	120,226	120,413	120,605	120,799	120,992	121,186	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	46,618	42,685	38,745	34,799	8,590	8,192	19,710			426,028
DW413-0006 Total			185,583	181,669	177,754	173,833	169,906	165,972	162,032	158,085	54,243	52,846	242,885	-	-	1,724,802
DW413-0005	- Omnellas 0.2 MG Tank Rehabilitation															-
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

Debt service payments to 2015 FRC 30% adjustment V7-5.(

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	3,882	147		29,175
DW413-0005	Loan Fee		20,484	19,150	17,808	16,458	15,109	13,734	12,361	10,979	30,646	26,887	74,830	2,999		281,637
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 MAIN REPLACEMENT															
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	4,349	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	1,448,237	6,624,084	3,661,639	-	24,419,987
SRF LOAN	INTEREST		89,234	86,923	80,966	75,076	69,110	63,136	57,026	51,026	44,822	38,660	108,897	22,944	-	787,818
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	$ 2,039,015.06	$ 1,992,805.63	$ 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	24,669,684	21,776,639	15,670,000	96,514,987
BOND & SRF COMBINED	INTEREST		3,167,159	3,573,885	3,543,053	3,490,181	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	53,333,780
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	157,011,461

	"CATCH-UP"														
Less: FRC Reimbursement to General Fund for Funding 30% of SAR Debt Serv	(512,708.76)	(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)	(10,332,663.12)	(5,217,215.84)	(50,047,097.15)
Less: Adjustments based on actual FRC related projects														
Add: Adjustments based on actual FRC related projects														
Total Reimbursement from FRC	(512,708.76)	(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)	(10,332,663.12)	(5,217,215.84)	(50,047,097.15)
Source Breakdown of FRC Debt Service														
Bonds	(464,708.62)	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	(48,000.14)	897,900.37	879,699.17	861,404.06	843,017.45	824,537.38	805,963.04	787,113.92	735,232.39	718,291.64	2,852,812.62	1,819,738.07	-	12,867,071.54
Total	(512,708.76)	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	10,332,663.12	5,217,215.84	50,047,097.15

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					2011	2012	2013	2014	2015	2016
25	Year / % of Water Sales Revenue / Months Effective									
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.

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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	$5,046,327
73										
74	Debt Service Coverage w/ FRC (13)	2.41	2.62	2.80	1.41	1.30	1.76	1.58	1.87	1.68
75	Minimum Debt Service Coverage (14)	N/A	N/A	N/A	1.50	1.50	1.50	1.50	1.50	1.50
76										
77	Average 5/8" Meter Bill ($/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

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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.

F 7.4

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		% of Water	Months							
25	Year	Sales Revenue	Effective		2011	2012	2013	2014	2015	2016
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	$0	$0	$0	$753,500	$3,166,100	$4,990,900	$6,996,700	$7,073,900
32										
33	Total Revenue			$19,268,088	$19,319,265	$34,921,548	$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.

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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	$6,154,572	$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)	(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	[redacted]	[redacted]	[redacted]	$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	$5,046,327
74										
75	Debt Service Coverage w/ FRC (13)	2.41	2.62	2.80	[redacted]	[redacted]	1.80	1.63	1.92	1.71
76	Minimum Debt Service Coverage (14)	N/A	N/A	N/A	1.50	1.50	1.50	1.50	1.50	1.50
77										
78	Average 5/8" Meter Bill ($/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

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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.

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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				2011	2012	2013	2014	2015	2016
25	Year / Sales Revenue / Months Effective									
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.

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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

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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.

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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.

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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	8,088,603	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	1,126,300
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)	($918,296)	($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	$5,046,327
74										
75	Debt Service Coverage w/ FRC (13)	2.41	2.62	2.80	1.12	1.39	1.74	1.56	1.84	1.63
76	Minimum Debt Service Coverage (14)	N/A	N/A	N/A	1.50	1.50	1.50	1.50	1.50	1.50
77										
78	Average 5/8" Meter Bill ($/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

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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.

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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	$13,223,898	$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	$2,167,800	$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	$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.

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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	[redacted]	$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	$5,046,327
74										
75	Debt Service Coverage w/ FRC (13)	2.41	2.62	2.80	[redacted]	[redacted]	1.99	1.50	1.85	1.70
76	Minimum Debt Service Coverage (14)	N/A	N/A	N/A	1.50	1.50	1.50	1.50	1.50	1.50
77										
78	Average 5/8" Meter Bill ($/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

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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 10,000 gallons per month.

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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	$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 Pg 47

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	[illegible]	[illegible]	[illegible]	$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	$5,003,806
73										
74	Debt Service Coverage w/ FRC (12)	2.41	2.62	2.71	[illegible]	[illegible]	1.66	1.61	2.00	1.95
75	Minimum Debt Service Coverage (13)	N/A	N/A	N/A	1.50	1.50	1.50	1.50	1.50	1.50
76										
77	Average Residential Bill ($/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

BOARD REPORT

November 9, 2010
April 28, 2011
May 26, 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
      i. Attached Proposed Draft Bill No. 2380
      ii. Attached Proposed Draft Bill No. 2401
      iii. Attached Approved bill No. 2401, Draft 2

Michael Dahilig
Chair – Rules Committee

cab
Mgrrp/Board- Rules Committee Report (11-18-10) (4-28-11) (5-26-11):cab

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 Amendment-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

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, 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

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:

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(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."*

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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, 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

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:

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Proposed Draft Bill (Rev. 2380)

(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)

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)

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

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 and shall include Condominium Property Regimes.

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 be related to the process of subdividing of the land or territory subdivided and shall include Condominium Property 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 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

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

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.

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.

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.

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 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.

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

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

Received this ____ day of

_____, 2010

_____
Peter Nakamura
County Clerk, County of Kauai

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
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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

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

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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

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.

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:
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:

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.

"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."

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.

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

unauthorized water service shall apply for service and a fine of $5,000 is paid.
[Eff.] (Auth: HRS 54-33) (Imp: HRS 54-33)

5-14 Effective date. This rule shall become effective ten days after it is filed with the County Clerk of the County of Kaua'i.
[Eff.] (Auth: HRS 54-33) (Imp: HRS 54-33)

5-15 Severability. If any provision of this chapter or the application thereof to any person or circumstance, is held invalid, the invalidity shall not affect other provisions or applications of this chapter which can be given effect without the invalid provision or application.
[Eff.] (Auth: HRS 54-33) (Imp: HRS 54-33)

Individual Fixtures	Minimum Fixture Branch Pipe Size *(inch)*	Water Supply Fixture Units *WSFU*	
		Private Installations	Public Installations
Bathtub	1/2	4	4
Bathtub with 3/4" fill valve	3/4	10	10
Bidet	1/2	1	
Dishwasher, domestic	1/2	1.5	1.5
Drinking fountain	1/2	0.5	0.5
Hose Bibb	1/2	2.5	2.5
Lavatory	1/2	1	1
Bar sink	1/2	1	2
Clinic faucet sink	1/2	3	
Kitchen sink, domestic	1/2	1.5	1.5
Laundry sink	1/2	1.5	1.5
Service or mop basin	1/2	1.5	3
Wash-up basin	1/2	2	
Shower head	1/2	2	2
Urinal with flush tank	1/2	2	2
Wash fountain	3/4	4	
Water closet with gravity tank	1/2	2.5	2.5
Water closet with flushometer tank	1/2	2.5	2.5
Water cooler	1/2	0.5	0.5

- *1 WFSU = 1 GPM = 3.79 liter/min*

DEPARTMENT OF WATER
County of Kaua'i

"Water has no Substitute – Conserve It!"

MANAGER'S REPORT NO. 11-17

May 20, 2011

Re: Committee Discussion and Possible Action on the Proposed Revised Organizational Chart to Organize for Future Operations

No update at this time; therefore, recommend that the Board defer this matter.

Respectfully submitted,

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

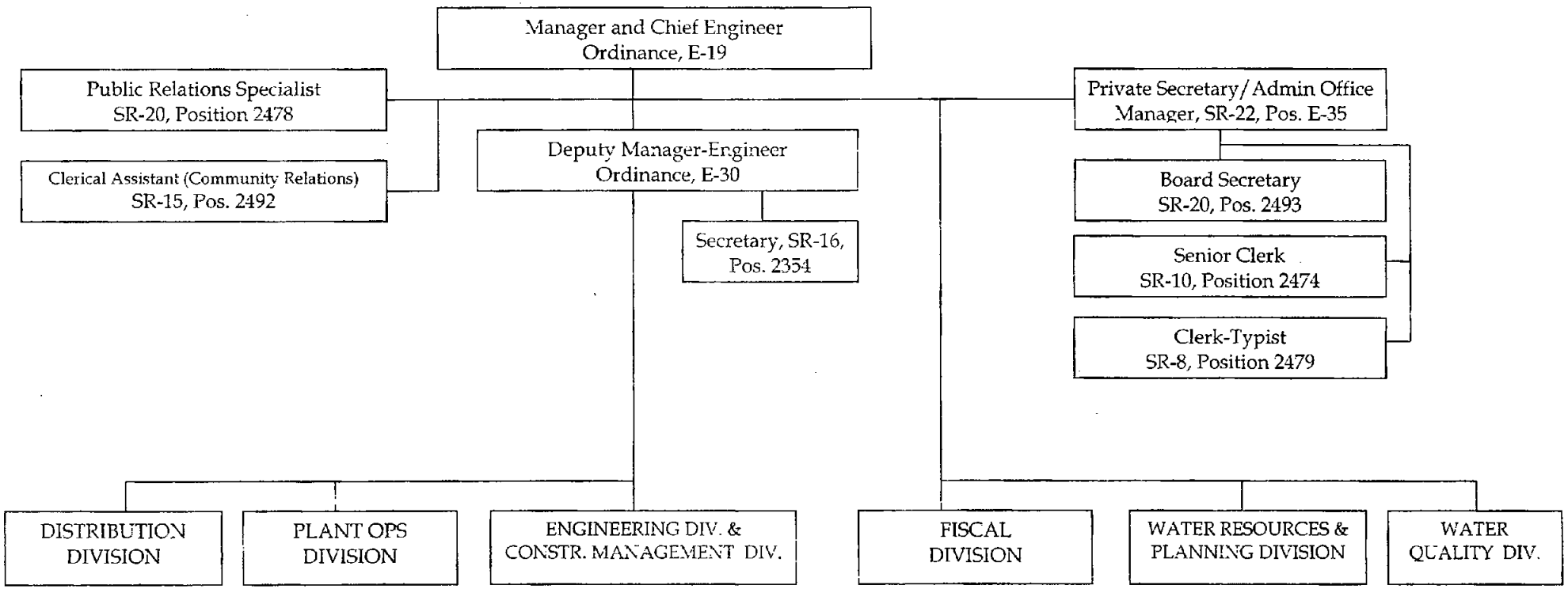
rm
Mgrrp/Org Chart (5-26-11):rm

---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

PREPARED BY: _____
DEPARTMENT HEAD DATE

APPROVED BY: _____
BOARD CHAIRPERSON DATE

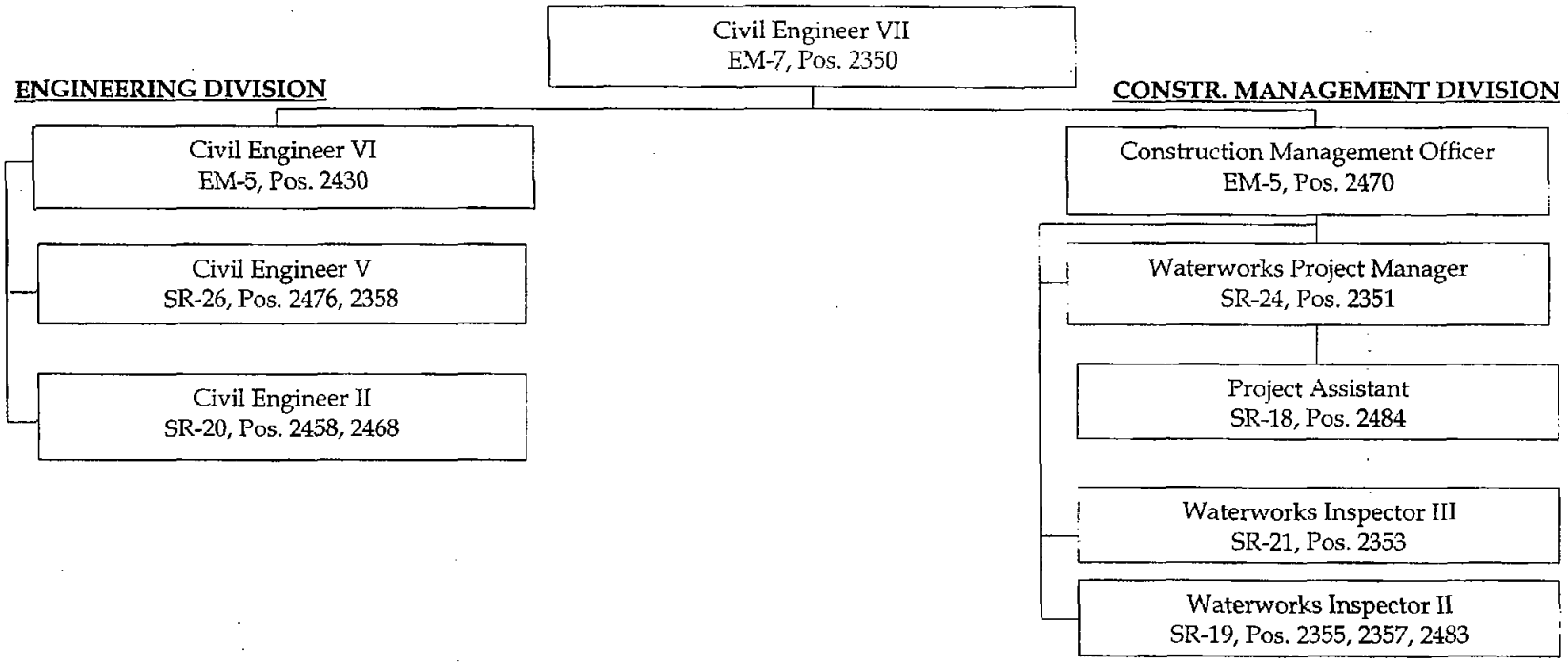
COUNTY OF KAUAI
KAUAI DEPARTMENT OF WATER
ORGANIZATION CHART
ADMINISTRATION



PREPARED BY: _____
DEPARTMENT HEAD DATE

APPROVED BY: _____
BOARD CHAIRPERSON DATE

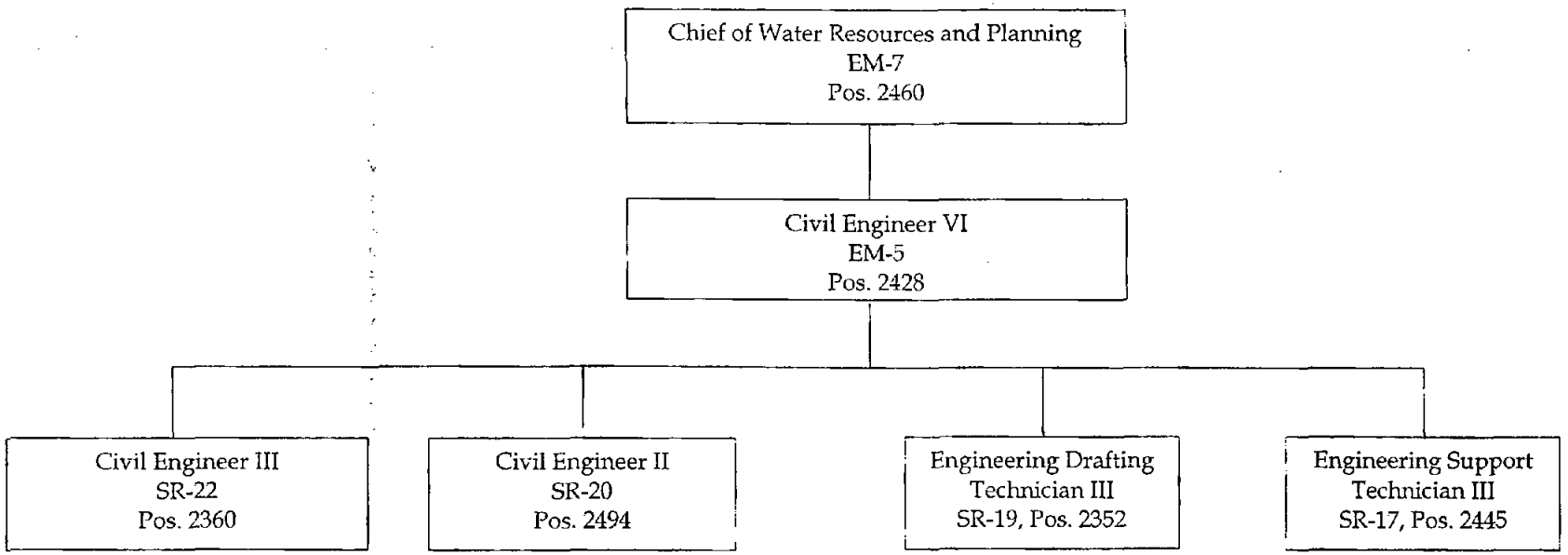
COUNTY OF KAUAI
KAUAI DEPARTMENT OF WATER
ORGANIZATIONAL CHART
ENGINEERING DIVISION AND
CONSTRUCTION MANAGEMENT DIVISION



PREPARED BY: _____
DEPARTMENT HEAD DATE

APPROVED BY: _____
CHAIRPERSON DATE

COUNTY OF KAUAI
KAUAI DEPARTMENT OF WATER
ORGANIZATIONAL CHART
WATER RESOURCE AND PLANNING DIVISION



Managers Report No. 11-64

Proposed FY 2012 Budget

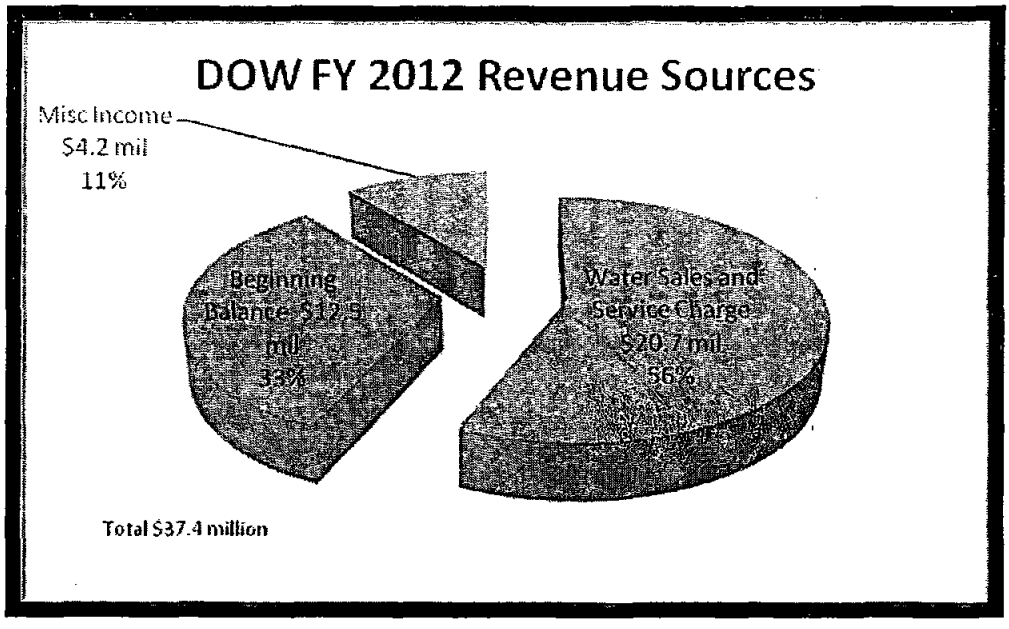
Your review, requested changes and approval is required by June 30th 2011.

A summary of the proposed budget is shown in graphic form.

REVENUES

The revenues incorporate a 1.7% increase not yet approved by the Board and will be subject to what the Board finally approves for a rate increase during rate deliberations. The assumption is a 3.4% yearly increase implemented in January or halfway through the fiscal year. This does reflect a transfer of 30% or $0.9 million of the debt requirements for the BAB and $1.1 million for SRF and other bond debt from the FRC account to pay for expansion related projects in keeping with the User Pays principle. This can happen for only one and portion years if the FRC charges are not changed to reflect these costs.

Labor costs to review and manage construction of projects that will require or provide additional resources from FRC related projects are not included in these costs and can be covered by a review charge should the Board move to a clean user pay. Due to the potential increase of the FRC charges these labor costs are left for future review. The engineering labor costs are capitalized in any case and are taken out of operational costs during the audit but must be included in the budget as the engineering labor costs are real expenses.



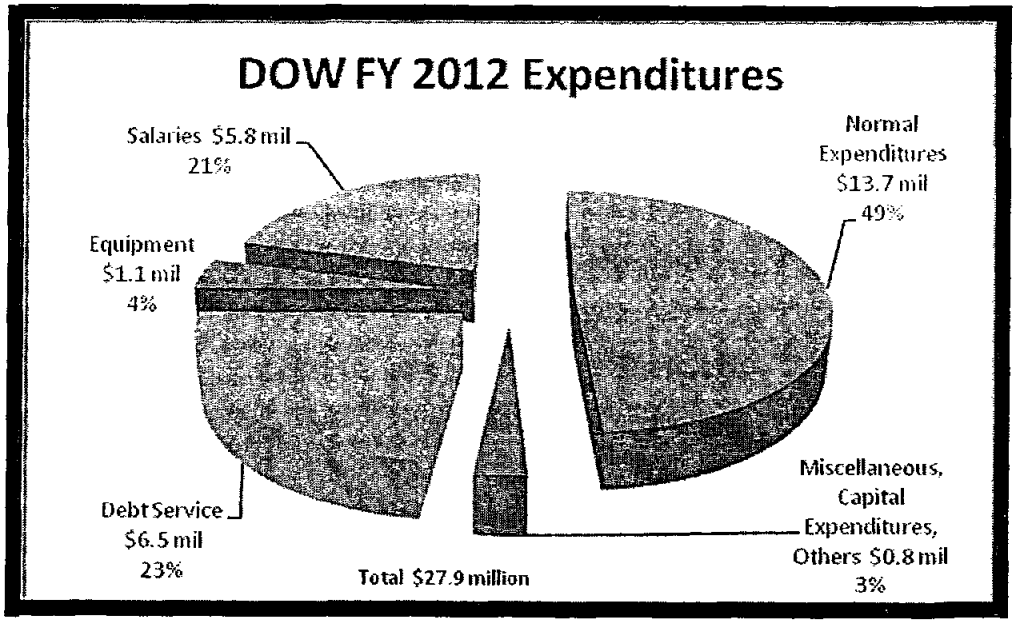
We are showing a potential for revenues of $22 million for FY2011 based on December financials which were used to prepare this budget. To do this will incorporate a 2.5% increase in consumption which may not be realized. As we go through the budget and we are able to get more current numbers the revenue projection may, however, be increased.

Note: This hand-out has been corrected based on the revised budget sheets distributed at the Committee of the Whole Meeting on Tuesday, April 26, 2011

At this time, however, we are proposing a more conservative number as second half of the year revenues are usually less than the first half of the year.

EXPENDITURES

Salaries are budgeted to be about $0.3 million above last year as positions that were vacant for some of last year are now filled. Part of the jump in normal expenditures is related to fully funding employee retirement and medical costs, including a proportional amount of past years that were underfunded. This amount is about $1.3 million over the previous year where this was not budgeted for but adjusted during the audit. Contractual expenses are up because the Water Use and Development Plan required by the CWRM are included this year. Funds were budgeted this current year and there is a chance of coming to the Board to encumber the funds this year, even though the current budgeted number is less than needed if we get a final contract prepared. If this happens the FY 2012 budget will be $0.9 million less than proposed. The largest items in the normal expenditures are the water purchases and the power purchases and these are out of our control unless the Board decides to purchase less water by purchasing the facilities. This would cut about $1 million from the operating budget while adding a $6 million capital purchase that has not been budgeted.



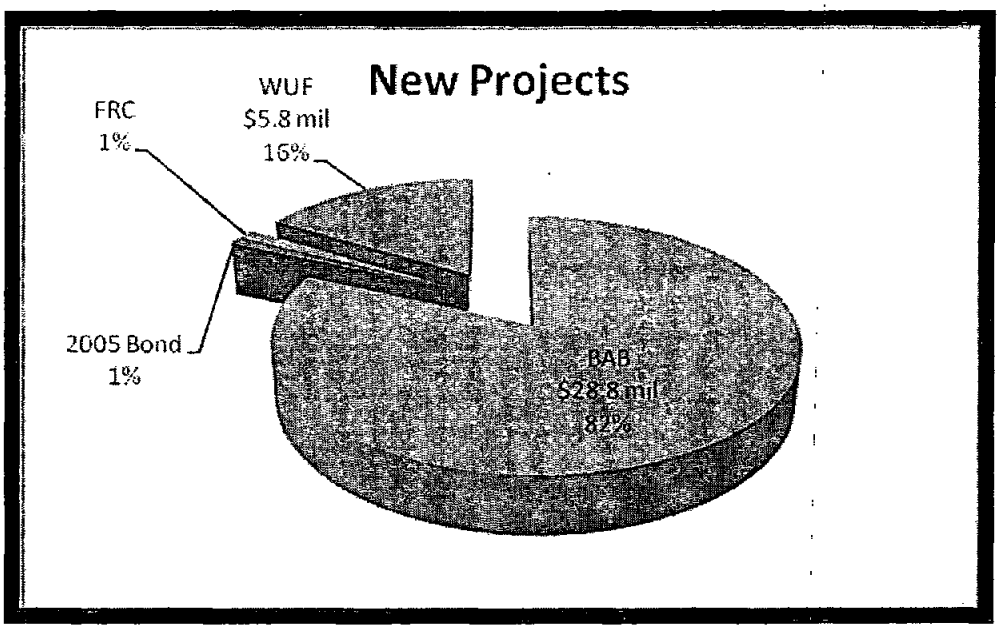
Debt service has also jumped by about $0.9 million due to a full year of payment on the interest for the BAB's. The remaining items are the capital projects which are increasing about $1.9 million. In addition to the operating costs there is a substantial capital budget.

CAPITAL IMPROVEMENTS

The revenues for the capital projects come from bonds, revenues and FRC charges. There are new projects that we expect to encumber this year, expected payments on existing contracts and remaining reserves.

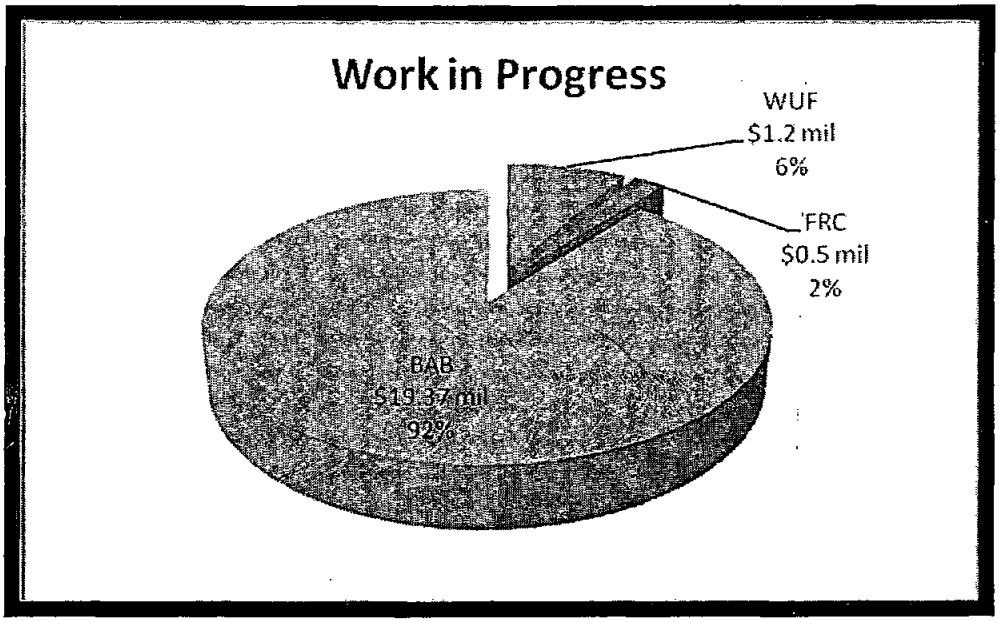
All of the unencumbered BAB funds of $28.8 million are budgeted to be encumbered. Two of the remaining projects, the DOW building and high level well, could use most of the remaining balance. We will be working closely with the Board on these two projects as more is known. There is a possibility of getting some grant funds which is not shown. The Water Utility Fund has expansion projects totaling

$1.8 million which will not be taken from the WUF without a borrowing resolution. The remaining $3.7 million are replacement projects.



WORK IN PROGRESS

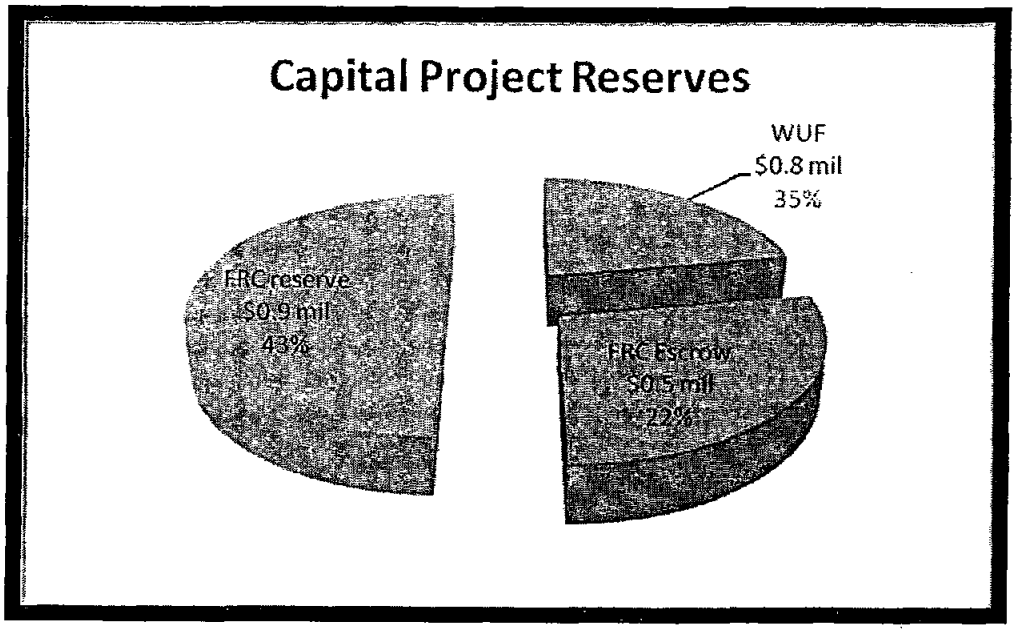
The BAB again is the lion's share of the spend-down. The WUF is older engineering projects.



CAPITAL PROJECT RESERVES

The FRCs go to a restricted fund used only for system source, storage and transmission improvements. The FRC reserve will be needed for FY 2013 debt service payments which will total about $2.5 million. Expansion projects are very much underfunded at this time and time is running out to generate additional

funds. The Board is reviewing the FRC charges and we expect this to be completed in early FY 2012. The FRC escrow is for projects that have paid FRC charges and are building the facilities needed, thus will qualify for refunds. The largest of this class of projects was Kukui'ula which has been paid back. The WUF reserve is subject to changes as the budget process moves forward.



Thank you for your attention to this matter and we look forward to working with you to refine the proposed budget.

Respectfully submitted,

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

DRC/cab
Mgrrp-Proposed Budget 2012 (4-28-11):cab

Note: This hand-out has been corrected based on the revised budget sheets distributed at the Committee of the Whole Meeting on Tuesday, April 26, 2011

Board's Goals for DOW Manager for Year 2011

(Goals:ro)

Item No.	Goal	Status	Deadline	Measure
	Goals from Board			
1	**Bond Float and Water Plan 2020**			
	Encumber $37 million in BAB	Manager provided updated figure of $37 million	End of November 2011	
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			

Board's Goals for DOW Manager for Year 2011

(Goals:ro)

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**			
5	**Fiscal**			

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

Employee Health and Safety Severity Rate

Purpose:

To quantify the rate of employee days lost from work due to illness or injury.

Discussion:

The Occupational Safety and Health Administration (OSHA) has established accident and illness recording and reporting requirements that affect most organizations. Some states have been delegated authority from OSHA to operate their own, similar systems. The OSHA standard is recommended because it has broad applicability and most utilities are already recording the needed data.

The OSHA lost-days indicator measures the rate of days lost due to illness or injury per 100 employee-years of work. It was selected as a good indicator for water and wastewater utilities because it summarizes a very useful set of data that is readily available at most utilities.

Detailed information about all of the OSHA indicators is found at www.osha.gov. Forms and tools to assist with understanding the indicator, applicable definitions, and the record-keeping process are available on-line. That information is not repeated here.

Mathematical Expression and Measurement Tips:

Utilities should refer to OSHA Form 300A, *Summary of Work-Related Injuries and Illnesses,* for the appropriate reporting period to determine the total number of days away from work in the equation below.

employee health and safety severity rate =

$$\frac{200{,}000 \text{ (total days away from work)}}{\text{total hours worked by all employees}}$$

Where:

200,000 is the number of hours actually worked by 100 typical full-time employees in 1 year

The severity rate is expressed in lost workdays per 100 employees per year

Data Needed to Support the Calculation:

Total workdays away from work are obtained directly from OSHA Form 300A (or state counterpart), *Summary of Work-Related Injuries and Illnesses.*

Total hours worked by all employees is the sum of hours actually worked by full-time, part-time, temporary, and seasonal employees of the utility.

Definitions:

Visit www.osha.gov for a complete explanation of this indicator, including applicable definitions.

Applicability:

This indicator is applicable to all water and wastewater utilities, regardless of customer base, size, or ownership. Utilities in Canada may need assistance with expanded guidance if their questions are not answered by a visit to the OSHA Web site.

Additional Guidance:

- The Bureau of Labor Statistics performs surveys of occupational injuries and illnesses by industry, employer size, etc., and publishes some data at www.bls.gov. Utilities may find this information of value for comparisons to other industries.
- Utilities will report total full-time equivalents for other indicators such as *Training Hours per Employee*. OSHA requirements are specific, including overtime hours and excluding nonwork hours due to vacations, holidays, sick leave, and other absences. When data is reported for this indicator, system managers should note that there is a difference.

QualServe Business System:
Organizational Development

QualServe Business Process Category:
Health and Safety Management

Utility Business Architecture Category:
Manage and Develop Human Resources

Balanced Scorecard Measure Type:
Internal Process

GASB Indicator Type:
Service Accomplishment

Training Hours per Employee

Purpose:

To measure the quantity of formal training utility employees are actually completing. This indicator is expressed as the number of formal training hours per employee per year.

Discussion:

This measure is intended to reflect the organization's commitment to formal training as a means of improving employee knowledge and skills. It also does not address the effectiveness or efficiency of the training programs used by the utility.

Use of the indicator in comparative analysis will allow utilities to gauge whether their use of formal training is consistent with other utilities.

Mathematical Expression and Measurement Tips:

$$\text{training hours per employee} = \frac{\text{total qualified formal training hours for all employees}}{\text{total full-time equivalents worked by employees during the reported period}}$$

Data Needed to Support the Calculation:

- Sum of all qualified formal training hours completed by all employees
- The total number of full-time equivalents (FTEs) worked by employees

Definitions:

- *Apprenticeship program* means a formal program designed to prepare an individual for journeyman status in any of several job categories.
- *Employees* are all full-time, part-time, temporary, and

seasonal employees of the utility. Contractors are not included.

- *Formal training* meets at least one of the following descriptions:
  - A professionally developed program or session with a fixed agenda that is offered on or off site during compensated working hours of the employee
  - The classroom and study portions of a formal apprenticeship program completed during working hours
  - A compensated training or related educational program, including an apprenticeship program, completed by an employee during nonwork hours

For the purposes of this definition, training is not limited to events where continuing education credits are awarded. Formal training includes technical training, certification training, apprenticeship training, employee skills and development training, professional seminars, attendance at professional conferences, and college classes. It does not include on-the-job training (OJT).

- *A full-time equivalent (FTE)* is the allocation of employee time equal to 2,080 hours per year. Use of this term allows data to be normalized around a common measure. Part-time, temporary, and seasonal employees are converted to FTEs based on the total number of compensated hours. Employee time from contracts supporting utility operations and maintenance is applied in the same way.
- *Qualified training hours* include all hours spent at the event, from the opening session to the wrapup, including all breaks that are part of the agenda. Travel time to and from the event, trainer time, and time invested in planning and conducting the training is not included.
- *Total full-time equivalents* is the sum of all compensated hours worked by all employees during the reporting period, divided by 2,080 hours per full-time employee per year.

Applicability:

This indicator is applicable to all water and wastewater utilities, regardless of customer base, size, or ownership.

QualServe Business System:
Organizational Development

QualServe Business Process Category:
Human Resources Management

Utility Business Architecture Category:
Manage and Develop Human Resources

Balanced Scorecard Measure Type:
Learning and Growth

GASB Indicator Type:
Service Efforts

(4) (5)

Customer Accounts per Employee (Water ~~and Wastewater~~), MGD Water Delivered per Employee, and ~~MGD Wastewater Processed per Employee~~

Purpose:

To measure employee efficiency.

Discussion:

These indicators measure employee efficiency. By expressing them in terms of both accounts and millions of gallons per day (MGD) of water delivered or wastewater processed, the effects of customer class are diminished.

The effects of contracts for operations and maintenance (O&M)

can have significant effects if not captured. Utilities will need to account for O&M contract employees effectively.

At multiple-service utilities, care will need to be taken with apportioning employee time to water or wastewater service. Budgets will help with making these counts for line employees, and added care will be needed with apportioning support employee time. Once this has been done for the first survey, it will be relatively easy to review and update that information for future years. If a utility cannot provide good data separately, it should be allowed to provide a single set of data for both water and wastewater services.

Utilities that receive support from larger organizations will need to work with those managers to estimate employee time applied to utility work. This may be most complex in the city setting where centralized services for human resources, fleet management, purchasing, engineering, and the like are applied to both water and wastewater work. It will be necessary to capture these numbers separately for the two.

Mathematical Expression and Measurement Tips:

customer accounts per employee =

$$\frac{\text{number of accounts}}{\text{number of full-time equivalents}}$$

MGD water delivered per employee =

$$\frac{\text{average MGD delivered}}{\text{number of full-time equivalents}}$$

MGD wastewater processed per employee =

$$\frac{\text{average MGD processed}}{\text{number of full-time equivalents}}$$

Each equation can be run separately for water and wastewater utility data where data provided will support that.

Data Needed to Support the Calculation:

- ❑ Number of active water accounts
- ❑ Number of active wastewater accounts
- ❑ Average daily volume of water distributed (in MGD)
- ❑ Average daily volume of wastewater processed (in MGD)
- ❑ Number of full-time equivalents (FTEs) supporting water service
- ❑ Number of FTEs supporting wastewater service

Definitions:

- ❑ *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.
- ❑ *Average daily volumes* distributed are calculated by dividing the total volume of water distributed or wastewater processed during the reporting period by 365. Distributed water is the total volume of water entering the distribution system from all sources, including treatment facilities, individual wells, and purchased water connections.
- ❑ A *full-time equivalent (FTE)* is the allocation of employee time equal to 2,080 hours per year. Use of this term allows data to be normalized around a common measure. Part-time, temporary, and seasonal employees are converted to FTEs based on the total number of compensated hours. Employee time from contracts supporting utility operations and maintenance is applied in the same way. Employee time from engineering and construction of new facilities is not counted in these indicators.

Applicability:

This indicator is applicable to all water and wastewater utilities,

regardless of customer base, size, or ownership. Comparisons will be most valid among utilities of similar size and with similar numbers of customers in various customer classes.

QualServe Business System:
Organizational Development

QualServe Business Process Category:
Human Resources Management

Utility Business Architecture Category:
Develop and Manage Human Resources

Balanced Scorecard Measure Type:
Internal Process

GASB Indicator Type:
Relating Efforts and Accomplishments

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

Disruptions of Water Service

Purpose:

To quantify the numbers of water outages experienced by utility customers. Each indicator is expressed as the number of customers experiencing disruptions per 1,000 customer accounts per year.

Discussion:

Customers have come to expect full water service all of the time. Maintenance and repair work that result in water outages or substantially reduced water pressure disrupt customer plans, bring complaints, and diminish goodwill toward the utility. This family of indicators measures the numbers and durations of water service disruptions. It does not address inconveniences resulting from access limitations around construction and repair work sites.

Six separate indicators are supported: planned and unplanned service disruptions for durations of less than 4 hours, between 4 and 12 hours, and more than 12 hours. Large numbers and proportions of unplanned service disruptions likely reflect on distribution system inadequacies. Outages of long durations may be indicative of poor repair practices.

The indicator is calculated separately for planned and unplanned disruptions of three different durations. For each of these six categories, the rate is expressed as the number of

Additional Guidance:

Where service disruptions are felt by customers of utilities that are wholesale customers of the utility, the total number of affected customers should be reported, even if those customers do not have service agreements with the wholesaling utility.

These indicators are useful for comparative analyses among utilities. Utilities are encouraged to collect additional data for internal measures. Tracking disruptions impacting different customer classes has merit. If record-keeping allows, maintaining records of disruptions felt by individual customers also has merit.

QualServe Business System:
Customer Relations

QualServe Business Process Category:
Customer Service

Utility Business Architecture Category:
Customer Service

Balanced Scorecard Measure Type:
Customer

GASB Indicator Type:
Service Accomplishments

~ 7500 gpd (15) Average

Residential Cost of Water ~~and/or Sewer Service~~

Purpose:

To allow utilities to compare the residential cost of water and sewer service based on both a defined quantity of water use and the average residential bill amounts for those services.

Discussion:

This indicator has several parts. A utility reports the individual costs in items 1–4, if possible, deferring to options 5 and 6 only if it cannot.

1. Bill amount for monthly residential water service for a customer using 7,500 gallons per month
2. Average residential water bill amount for one month of service
3. Bill amount for monthly residential wastewater service for a customer using 7,500 gallons of water per month
4. Average residential wastewater bill amount for one month of service
5. For multiple service utilities that cannot provide individual costs, the total monthly bill amount for residential water and wastewater service for a customer using 7,500 gallons of water per month
6. For multiple service utilities that cannot provide individual costs, the average residential combined water and wastewater bill amount for one month of service

NOTE: Include any additional costs added to the bill for basic service that may include other taxes and fees required to be paid by the residential customer to retain basic service.

Although this indicator seems simple, it is really quite complex because of the uniqueness of each utility. In some places, rates may be artificially low to reflect well on elected officials. In others, rates may be artificially high so elected officials can achieve nonutility objectives, such as annexations or general fund contributions. In still others, investor-owned utilities may have rates controlled by public utility commissions. And then there are the physical differences: age and condition of facilities; raw water quality; wastewater discharge requirements; mix of service to residential, commercial, and wholesale customers, and others.

The utility should calculate the bill amount for a typical residential customer served water through a ¾ × ⅝-inch meter. Include the fee for 7,500 gallons of water or the fee for wastewater service consistent with that volume of water

use. Also, add any surcharges and taxes in effect during the reporting period. If billing is quarterly, calculate what the fee would be for 22,500 gallons of water and divide by 3. If there is more than one rate zone, calculate the weighted average of charges for all zones.

Mathematical Expression and Measurement Tips:

No calculation required beyond those required of the utility when preparing their submittal(s).

Data Needed to Support the Calculation:

No calculation required beyond those required of the utility when preparing their submittal(s).

Definitions:

- *Bill* means the periodic statement of charges (volumetric, surcharges, and taxes) for water and/or wastewater services, which are calculated based on known volumes of water delivered or wastewater collected.
- *Flat fee* means a set fee charged to a water or wastewater customer regardless of the amount of water used, or wastewater collected, during the billing period. If there are surcharges or ad valorem taxes assessed to flat-fee customers, they are considered part of the flat fee.

Applicability:

This indicator is applicable to all water and wastewater utilities, regardless of customer base, size, or ownership.

Additional Guidance:

This indicator may be particularly useful to utilities with artificially low rates and significant capital improvement needs.

QualServe Business System:
Customer Relations

QualServe Business Process Category:
Customer Accounts Management

Utility Business Architecture Category:
Customer Service
Set Rates, Sell Service, and Conservation

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

Billing Accuracy

Purpose:

To measure the effectiveness of water and/or wastewater utility billing practices. The calculation shows the number of error-driven billing adjustments per 10,000 bills generated during the year.

Discussion:

Customers rarely think about their utility, unless they have a problem with service or billing. This indicator helps a utility measure how effective its billing practices are relative to others.

Because explanatory factors are minimized, this indicator can be very meaningful. Accuracy will be very high for most utilities (which is good). Consequently, it is recommended that the measure be standardized at around 10,000 billings.

Mathematical Expression and Measurement Tips:

$$\text{billing accuracy} = \frac{(1{,}000)(\text{number of error-driven billing adjustments during reporting period})}{\text{number of bills generated during the reporting period}}$$

Data Needed to Support the Calculation:

- *For the number of bills generated during the reporting period,* multiple-service utilities that send a single bill for water and wastewater service will count each such bill as two bills for the purposes of this indicator.
- *For the number of error-driven billing adjustments made during the reporting period,* multiple-service utilities that send a single bill for water and wastewater service will count each billing adjustment once unless both water and wastewater billings are adjusted, in which case two billing adjustments are counted.

Definitions:

- *Bill* means the periodic statement of charges (volumetric, surcharges, and taxes) for water and/or wastewater services, which are calculated based on known volumes of water delivered or wastewater collected during a specific period of time.
- *Error-driven billing adjustment* is an adjustment to a customer's charges resulting from an error on the original bill actually sent to the customer, regardless of cause and including all such discoveries made by utility staff, the customer, or a third party. Errors include all those under control of the utility such as meter reads (whether by utility staff or the customer), data entry, and calculations or computer programming. Bills re-issued for estimated bills should not be included as a billing error.

Applicability:

This indicator is applicable to all water and wastewater utilities, regardless of customer base, size, or ownership. As with many of the recommended indicators, smaller utilities should expect larger annual swings because their basis for measurement is small.

Additional Guidance:

This indicator actually calculates billing inaccuracy. During review of the final draft report, all but one reviewer favored this approach. An alternate approach for consideration during the pilot period is shown in the following equation. It results in the number of accurate billings per 10,000 issued by the utility.

$$\text{billing accuracy} = \frac{(1{,}000)(\text{number of bills generated} - \text{number of error-driven adjustments during reporting period})}{\text{number of bills generated during the reporting period}}$$

QualServe Business System:
Customer Relations

QualServe Business Process Category:
Customer Accounts Management

Utility Business Architecture Category:
Customer Service

Balanced Scorecard Measure Type:
Customer

GASB Indicator Type:
Service Accomplishment

Debt Ratio

Purpose:

To quantify the utility's level of indebtedness.

Discussion:

The higher the calculated debt ratio, the more dependent the utility is on debt financing. Many utilities use this indicator as an internal measure of performance. Data is readily available from the utility's audited financial statements that are generated at the end of each fiscal year.

Mathematical Expression and Measurement Tips:

$$\text{debt ratio} = \frac{\text{total liabilities}}{\text{total assets}}$$

Data Needed to Support the Calculation:

- Total liabilities
- Total assets

Definitions:

- *Total liabilities* are all obligations of the utility under law or equity. They are categorized as such on the utility's financial statement. In essence, they are the total amount of dollars owed to others. Liabilities are defined and designated by the Governmental Accounting Standards Board (GASB) or the Financial Accounting Standards Board (FASB) as applicable to each specific utility. They include outstanding bonds, outstanding long-term debt, outstanding short-term debt, payments owed to others, accounts payable, and deposits collected from customers.
- *Total assets* are all resources of the utility, both tangible and intangible. They are categorized as such on the utility's financial statement. They include the total value of properties and claims against others that are owned

by the utility as expressed at original cost. Assets are defined and designated by the GASB or the FASB, as applicable to each specific utility. They include accounts receivable, cash, inventories, service delivery facilities (less depreciation), cost of easements, cost of water rights, and all other items of value owned by the utility.

Applicability:

This indicator is applicable to all water and wastewater utilities, regardless of customer base, size, or ownership. However, utilities that do not maintain independent financial statements, such as departments of city government and multiservice utilities that do not maintain costs for each service, may have difficulty providing accurate data.

Additional Guidance:

During pilot tests of the survey and database, evaluate whether utilities are providing audited or estimated data to help decide whether data reported in actual surveys should be qualified.

QualServe Business System:
Business Operations

QualServe Business Process Category:
Finance and Fiscal Planning

Utility Business Architecture Category:
Manage Finance and Accounting

Balanced Scorecard Measure Type:
Financial

GASB Indicator Type:
Relating Efforts and Accomplishments

System Renewal/Replacement Rate

Purpose:

To quantify the rate at which the utility is meeting its individual need for infrastructure renewal or replacement.

Discussion:

This indicator measures the degree to which a water or wastewater utility is replacing its infrastructure based on target lives for each of two asset groups: (1) distribution system and treatment for water utilities and (2) collection system and treatment for wastewater utilities. Joint water and wastewater utilities will be asked to provide data for all four categories:

1. Water pipeline/distribution
2. Water treatment facility and pumping
3. Wastewater pipelines and collection
4. Wastewater treatment facility and pumping

As asset management systems become more prominent at public utilities as a result of Governmental Accounting Standards Board (GASB) Statement 34, many public utilities are joining long-standing practices at investor-owned utilities by establishing target lives for these asset groups. Utilities that have not done this should use the following default values for these indicators:

- ❑ Water distribution system components—50 years
- ❑ Wastewater collection system components—100 years
- ❑ Wastewater or water treatment facilities—50 years

Not all utility assets are captured by this indicator. Miscellaneous categories are established for both water and wastewater utilities, but anticipated differences limit the value of that data for comparative analysis. As a performance indicator system is implemented and refined, this decision can be reconsidered.

Mathematical Expression and Measurement Tips:

$$\text{renewal rate (\%)} = \frac{100\ (\text{total actual expenditures or total amount of funds reserved for renewal and replacement for each asset group})}{\text{total present worth for renewal and replacement needs for each asset group}}$$

Utilities will need to collect important data and perform several calculations to provide good data for these indicators. However, once those actions are completed, it will be relatively easy for utilities to update that information each year. The following concessions have been made to make these calculations as simple as possible, consistent with the needs of meaningful indicators:

1. Inventory and separate assets into appropriate asset groups as noted in the discussion, with a separate group for miscellaneous assets that will not be used in the calculations.
2. Use known current renewal and replacement costs for each asset or use historic values and update them using the *Engineering News-Record* Construction Cost Index (CCI). For example, the replacement cost for a treatment facility constructed in 1990 would be calculated by multiplying the 1990 cost by the CCI for the reporting year divided by the CCI for 1990. For water and wastewater pipelines where complete cost information is absent, it is permissible to simplify calculations by ignoring the effects of relatively low-cost water valves and hydrants and wastewater access holes and clean-outs. Major installations such as pumping stations and water storage facilities would be included.
3. Establish asset lives for each asset group or use the default values in the discussion. Where a utility calculates its own asset lives and where asset groups have subcategories with different lives, a weighted average should be calculated.
4. Calculate the target level for the annual investment in renewal and replacement for each asset group by dividing the total asset group renewal/replacement cost by the asset group life.
5. Because total actual expenditures may be difficult to aggregate accurately, utilities could be offered two ways of calculating their renewal/replacement rate: with actual expenditures or by providing the funding amount reserved for renewal/replacement in each asset group during the reporting year. Utilities should be asked to designate the method used for their calculation and that method should be reported in the database.

Data Needed to Support the Calculation:

- ❑ Total present worth of renewal and replacement needs for each asset class
- ❑ Weighted average lives for each asset class
- ❑ Total actual expenditures or total amount of funds reserved for renewal and replacement for each asset class during the reporting period
- ❑ Indication of whether total actual expenditures or total of funds reserved was provided on the survey

Definitions:

- ❑ *Asset class* in the context of this indicator means one of the following classes for a water or wastewater utility:
  - — *Water treatment facilities* include all assets associated with treating source water to make it ready for distribution. They include those assets associated with disposal of solids accumulated during treatment.
  - — *Water distribution system* includes all piping, valves, hydrants, pump stations, storage facilities, service

taps and meters, and other appurtenances conveying treated water to customers.

- *Water miscellaneous assets* include surface and groundwater resources, source water storage facilities, office buildings, maintenance facilities, laboratories not associated with treatment process control, and land acquired to protect water resources.
- *Wastewater collection assets* include all piping, access holes, clean-outs, pumping facilities, and force mains used to convey wastewater to a central location for treatment.
- *Wastewater treatment facilities* include all assets at each facility used to treat wastewater, treat and dispose of solids, and protect air quality.
- *Wastewater miscellaneous assets* include office buildings, maintenance facilities, and laboratories not associated with process control.

Applicability:

These indicators apply to all water and wastewater utilities regardless of ownership, size, or customer base. Utilities report data for all asset categories important to their operations.

QualServe Business System:
Business Operations

QualServe Business Process Category:
Capital Improvement Planning
Plant and Property Management

Utility Business Architecture Category:
Construct Facilities and Infrastructure
Manage Real Estate and Facilities

Balanced Scorecard Measure Type:
Internal Process

GASB Indicator Type:
Service Efforts

Return on Assets

Purpose:

To measure the financial effectiveness of the utility.

Discussion:

All utilities are interested in their financial health. Investor-owned and enterprise-fund utilities are particularly sensitive to this indicator, seeking higher ratios where possible. Some publicly owned utilities operating within a larger budget may find value for this indicator when justifying organizational improvements. Others may see little immediate value for this indicator.

Mathematical Expression and Measurement Tips:

$$\text{return on assets} = \frac{\text{net income}}{\text{total assets}}$$

Data Needed to Support the Calculation:

- ❑ Net income
- ❑ Total assets

Definitions:

- ❑ *Net income* is titled as such on the utility's financial statement and is defined and designated by the Governmental Accounting Standards Board (GASB) or the Financial Accounting Standards Board (FASB), as applicable to each specific utility.
- ❑ *Total assets* are the entire resources of the utility, both

tangible and intangible. They are categorized as such on the utility's financial statement. They include the total value of properties and claims against others that are owned by the utility as expressed at original cost. Assets are defined and designated by the GASB or the FASB, as applicable to each specific utility. They include accounts receivable, cash, inventories, service delivery facilities (less depreciation), cost of easements, cost of water rights, and all other items of value owned by the utility.

Applicability:

This indicator is applicable to all water and wastewater utilities, regardless of customer base, size, or ownership. However, utilities that do not maintain financial statements, such as departments of city government and multiservice utilities, may have difficulty providing accurate data.

Additional Guidance:

During pilot tests of the survey and database, evaluate whether utilities are providing audited or estimated data to help decide whether data reported in actual surveys should be qualified.

During pilot tests of the survey and database, evaluate whether utilities see value for this indicator.

QualServe Business System:
Business Operations

QualServe Business Process Category:
Financial and Fiscal Planning
Strategic Planning

Utility Business Architecture Category:
Manage Finance and Accounting
Develop Business Plans

Balanced Scorecard Measure Type:
Financial

GASB Indicator Type:
Efforts and Accomplishments

Drinking Water Compliance Rate

Purpose:

To quantify the percentage of time each year that a water utility meets all of the health-related drinking water standards in the US National Primary Drinking Water Regulations.

Discussion:

The drinking water compliance rate is similar to the wastewater treatment effectiveness rate. It indicates the percent of time that a drinking water utility is in full compliance with all of the water quality contaminants and treatment techniques mandated for public water systems in the United States. It does not take into account additional parameters regulated by individual states, nor does it include violations of monitoring requirements. A utility measures its compliance relative only to those primary maximum contaminant levels and treatment techniques that apply to its operations.

The drinking water compliance rate uses simple tests of "in compliance" and "not in compliance." Thus, a utility that detects a contaminant at the maximum contaminant level (MCL) receives credit for being in compliance the same as if that contaminant had been present below the MCL or had not been detected.

The drinking water compliance rate does not take into account secondary MCLs. These are recommended, nonmandatory drinking water quality parameters in the United States. These parameters, which are associated with the aesthetic quality of drinking water, are covered through another recommended performance indicator, the technical quality of service complaints.

As an internal performance measure, the drinking water compliance rate allows a utility to gauge its compliance with health-related drinking water quality parameters. Anything less than 100 indicates at least one excursion beyond the MCL, for at least one primary drinking water quality standard or treatment technique, for at least 1 day. The indicator does not identify the excursion(s).

As a performance indicator for comparative analysis, the drinking water compliance rate allows a utility to gauge its compliance with health-related drinking water parameters relative to other water utilities reporting data into the comparative analysis system. Since most if not all of this information is readily available through Consumer Confidence Reports published by utilities in the United States, it is recommended that data be attributed.

The categories of potential drinking water contaminants listed below are included in the calculation:

- ❑ Microbiologicals
- ❑ Turbidity
- ❑ Disinfectant residuals in the distribution system
- ❑ Trihalomethanes and haloacetic acids
- ❑ Inorganic chemicals
- ❑ Organic chemicals
- ❑ Treatment techniques

To calculate the compliance rate, a utility simply notes and tallies all days during which it was in full compliance with applicable primary MCLs and treatment techniques throughout its system. The compliance rate is calculated as shown below and defines the percentage of the year that the utility was in compliance with all federally mandated, health-related drinking water quality parameters.

Mathematical Expression and Measurement Tips:

$$\text{drinking water compliance rate (\%)} = \frac{(100)(\text{number of days in full compliance})}{365 \text{ days}}$$

Data Needed to Support the Calculation:

Number of calendar days during which the utility was in full compliance with all drinking water quality and treatment technique requirements contained in the National Primary Drinking Water Regulations

Definitions:

Definitions of regulated contaminants and treatment techniques are contained in 40 CFR Part 141 (the National Primary Drinking Water Regulations).

- ❑ *Noncompliance* refers to exceedance of an applicable primary MCL or less than full compliance with an applicable treatment technique.

Applicability:

This indicator is applicable to all public water systems regardless of ownership, size, or customer base.

Additional Guidance:

Only utilities that have completed all required monitoring during the reporting period should provide data for this indicator.

Since the calculation of days in full compliance can be cumbersome, data surveys should include a tabulation form that includes all drinking water quality primary contaminant and treatment technique requirements. This will assist utility staff with compiling accurate data.

After much consideration and debate among the study team and workshop participants, this indicator is recommended as a substitute for the elusive "water quality index" originally proposed but set aside due to complexity. Conceptually, the water quality index received strong support from workshop participants and peer reviewers. Development of such an indicator seems warranted and may require a dedicated project. In the short term, the drinking water compliance rate is recommended as a companion to the wastewater treatment effectiveness rate for pilot testing and, if shown to be of value, for inclusion in the suite of performance indicators.

QualServe Business System:
Water Operations

QualServe Business Process Category:
Water Quality Management
Water Treatment
Distribution Operations and Maintenance

Utility Business Architecture Category:
Manage Compliance and Emergency Response
Water Treatment
Water Distribution

Balanced Scorecard Measure Type:
Internal Process

GASB Indicator Type:
Service Accomplishments

27 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

Water Distribution System Integrity

Purpose:

To quantify the condition of the water distribution system, expressed as the total annual number of leaks and pipeline breaks per 100 miles of distribution piping.

Discussion:

For a water utility, distribution system integrity has importance for health, customer service, operations, and asset management reasons. This indicator quantifies the total number of water distribution system breaks and leaks requiring repair per 100 miles of piping. Low-frequency ratings are desirable.

Mathematical Expression and Measurement Tips:

integrity rate =

$$\frac{100\ (\text{total number of leaks} + \text{total number of breaks})}{\text{total miles of distribution piping}}$$

By definition, leaks and breaks are distinctly different events. If an event requires repair, it fits one category or the other.

Data Needed to Support the Calculation:

- Total miles of distribution piping
- Total number of leaks during the reporting period
- Total number of pipeline breaks experienced during the reporting period

Definitions:

- *Distribution piping* includes all pipes, valves, hydrants, and other appurtenances conveying treated water between treatment facilities and the final point of utility control over customer service connections. Customer service piping downstream of that point is not part of the distribution system.
- *Leak* means an opening in a distribution pipeline, valve, hydrant, appurtenance, or service connection that is continuously losing water. The rate of leakage may be stable or progressive.
- *Break* means physical damage to a pipe, valve, hydrant, or other appurtenance that results in an abrupt loss of water.

Applicability:

This indicator is applicable to all water utilities, regardless of customer base, size, or ownership. Smaller utilities are likely to have frequency rates that vary significantly with each reporting period due largely to the small quantities of distribution piping.

Additional Guidance:

Utilities should consider supplementing this indicator with other internal measures, which can be useful for trend analysis and when sharing benchmarking studies with other utilities. The types of data to consider tracking for each leak or break include

- Leak or break characteristics such as pinhole corrosion, pipe split, joint leak, contractor damage, circumferential break, etc.
- Pipe material, diameter, and age
- Pipeline depth

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 Accomplishment

Operations and Maintenance Cost Ratios: Water and Wastewater

Purpose:

To quantify all utility costs related to operations and maintenance (O&M), with break-outs of those costs related to water or wastewater treatment, as related to volumes processed and the number of active customers. Three indicators each are proposed for water and wastewater utilities.

These are O&M cost per account, O&M cost per million gallons processed, and direct cost of treatment per million gallons.

Discussion:

These related indicators tally the cost of O&M per account and per million gallons of water or wastewater processed. Additional subsets are possible for utilities maintaining detailed cost-accounting systems. It is likely that many utilities already maintain data associated with direct costs of water or wastewater treatment, in which case those two subsets are recommended for immediate implementation. Data for appropriate major operations such as water resource acquisition and maintenance, water distribution, wastewater collection, and watershed management can be added as the indicator system grows.

For utilities following Governmental Accounting Standards Board (GASB) or Financial Accounting Standards Board (FASB) practices, the required total O&M cost information can be found on the audited financial statement. Use of the GASB and FASB definitions where possible will help to ensure compatibility among utilities.

Depreciation is excluded from total O&M costs to help normalize responses and to take into account the fact that some utilities do not depreciate assets, or are just now beginning to depreciate assets, and may not have an accurate assessment of total assets.

Obviously, single-service utilities will keep data on only water or wastewater operations. Utilities that provide more than a single service may maintain only aggregate data. However, it is recommended that surveys for information to support these indicators request separate submittals for water and wastewater service. This will allow all water and wastewater utilities to compare data and identify study partners.

Utility customer profiles can provide useful explanatory information for this indicator, especially if there are numerous large commercial/industrial and/or wholesale customers. It is recommended that surveys ask for information on volumes of service attributed to these three customer sectors: residential, commercial/industrial, and wholesale.

The indicators become even more useful where utility accounting practices allow apportioning total O&M costs among residential, commercial, and wholesale customers. Utilities should be asked for these additional breakdowns if they are available and if implementation resources allow.

Mathematical Expressions and Measurement Tips:

$$\text{O\&M cost per account} = \frac{\text{total O\&M costs (less depreciation)}}{\text{total number of active customer accounts}}$$

O&M cost per million gallons distributed =

$$\frac{\text{total O\&M costs (less depreciation)}}{\text{total volume processed during the reporting period (in million gallons)}}$$

direct cost of treatment per million gallons distributed =

$$\frac{\text{total direct O\&M costs for water and/or wastewater treatment}}{\text{total volume processed during the reporting period (in million gallons)}}$$

Data Needed to Support the Calculation:

- *Total operations and maintenance costs* (less depreciation) are compiled in accordance with GASB and FASB statements of accounting practices. Specific guidance can be developed and included with data surveys.
- *Total number of active accounts* is the total of customer accounts
- *Total volume processed* in million gallons
- *Total direct O&M costs* for water and/or wastewater treatment (including all supporting functions)

Definitions:

- *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 service connection.
- *Total volume processed* (in million gallons) refers to the total volume of water and/or wastewater distributed by the utility during the reporting period. It is reported in millions of gallons.
- *Total direct O&M costs* for water and/or wastewater treatment (including all supporting functions) is the total costs for salaries, direct benefits, and direct O&M costs associated with treatment. It includes pumping costs only within treatment facilities, not those associated with delivery of water or wastewater to treatment facilities nor those associated with discharge of treated solids or liquids leaving wastewater treatment facilities. Costs of solids treatment are included.

Applicability:

This indicator applies at all water and wastewater utilities. Those with financial records that do not follow FASB or GASB practices may find it more complex to provide accurate information for O&M costs. It may be useful to ask respondents to indicate whether their accounting practices adhere to FASB, GASB, or neither and whether the utility's financial records have been audited.

Additional Guidance:

Added flexibility for comparison will be gained if multiple-service utilities can report separate data for water and wastewater operations and if all utilities can break out costs of serving residential, commercial/industrial, and wholesale customers.

Depreciation has been purposefully eliminated from the calculation of this indicator to preserve the focus on current costs of O&M activities.

QualServe Business System:

Water Operations
Wastewater Operations

QualServe Business Process Category:

Water Resources Management
Water Treatment O&M
Water Distribution O&M
Water Quality Management
Wastewater Collection O&M

Wastewater Treatment O&M
Biosolids Management
Watershed Management
Permitting Air and Water Quality

Utility Business Architecture Category:

Protect Water Sources
Produce Water
Treat Water
Transmit Water
Distribute Water
Collect Wastewater
Collect Stormwater
Treat Wastewater
Dispose of Solids
Monitor Sewer Use

Balanced Scorecard Measure Type:

Financial

GASB Indicator Type:

Relating Efforts and Accomplishments

Planned Maintenance Ratios: Water and Wastewater

Purpose:

To allow comparison of how effectively utilities are investing in planned maintenance.

Discussion:

Planned maintenance includes preventive and predictive maintenance. Preventive maintenance is performed according to a predetermined schedule rather than in response to failure. Predictive maintenance is initiated when secondary monitoring signals from activities such as vibration and oil analysis indicate that maintenance is due. All other maintenance is categorized as corrective (i.e., maintenance resulting from an asset that is no longer providing reliable service such as a breakdown, blockage, or leakage). At some utilities corrective maintenance may be known as reactive maintenance.

Planned maintenance is preferable for assets for which the cost of repairs is high relative to the cost of planned maintenance. The avoided cost includes both the cost of repair and the cost consequences of the service disruption, with the latter including an allowance for customer costs. Assets are often defined as critical based on the cost consequences of service disruption.

Not all maintenance should be planned. In the case of noncritical assets for which the cost of planned maintenance is expected to be higher than the cost consequences of failure, total reliance on corrective maintenance may be good business practice. On a utility-wide basis, corrective maintenance might be appropriate up to 30 percent of the time.

There are alternatives to how this indicator might be calculated. Costs may be preferable because their use would encourage utilities to make business decisions based on total cost. However, the reliability of costs is uncertain. It is likely that there is more variability to utility tracking of cost than to utility tracking of hours. Unfortunately, not all utilities track hours. Thus, it is recommended that ratios be calculated on whichever data sets the utility can provide.

Mathematical Expression and Measurement Tips:

$$\text{planned maintenance ratio in percent (hours)} = \frac{(100)\ \text{hours of planned maintenance}}{\text{hours of planned maintenance} + \text{corrective maintenance}}$$

planned maintenance ratio in percent (cost) =

$$\frac{(100)\ \text{cost of planned maintenance}}{\text{cost of planned maintenance} + \text{corrective maintenance}}$$

Utilities should be asked to provide both sets of data in early surveys so a decision can be made on which data are most readily available. Once that is established, it might be possible to delete one of these indicators from the system.

Data Needed to Support the Calculation:

- Total hours of planned maintenance undertaken by the utility and contractors working on behalf of the utility during the reporting period
- Total hours of corrective maintenance undertaken by the utility and contractors working on behalf of the utility during the reporting period
- Total cost of planned maintenance during the reporting period, including costs of contracts for planned maintenance
- Total cost of corrective maintenance undertaken by the utility, including costs of contracts for corrective maintenance

Definitions:

- *Planned maintenance* is all maintenance undertaken in advance of asset failure. Planned maintenance may be predictive or preventive. Total hours should include employee hours such as sick time and overtime.
- *Corrective maintenance* is all maintenance undertaken after asset failure. Total hours should include employee hours such as sick time and overtime.

Applicability:

This indicator is applicable to all water and wastewater utilities, regardless of customer base, size, or ownership.

Users of this data should be cautioned that there are a variety of maintenance management systems in use at utilities. Many utilities have more than one system. Each system may be configured differently relative to how maintenance activities are classified and how work hours are recorded. Thus, the reliability of reported data is likely to vary.

Additional Guidance:

- Hours charged to maintenance work include all time charged to maintenance work orders for travel, obtaining tools and parts, and for completing the work. Do not include time spent in training, meetings, or similar activities not directly related to a maintenance work order. Use similar limitations for cost data.
- For joint water/wastewater utilities, usefulness will increase if data are provided separately for water and wastewater maintenance.

QualServe Business System:

Water Operations
Wastewater Operations
Business Operations

QualServe Business Process Category:

Water Resources Management
Water Treatment O&M
Water Distribution O&M
Wastewater Collection O&M
Wastewater Treatment O&M
Biosolids Management
Plant and Property Management

DEPARTMENT OF WATER
County of Kaua'i

"Water has no Substitute – Conserve It!"

Manager's Report No. 11 - 65

March 24, 2011

Re: Hiring Legal Assistance in negotiating the Kahili High Level Well Right of Entry

Your approval is requested to hire legal assistance in negotiating the Kahili High Level Well Right of Entry.

The Kahili High Level Well project, as is any exploratory drilling project is highly speculative in nature and carries a high level of financial risk. As a result it usually does not warrant giving away the results before they are known. Additionally, DOW must have an unfettered right to develop what it finds as a result of its exploration.

The draft agreement reserves rights which we feel go to the risk taker. No one is prevented from joining in the risk and enjoying the fruits of the risk. The publics rights must be protected in this matter and we feel specialized legal assistance is needed in the negotiation of this Right of Entry.

Cost for this would be in the range of $8K-$16K or 40 hours at $200 to $400 per hour.

After the budget amendment request in Manager's Report No. 11-60, there will be $40 K remaining in the legal assistance and liaison funds budget.

This item is listed for executive session should the Board feel it is necessary.

Respectfully submitted,

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

DRC/cab
Mgrrp_Hiring Legal Assistance in negotiating the Kahili High Level Well Right of Entry (3-24-11):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

New Business

DEPARTMENT OF WATER
County of Kaua'i

"Water has no Substitute – Conserve It!"

Manager's Report No. 11-69

May 26, 2011

Subject: Resolution #12 *(10/11)* for Refunding of the 2001County of Kauai G.O. Bonds to Series 2011A.

Recommendation:
Board approval of the attached resolution which allows refunding of DOW portion of County 2001 GO bonds with 2011A series bonds is requested.

It is estimated there will be a $50k per year saving over the current debt service payments. There is a 2% threshold of minimum savings over current debt service which the attached County Councils Refunding Resolution requires before allowing refinancing. Also attached is the Bond Issuance certificate

Funding:
None

Respectfully submitted,

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

Attachments: Resolution #12 -Water Resolution
Council Refunding Resolution
Bond Issuance Certificate

DRC/cab
Mgrrp-Refunding of the 2001 County of Kauai G.O. Bonds to Series 2011A (5-26-11):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

RESOLUTION NO. 12

(2010-11)

REQUESTING THE ISSUANCE AND SALE OF REIMBURSABLE GENERAL OBLIGATION BONDS OF THE COUNTY OF KAUA'I, STATE OF HAWAI'I, FOR THE PURPOSE OF REFUNDING ALL OR A PORTION OF THE OUTSTANDING GENERAL OBLIGATION BONDS, SERIES 2001A PREVIOUSLY ISSUED BY THE COUNTY TO FINANCE OR REFINANCE IMPROVEMENTS AND BETTERMENTS FOR THE WATERWORKS SYSTEM OF THE COUNTY

WHEREAS, the Department of Water (the "Department"), consisting of a Board of Water Supply (the "Board"), Manager and Chief Engineer and the necessary staff, is a department of the County of Kaua'i (the "County") established under the Charter of the County to manage and operate the waterworks system of the County (the "Waterworks System"); and

WHEREAS, the County has heretofore issued $45,360,000 aggregate principal amount of General Obligation Bonds, Series 2001A (the "2001A Bonds"), including $11,725,000 aggregate principal amount of reimbursable general obligation bonds (the "2001A Waterworks Bonds") which were issued to finance or refinance certain improvements and betterments to and extensions of the Waterworks System; and

WHEREAS, the 2001A Bonds are currently outstanding in the aggregate principal amounts of $26,695,000, including $5,240,000 of outstanding 2001A Waterworks Bonds; and

WHEREAS, pursuant to Ordinance No. 891, as adopted by the Council of the County (the "Council") on February 17, 2010 and approved by the Mayor of the County on February 18, 2010 ("Ordinance No. 891"), the County has authorized has authorized the issuance of general obligation refunding bonds from time to time for the purpose of refunding outstanding general obligation bonds previously issued by the County, subject to the condition that any such issuance shall result in debt service savings with a present value not less than two percent (2%) of the callable par amount of the bonds to be refunded; and

WHEREAS, the Director of Finance of the County has advised, based on current market conditions, that a refunding of all or a portion of the outstanding 2001A Bonds, including the 2001A Waterworks Bonds, would be expected to produce debt service savings in excess of the threshold required by Ordinance 891;

NOW, THEREFORE, BE IT RESOLVED by the BOARD OF WATER SUPPLY of the County of Kaua'i, State of Hawai'i:

SECTION 1. The issuance and sale of up to $5,450,000 aggregate principal amount of reimbursable general obligation bonds (the "Refunding Bonds") to refund all or a portion of the outstanding 2001A Waterworks Bonds is hereby approved. The Refunding Bonds may be issued and sold in one or more series, at such time or times and upon such terms as the Director of Finance shall determine in accordance with Ordinance No. 891; provided, however, that such refunding shall produce debt service savings with a net present value not less than two percent (2%) of the

callable par amount of the 2001A Waterworks Bonds to be refunded as required by Ordinance 891. The Refunding Bonds of a series may be issued separately or as part of a larger issue of general obligation bonds of the County, as determined by the Director of Finance. The Refunding Bonds shall be in the form prescribed by Ordinance No. 891 authorizing such Refunding Bonds.

SECTION 2. The Refunding Bonds shall be deemed issued for a public undertaking from which revenues are derived, to wit: for the Waterworks System of the County. The General Fund of the County shall be reimbursed for the payment of the principal of and the interest and premium (if any) on the Refunding Bonds, at least annually as determined by the Director of Finance, from the revenues of the Waterworks System remaining after the costs of operation, maintenance, and repair of said Waterworks System have been paid and the required payments of the principal of and the interest and premium (if any) on all revenue bonds, if any, of the Department have been made.

SECTION 3. The Board hereby covenants and agrees to establish, maintain, collect, and enforce a schedule of rates, fees, tolls and charges for connection to and use of the Waterworks System, which schedule shall be sufficient to assure that the revenue thereby produced, together with any other funds which may be lawfully available, shall pay all reasonable costs and expenses of operation, maintenance and repair of the Waterworks System, shall pay the principal of and the interest and premium (if any) on any revenue bonds of the Department, and shall pay or reimburse the General Fund of the County for payments of the principal of and the interest and premium (if any) on the Refunding Bonds, promptly as the same become due and payable, respectively. The Board hereby specifically consents to the application of such revenues of the Waterworks System to pay or reimburse the General Fund of the County for payments of the principal of and the interest and premium (if any) on the Refunding Bonds.

SECTION 4. All resolutions or parts of resolutions heretofore adopted by this Board which are in conflict or inconsistent with the provisions of this resolution be and the same are hereby repealed to the extent of such conflict or inconsistency. This resolution shall take effect upon the adoption thereof, and a certified copy hereof shall be delivered to the Mayor and to the Council.

Approved as to Form and Legality:

_____

County Attorney, County of Kaua'i

CERTIFICATE

I hereby certify that the BOARD OF WATER SUPPLY, County of Kaua'i, adopted the foregoing Resolution No. 12 at a regular meeting held on May 26, 2011, by the following vote of the Board:

FOR ADOPTION: TOTAL:

AGAINST ADOPTION: TOTAL:

ABSENT & NOT VOTING: TOTAL:

By: _____
Name:
Title:

DRAFT 5/04/2011

COUNTY COUNCIL
COUNTY OF KAUA'I

RESOLUTION NO. ___

RESOLUTION APPROVING THE ISSUANCE OF GENERAL OBLIGATION REFUNDING BONDS TO REFUND ALL OR A PORTION OF THE OUTSTANDING GENERAL OBLIGATION BONDS, SERIES 2001A PREVIOUSLY ISSUED BY THE COUNTY OF KAUA'I

WHEREAS, pursuant to Ordinance No. 891 (the "Bond Ordinance"), as adopted by the Council of the County of Kaua'i (the "County") on February 17, 2010 and approved by the Mayor of the County on February 18, 2010, the County has authorized the issuance of general obligation refunding bonds ("Refunding Bonds") from time to time for the purpose of refunding outstanding general obligation bonds previously issued by the County, as determined by the Director of Finance of the County to be in the best interest of the County; and

WHEREAS, such authorization is subject to the condition that any issuance of Refunding Bonds shall result in debt service savings with a present value not less than two percent (2%) of the callable par amount of the bonds to be refunded; and

WHEREAS, the Director of Finance of the County has advised, based on current market conditions, that a refunding of all or a portion of the County's General Obligation Bonds, Series 2001A, currently outstanding in the aggregate principal amount of $26,695,000 (the "2001A Bonds"), would be expected to produce debt service savings in excess of the threshold required by the Bond Ordinance; and

WHEREAS, the Council of the County intends hereby to approve the issuance of Refunding Bonds for the purpose of refunding all or a portion of the outstanding 2001A Bonds.

NOW, THEREFORE, BE IT RESOLVED by the Council of the County of Kaua'i that the issuance and sale of up to $27,750,000 aggregate principal amount of Refunding Bonds to refund all or a portion of the outstanding 2001A Bonds is hereby approved, such Refunding Bonds to be issued and sold in one or more series, at such time or times and upon such terms as the Director of Finance may determine to be in the best interest of the County; provided, however, that such refunding shall produce debt service savings with a net present value not less than two percent (2%) of the callable par amount of the 2001A Bonds to be refunded as required by the Bond Ordinance.

BE IT FURTHER RESOLVED that the Clerk be and is directed to transmit copies of this resolution to the Director of Finance of the County.

INTRODUCED BY:

_____

	Aye	Nay	Exc	Recused
Total				

Certificate of Adoption

We hereby certify that Resolution No. _____ was adopted by the Council of the County of Kaua'i, State of Hawai'i, Lihu'e, Kaua'i, Hawai'i, on

_____ _____

County Clerk *Chairman & Presiding Officer*

Dated

DRAFT 4/21/2011
Closing Item __

CERTIFICATE

OF THE DIRECTOR OF FINANCE OF THE COUNTY OF KAUA'I, STATE OF HAWAI'I, PROVIDING FOR THE ISSUANCE AND SALE AND FIXING THE FORM AND DETAILS OF $_____ PRINCIPAL AMOUNT OF GENERAL OBLIGATION BONDS OF SAID COUNTY; CONFIRMING THE SALE OF SAID BONDS; AND PROVIDING FOR OTHER RELATED MATTERS.

I, the undersigned, WALLACE G. REZENTES, JR., being the duly appointed Director of Finance (the "Director of Finance") of the County of Kaua'i (the "County"), and under Part I of Chapter 47, Hawai'i Revised Statutes, as amended, and the Charter of the County, the officer having the responsibility for issuing, selling, paying interest on and redeeming bonds, notes and other instruments of indebtedness of the County authorized by the Council thereof, DO HEREBY CERTIFY as follows:

ARTICLE I
DEFINITIONS

Section 101. Definitions. Unless the context shall clearly indicate some other meaning, the terms defined in this Section shall, for all purposes of this Certificate and of any certificate, resolution or other instrument supplemental hereto and of any opinion or instrument or other document herein mentioned, have the meanings herein specified, with the following definitions to be equally applicable to both the singular and plural forms of any of the terms herein defined.

"Beneficial Owner" shall mean, when used with reference to the Book-Entry Only System, the person who is considered the beneficial owner of the Bonds pursuant to the arrangements for book-entry determination of ownership applicable to DTC.

"Bond Ordinance" shall mean Ordinance No. 891 of the County, as enacted by the Council of the County on February 17, 2010 and approved by the Mayor of the County on February 18, 2010.

"Bond Register" shall mean the books kept by the Registrar hereunder for the registration and transfer of the Bonds.

"Bonds" shall mean the General Obligation Bonds, Series 2011A, issued hereunder in substantially the form attached as Exhibit A hereto.

"Book-Entry Only System" shall mean the book-entry-only system of transfer maintained by DTC, as herein described, under which transfers of beneficial ownership of the Bonds initially shall be made only through DTC and its Depository Participants in accordance with rules specified by DTC.

"Code" shall mean the Internal Revenue Code of 1986, as amended.

"Depository Participant" shall mean a member of, or participant in, the Securities Depository.

"DTC" shall mean The Depository Trust Company, New York, New York.

"Escrow Agent" shall mean _____, and any successor to its duties as escrow agent for the Refunded Bonds.

"Escrow Agreement" shall mean the Escrow Deposit Agreement dated as of _____, 2011 between the County and the Escrow Agent pursuant to which the County has established the Escrow Fund.

"Escrow Fund" shall mean the escrow fund established under the Escrow Agreement for the purpose of refunding the Refunded Bonds.

"Holder" or "Bondholder" shall mean any person who shall be the registered owner, or his duly authorized attorney-in-fact, representative or assigns, of any Bond.

"Letter of Representations" shall mean the blanket letter of representations heretofore delivered by the County to DTC to effect the Book-Entry Only System, as applicable to the Bonds pursuant.

"Outstanding" or "outstanding" shall mean all Bonds which have been authenticated and delivered by the Registrar under this Certificate, except: (a) Bonds cancelled after purchase in the open market or because of payment at maturity; and (b) Bonds in lieu of which others have been authenticated and delivered hereunder.

"Paying Agent" shall mean _____, and any successor to its duties as paying agent for the Bonds.

"Refunded Bonds" shall mean the County's outstanding General Obligation Bonds, Series 2001A, to be refunded with proceeds of the Bonds.

"Registrar" shall mean _____, and any successor to its duties as registrar and transfer agent for the Bonds.

"Registrar and Paying Agent Agreement" shall mean the [Registrar and Paying Agent Agreement] dated as of _____ between the County and the Registrar and Paying Agent (or any successor agreement) pursuant to which the Registrar and Paying Agent has been appointed as the registrar, transfer agent and paying agent for the Bonds.

"Securities Depository" shall mean DTC and its successors and assigns or, (i) if the then-Securities Depository resigns from its functions as depository of the Bonds, or (ii) if County discontinues use of the then-Securities Depository hereunder, any other securities depository which agrees to follow the procedures required to be followed by a securities depository in connection with the Bonds and which is selected by the County.

"Tax Certificate" shall mean the Tax Certificate delivered at the closing for the Bonds regarding certain matters pertaining to the Bonds under applicable provisions of the Code and the regulations promulgated thereunder.

"Water Department" shall mean the Department of Water of the County.

"Water Department Resolution" shall mean Resolution No. __ of the Board of Water Supply of the County, adopted on _____, 2011, approving the issuance of the Bonds to refund the portion of the Refunded Bonds previously issued to finance or refinance projects for the Water Department.

ARTICLE II
AUTHORITY FOR ISSUANCE; FINDINGS AND DETERMINATIONS

Section 201. Authority for Issuance. The issuance of the Bonds has been duly authorized pursuant to the Bond Ordinance. Among other things, the Bond Ordinance: (a) authorizes the issuance of general obligation bonds to refund all or a portion of the outstanding general obligation bonds previously issued by the County, including the Refunded Bonds; and (b) authorizes the Director of Finance to make such arrangements as may be necessary or desirable for the sale of the foregoing bonds by negotiated sale, to determine the final terms and details of the Bonds and the offering and sale thereof, and to take such other actions as may be necessary or desirable in connection with the offering, sale and issuance of such bonds.

Section 202. Findings and Determinations. The Director of Finance hereby finds and determines as follows with respect to the issuance of the Bonds:

(a) The Bonds shall be issued and sold pursuant to Part I of Chapter 47, Hawaii Revised Statutes, as amended, the Charter of the County and the Bond Ordinance.

(b) The issuance of the Bonds, as provided herein, including the terms and details of the Bonds and the offering and sale thereof, is in compliance, or will be in compliance as of the delivery of the Bonds, with the applicable requirements of the Bond Ordinance, which remains in full force and effect as of the date hereof. Without limiting the generality of the foregoing, based on calculations provided by Merrill Lynch, Pierce, Fenner & Smith Incorporated, the refunding of the Refunded Bonds with proceeds of the Bonds will result in debt service savings with a present value of $_____, which exceeds two percent (2%) of the callable par amount of the Refunded Bonds as required by the Bond Ordinance.

(c) In reliance on representations made by the Water Department, the Board of Water Supply of the County has duly adopted the Water Department Resolution approving the issuance of the Bonds to refund the portion of the Refunded Bonds allocable to the financing or refinancing of projects for the Water Department, and the Water Department Resolution remains in full force and effect as of the date hereof.

(d) In consideration of the debt service savings resulting from the refunding of the Refunded Bonds, the issuance of the Bonds for the purpose of such refunding is in the best interest of the County.

ARTICLE III
TERMS AND DETAILS OF THE BONDS

Section 301. Terms and Details of the Bonds. The Bonds shall be issued and sold in a single series in the aggregate principal amount of $_____. The Bonds shall have the form and details, and be paid upon the terms and specifications, fixed and determined as provided in the Bond Ordinance and as hereinafter set forth:

(a) The Bonds shall be designated as the County's "General Obligation Bonds, Series 2011A" and shall be in substantially the form attached as Exhibit A hereto, subject to the further provisions of this Article III.

(b) The Bonds shall: (i) be dated the date of their initial issuance and delivery; (ii) be in fully registered form without coupons; (iii) be in authorized denominations of $5,000 or integral multiples thereof; and (iv) be numbered upwards consecutively from A-1 in order of their issuance.

(c) The Bonds shall mature on _____ 1 in each of the years and in the respective principal amounts, and shall bear interest at the respective rates per annum (computed on the basis of a 360-day year) payable on _____ 1, 201_ and semiannually on each _____ 1 and _____ 1 thereafter, as set forth below:

$____
Taxable General Obligation Bonds,
Series 2011A

Year	Amount Maturing	Interest Rate	Year	Amount Maturing	Interest Rate

Year	Amount Maturing	Interest Rate	Year	Amount Maturing	Interest Rate

Section 302. Redemption of Bonds. The Bonds shall be subject to redemption prior to maturity in accordance with the following:

(a) The Bonds maturing on or after _____, 20__ shall be subject to redemption prior to their stated maturity dates, at the option of the County, on and after ____, 20__, in whole or in part at any time, or in part from time to time in any order of maturity selected by the County and by lot within a maturity, at a redemption price equal to the principal amount of the Bonds to be redeemed plus accrued interest on such principal amount to the redemption date.

(b) Notice of redemption will be mailed, not less than thirty days prior to the date fixed for redemption, to each Holder of a Bond in whose name such Bond is registered upon the Bond Register as of the close of business on the forty-fifth (45th) day (whether or not a business day) next preceding the date fixed for redemption at his address as shown on such Bond Register. The failure of the Holder of a Bond to receive such notice by mail or any defect in such notice will not affect the sufficiency of the proceedings for the redemption of Bonds. Any notice of redemption may state that such redemption is conditional upon the receipt by the Paying Agent, on or before the date fixed for redemption, of moneys sufficient to pay in full the redemption price of the Bonds proposed to be redeemed. If the notice contains such condition, and moneys sufficient to pay in full the redemption price of the Bonds proposed to be redeemed shall not be received on or prior to the date fixed for redemption, such notice of redemption shall be null and void and of no force and effect, the County shall not redeem or be obligated to redeem any Bonds, and the Paying Agent shall give notice, in the same manner as notice of redemption is given, that moneys sufficient to pay in full the redemption price of the Bonds proposed to be redeemed were not received on or prior to the date fixed for redemption and such redemption did not occur. In the event of the failure to redeem, all Bonds surrendered for redemption shall be promptly returned to the holder or holders by the Paying Agent.

(c) If less than all of the Bonds of a maturity are to be selected for redemption, each Bond of such maturity in a denomination of $5,000 and each $5,000 principal portion of a Bond of such maturity in a denomination in excess of $5,000 shall have an equal probability of being selected for redemption. If any Bond is of a denomination in excess of $5,000, portions of the principal sum thereof equal to $5,000 or any integral multiple thereof may be redeemed, and if less than all of the principal sum thereof is to be redeemed, upon the surrender of such Bond to the Registrar, there shall be issued to the Holder thereof, without charge, one or more Bonds of like series, maturity and interest rate and in authorized denominations hereunder representing the unredeemed portion of the Bond surrendered for partial redemption.

(f) If any Bond (or any portion of the principal sum thereof) be redeemable and shall have been duly called for redemption and notice of such redemption duly given as provided in

this Section, and if on or before the date fixed for such redemption payment of the principal sum thereof to be redeemed, the redemption price payable upon such redemption and the interest accrued on the principal sum to be redeemed to the date fixed for such redemption shall have been duly made or provided for, then such Bond (or the portion of the principal sum thereof to be redeemed) shall become due and payable upon such date fixed for redemption and interest shall cease to accrue and become payable from and after the date fixed for such redemption on the principal sum thereof to be redeemed.

(g) Any provision of this Section 302 to the contrary notwithstanding, portions of the Bonds which mature in the same year, but bear interest at different rates, shall not be treated as a single maturity of Bonds, but shall instead be treated as separate maturities corresponding to the portions bearing interest at different rates.

Section 303. *Registration of Bonds in the Book-Entry Only System.* The Bonds initially delivered will be eligible securities for the purposes of the Book-Entry-Only System of transfer maintained by DTC, and transfers of beneficial ownership of such Bonds shall be made only through DTC and its Depository Participants in accordance with rules specified by DTC. The County has heretofore delivered the Letter of Representations to DTC to effect the Book-Entry Only System for its general obligation bonds. The Letter of Representations, a copy of which is attached as Exhibit B hereto, remains in full force and effect and shall apply in all respects to the Bonds for so long as the Book-Entry Only System remains in effect. The following further provisions shall apply with respect to the Bonds while the Book-Entry Only System is in effect:

(a) The Bonds of each series shall be issued in the form of a separate single authenticated fully registered Bond for each maturity and interest rate, each in the principal amount of Bonds of such maturity, and shall be registered in the Bond Register in the name of the Securities Depository or its nominee, as agent for the County in maintaining the Book-Entry Only System. On the date of original delivery thereof, the Bonds shall be registered in the Bond Register in the name of CEDE & CO., as nominee of The Depository Trust Company.

(b) Except as provided in paragraph (c) or (d) below, the Bonds may be transferred, in whole but not in part, only to the Securities Depository or a nominee of the Securities Depository or to a successor Securities Depository appointed by the County or to a nominee of such successor Securities Depository. Each Bond shall bear a legend substantially to the following effect: "Except as otherwise provided in the Authorizing Certificate, this bond may be transferred, in whole but not in part, only to another nominee of the Securities Depository (as defined in the Authorizing Certificate) or to a successor Securities Depository or to a nominee of a successor Securities Depository." With respect to Bonds registered in the Bond Register in the name of CEDE & CO., as nominee of The Depository Trust Company, the County and the Paying Agent shall have no responsibility or obligation to any Depository Participant or to any Beneficial Owner (which means, when used with reference to the Book-Entry Only System, the person who is considered the beneficial owner of the Bonds pursuant to the arrangements for book-entry determination of ownership applicable to DTC) with respect to the following: (i) the accuracy of the records of DTC, CEDE & CO. or any Depository Participant with respect to any ownership interest in the Bonds, (ii) the delivery to any Depository Participant, any Beneficial Owner or any other person, other than DTC, of any notice with respect to the Bonds, including any notice of redemption, (iii) the payment to any Depository Participant, any Beneficial Owner

or any other person, other than DTC, of any amount with respect to the principal of or premium, if any, or interest on the Bonds, (iv) any consent given by the Securities Depository as registered owner, (v) subject to the redemption sections hereof, the selection by the Securities Depository or any Depository Participant of any beneficial owners to receive payment if Bonds are redeemed in part, or (vi) any other act or failure to act of the Securities Depository. The Paying Agent shall pay all principal of and premium, if any, and interest on the Bonds only to or upon the order of DTC, and all such payments shall be valid and effective fully to satisfy and discharge the County's obligations with respect to the principal of and premium, if any, and interest on such Bonds to the extent of the sum or sums so paid. No person other than DTC shall receive an executed Bond evidencing the obligation of the County to make payments of principal of and premium, if any, and interest pursuant to this Certificate. Upon delivery by DTC to the Paying Agent of written notice to the effect that DTC has determined to substitute a new nominee in place of CEDE & CO., the words "CEDE & CO." in this Certificate shall refer to such new nominee of DTC.

(c) Upon receipt by the County and the Paying Agent of written notice from DTC to the effect that DTC is unable or unwilling to discharge its responsibilities, the Paying Agent shall issue, transfer and exchange Bonds as requested by DTC in appropriate amounts, and whenever DTC requests the County and the Paying Agent to do so, the Paying Agent and the County will cooperate with DTC in taking appropriate action after reasonable notice (i) to arrange for a substitute bond depository willing and able upon reasonable and customary terms to maintain custody of the Bonds, or (ii) to make available Bonds registered in whatever name or names the Holders of the Bonds transferring or exchanging such Bonds shall designate.

(d) In the event the County determines that it is in the best interests of the County to discontinue the Book-Entry Only System, or that the interests of the Beneficial Owners might be adversely affected if the Book-Entry Only System is continued, or that it is in the best interest of the Beneficial Owners that they be able to obtain certificates representing the Bonds (the County undertakes no obligation to make any investigation to determine the occurrence of any events that would permit it to make any such determination), the County may so notify DTC and the Paying Agent, whereupon DTC will notify the Depository Participants of the availability through DTC of certificates. In such event, the Paying Agent shall issue, transfer and exchange certificates as requested by DTC in appropriate amounts and in authorized denominations. The Paying Agent shall deliver such certificates representing the applicable Bonds to the persons in whose names such Bonds are so registered as promptly as possible.

(e) Notwithstanding any other provision of this Certificate to the contrary, so long as any Bond is registered in the name of CEDE & CO., as nominee of DTC, all payments with respect to the principal of and premium, if any, and interest on such Bond and all notices with respect to such Bond shall be made and given, respectively, to DTC as provided in the Letter of Representations.

(f) Notwithstanding any provision in this Certificate to the contrary, so long as all of the Bonds Outstanding of a series are held in the Book-Entry Only System, if less than all of such Bonds of any one maturity bearing the same interest rate are to be redeemed upon any redemption of Bonds hereunder, the particular Bonds or portions of Bonds of such maturity and interest rate to be redeemed shall be selected by DTC in such manner as DTC may determine.

Section 304. Paying Agent and Registrar. _____ is hereby appointed Registrar and Paying Agent for the Bonds pursuant to the terms and conditions specified herein and the further terms and conditions specified in the Registrar and Paying Agent Agreement attached as Exhibit C hereto. The Director of Finance hereby finds and determines the form and terms of the Registrar and Paying Agent Agreement to be appropriate and in the best interest of the County.

Section 305. Payment of Bonds. Principal of and premium, if any, on the Bonds shall be payable upon surrender thereof at the office of the Paying Agent. Subject to such different arrangements as may be agreed upon with DTC or any successor depository, interest on the Bonds shall be payable by check mailed to each Holder of a Bond in whose name such Bond is registered upon the Bond Register as of the close of business on the fifteenth (15th) day (whether or not a business day) of the calendar month next preceding each interest payment date at such Holder's address as it appears on the Bond Register kept at the office of the Registrar. Principal of, and interest and premium, if any, on the Bonds shall be payable in any coin or currency of the United States of America which at the time of payment is legal tender for public and private debts.

Section 306. Transfers and Exchanges; Authentication; CUSIP Numbers.

(a) The Registrar will cause the Bond Register to be kept at its designated office for the registration and transfer of the Bonds. Each Bond will be transferable or exchangeable only upon the Bond Register by the Holder thereof or by such Holder's attorney duly authorized in writing, upon presentation and surrender of such Bond to the Registrar, together with a written instrument of transfer satisfactory in form to the Registrar and duly executed by the Holder or such Holder's duly authorized attorney. Upon the surrender of any Bond or Bonds for transfer or exchange, the Registrar will redeliver in the name of the transferee or exchangee one or more new Bond or Bonds of the same aggregate principal amount, maturity and interest rate as the surrendered Bond or Bonds, in any denomination authorized hereby and in the manner and subject to the conditions set forth herein. All transfers and exchanges will be made without expense to the Holder of such Bond, except that the Registrar will require the payment by the Holder of the Bond requesting such transfer or exchange of any tax or other governmental charges required to be paid with respect to such transfer or exchange. All Bonds surrendered for transfer or exchange will be cancelled. All transfers or exchanges of Bonds will be subject to such provisions as may prescribed from time to time by the Director of Finance and the Registrar. The County, the Registrar and the Paying Agent may deem and treat the person in whose name a Bond is registered upon the Bond Register as the absolute owner of such Bond for the purpose of receiving payment of the principal thereof, premium, if any, and interest thereon and for all other purposes, and they shall not be affected by any notice to the contrary.

(b) The Bonds will bear thereon a certificate of authentication duly executed by the Registrar, in the form set forth in Exhibit A hereto. At any time and from time to time, the County may deliver Bonds executed as aforesaid to the Registrar, and the Registrar will at the written order and direction of the Director of Finance in the case of the Bonds initially delivered, authenticate and deliver the Bonds, not to exceed the aggregate principal amount of the Bonds sold by the County hereunder and outstanding at any time. Upon such authentication of each Bond, the Registrar will endorse on such Bond the date of authentication. No order or direction of the County or any other document shall be necessary to authorize authentication of Bonds

delivered in accordance with the provisions hereof upon transfers, exchanges or redemption. Only such Bonds as shall bear thereon such certificate of authentication, duly executed by the Registrar, shall be valid or obligatory for any purpose. Such certificate of authentication upon any Bond executed by the Registrar on behalf of the County will be conclusive and the only evidence that the Bond so authenticated has been duly authenticated and delivered. Notwithstanding the foregoing, a certificate of authentication shall not be required for any Bond if the Director of Finance is serving as Registrar and if such Director has manually signed the Bond in question.

(c) CUSIP identification numbers may be printed upon the Bonds. Such numbers and the printing and use thereof shall be subject in all respects to the provisions of Section 47-10, Hawaii Revised Statutes.

Section 307. Execution and Form of Bonds. So long as the Bonds are in book-entry form, the Bonds shall be typewritten or otherwise produced and shall be signed by the manual or facsimile signatures of the Mayor and the Director of Finance of the County, and shall be impressed with, or bear a facsimile of, the seal of the County. If the events described in Section 303(c) or (d) shall occur, the Bonds shall be lithographed or steel engraved, shall bear the facsimile signatures of the Mayor and Director of Finance of the County, and shall bear a facsimile of the seal of the County. The Bonds, including the Certificate of Authentication, Instrument of Assignment and Statement of Insurance thereon, shall be in substantially the form set forth in Exhibit A hereto; subject to such variations, additions and changes in the form of the Bonds as the Director of Finance may deem necessary and advisable if the events described in Section 303(c) or (d) shall occur.

ARTICLE IV
SALE OF BONDS; APPLICATION OF SALE PROCEEDS; ESTABLISHMENT OF ESCROW FUND

Section 401. Sale of Bonds. The Director of Finance has heretofore found it appropriate and in the best interest of the County to sell the Bonds at a negotiated sale. Accordingly, the Bonds shall be sold to Merrill Lynch, Pierce, Fenner & Smith Incorporated (the "Underwriter") pursuant to, and upon the other terms and conditions set forth in, the Bond Purchase Contract between the County and the Underwriter of even date herewith (the "Bond Purchase Contract"), at the purchase price of $_____, representing the aggregate principal amount of the Bonds, [plus a net original issue premium][less a net original issue discount] in the amount of $_____, and less an underwriting discount in the amount of $_____. In connection with the sale of the Bonds to the Underwriter, and the public offering of such Bonds by the Underwriter, the Director of Finance hereby: (a) deems the price, terms, conditions and other arrangements provided for in the Bond Purchase Agreement to be appropriate and in the best interest of the County; and (b) ratifies the distribution and use of the Preliminary Official Statement dated _____, 2011, and authorizes the distribution and use of the Official Statement dated _____, 2011, and the information contained therein, in connection with the public offering and sale of the Bonds by the Underwriter.

Section 402. Application of Sale Proceeds. The Bond proceeds delivered by the Underwriter at the closing for the Bonds will be applied as follows:

(a) The sum of $_____ shall be deposited into the Escrow Fund and applied to the refunding of the Refunded Bonds.

(b) The remaining proceeds of the Bonds, in the amount of $_____, shall be deposited into a cost of issuance fund established by the Department of Finance with the Paying Agent and applied toward the costs of issuance of the Bonds, as directed by the Department of Finance.

Section 403. Appointment of Escrow Agent; Establishment of Escrow Fund. _____, is hereby appointed as Escrow Agent for the Refunded Bonds. The county will enter into the Escrow Agreement with the Escrow Agent, pursuant to which the County will establish the Escrow Fund with the Escrow Agent for the purpose of refunding the Refunded Bonds.

ARTICLE V
ADDITIONAL TERMS AND PROVISIONS

Section 501. Security; Reimbursement by Department of Water.

(a) The Bonds are general obligation bonds of the County and the interest and principal on such Bonds shall be a first charge upon and paid from the General Fund of the County.

(b) A portion of the Bonds (the "Waterworks Portion") shall be allocated to the Water Department and reimbursed from revenues of the Water Department based on the allocation of the Bond proceeds to the refunding of Refunded Bonds previously issued to finance or refinance projects for the Water Department. The General Fund of the County shall be reimbursed at least semi-annually for the principal of and interest and premium (if any) on the Waterworks Portion from the revenues of the Water Department remaining after costs of operation, maintenance and repair of the Waterworks System of the Water Department and after the required payments, if any, of the principal of and interest and premium (if any) on any revenue bonds of the Water Department have been made. In accordance with the Bond Ordinance, the Water Department shall establish, maintain, collect and enforce a schedule of rates, rentals, fees and charges for connection to and use of the Waterworks System of the Water Department, which schedule shall be sufficient to assure that the revenues thereby produced, together with other lawfully available funds of the Water Department, shall be sufficient to pay all reasonable costs and expenses of operating, maintaining and repairing the Waterworks System, to pay the principal of and interest and premium (if any) on any revenue bonds of the Water Department, and to pay or reimburse the General Fund of the County for payments of the principal of and interest and premium (if any) on the Waterworks Portion. Any failure of the Water Department to reimburse the General Fund as aforesaid shall not relieve the County from its obligations to pay the principal of and interest and premium (if any) on the Bonds, when due.

Section 502. Tax Covenant. The County covenants that it will observe and perform its covenants and agreements under the respective Tax Certificates and otherwise comply with all applicable provisions of the Code and regulations promulgated thereunder pertaining to the Bonds.

Section 503. Limitation of Rights. With the exception of the rights herein expressly conferred, nothing expressed or mentioned in or to be implied from this Certificate is intended or shall be construed to give any person other than the parties to the documents approved hereby and the Holders of the Bond any legal or equitable right, remedy or claim under or in respect to this Certificate or any covenant, condition and agreement herein contained; this Certificate and all of the covenants, conditions and agreements hereof being intended to be and being for the sole and exclusive benefit of the parties to the documents approved hereby and the Holders of the Bond as herein provided.

Section 504. Successors and Assigns. This Certificate shall be binding upon, inure to the benefit of and be enforceable by the parties to the documents approved hereby and their respective successors and assigns.

Section 505. Severability. If any provision of this Certificate shall be held invalid by any court of competent jurisdiction, such holding shall not invalidate any other provision hereof.

Section 506. Applicable Law. This Certificate shall be governed by the applicable laws of the State of Hawaii.

Section 507. Amendment of Certificate Without Consent of Holders of Bonds. The Director of Finance from time to time and at any time and without the consent or concurrence of any Holder of the Bonds, may amend this Certificate to make any changes or corrections hereto which are required for the purpose of curing or correcting any ambiguity or defective or inconsistent provision or omission or mistake or manifest error contained herein, or to insert

herein such provisions clarifying matters or questions arising hereunder or pertaining to the form of the Bond or transfer and exchange of the Bonds as are necessary or desirable.

IN WITNESS WHEREOF, I have hereunto set my hand as of the __ day of _____, 2011.

WALLACE G. REZENTES, JR.

_____
Director of Finance
County of Kaua'i

The above and foregoing certificate is hereby approved as to form and legality as of the __ day of _____, 2011.

_____
Alfred B. Castillo, Jr.
County Attorney
County of Kaua'i

Exhibit A

[FORM OF BOND]

UNITED STATES OF AMERICA
STATE OF HAWAI'I

COUNTY OF KAUA'I
GENERAL OBLIGATION BONDS
Series 2011A

NO. A- **$**

INTEREST RATE:	**DATED DATE:**	**MATURITY DATE:**	**CUSIP NUMBER:**
		August 1,____	

REGISTERED HOLDER:
PRINCIPAL SUM:

THE COUNTY OF KAUA'I, State of Hawai'i (hereinafter called the "County"), for value received, hereby promises to pay to the Registered Holder (named above), or registered assigns (unless this bond shall be subject to prior redemption and shall have theretofore been duly called for prior redemption and payment of the redemption price duly made or provided for), the Principal Sum (specified above) on the Maturity Date (specified above), upon presentation and surrender of this bond, and to pay interest on said Principal Sum semiannually on _____ 1 and _____ 1 in each year from the date hereof, commencing on _____ 1, 201_, until the payment of said Principal Sum in full, at the Interest Rate per annum (specified above), in each case to the Registered Holder hereof in whose name this bond is registered upon the Bond Register as of the close of business on the 15th day (whether or not a business day) of the calendar month next preceding an interest payment date, such interest to be paid by check mailed to the Registered Holder hereof at his address as it appears on the Bond Register kept pursuant to the proceedings authorizing this bond or otherwise as agreed upon by the County and the Registered Holder. The principal or redemption price hereof shall be payable upon presentation and surrender hereof at the office of _____, Registrar and Paying Agent, in _____, _____, or at the office of any successor paying agent appointed from time to time by the County. The principal or redemption price hereof and interest hereon shall be payable in any coin or currency of the United States of America which at the time of payment is legal tender for public and private debts.

This Bond is one of a series designated as the County's "General Obligation Bonds, Series 2011A" of like date and tenor, except as to number, denomination, interest rate, and maturity (the "Bonds"). The Bonds have been authorized and issued pursuant to and in full compliance with the Constitution and laws of the State of Hawaii, including Part I of Chapter 47,

Hawaii Revised Statutes, as amended, the Charter of the County, proceedings of the County duly taken thereunder, and the Certificate of the Director of Finance of the County providing for the issuance and sale of the Bonds and fixing the form and details thereof (the "Authorizing Certificate").

The Bonds are subject to redemption prior to maturity, at the option of the County, under the circumstances, at the times, in the amounts, at the redemption prices and upon the other terms and conditions and with the effect set forth in the Authorizing Certificate. For purposes of such redemptions, portions of the Bonds which mature in the same year, but bear interest at different rates, shall not be treated as a single maturity of Bonds, but shall instead be treated as separate maturities corresponding to the portions bearing interest at different rates.

In the event this Bond is redeemable, as aforesaid, and shall be called for redemption, notice of the redemption hereof stating the designation, date, number and maturity of this Bond, the portion of the principal sum hereof to be redeemed, the date fixed for such redemption and the redemption price payable upon such redemption, shall be mailed, at least once not less than thirty (30) days prior to the date fixed for the redemption hereof, to the Holder hereof in whose name this Bond is registered upon the Bond Register as of the close of business on the forty-fifth (45th) day (whether or not a business day) next preceding the date fixed for the redemption hereof. The failure of the Holder hereof to receive such notice by mail or any defect in such notice shall not affect the sufficiency of the proceedings for the redemption of this Bond.

Any notice of redemption may state that such redemption is conditional upon the receipt by the Paying Agent, on or before the date fixed for redemption, of moneys sufficient to pay in full the redemption price of the Bonds proposed to be redeemed. If the notice contains such condition, and moneys sufficient to pay in full the redemption price of the Bonds proposed to be redeemed shall not be received on or prior to the date fixed for redemption, such notice of redemption shall be null and void and of no force and effect, the County shall not redeem or be obligated to redeem any Bonds, and the Paying Agent shall give notice, in the same manner as notice of redemption is given, that moneys sufficient to pay in full the redemption price of the Bonds proposed to be redeemed were not received on or prior to the date fixed for redemption and such redemption did not occur. In the event of the failure to redeem, all Bonds surrendered for redemption shall be promptly returned to the holder or holders by the Paying Agent.

If this Bond is in a denomination in excess of $5,000, portions of the principal sum hereof in installments of $5,000 or any integral multiple thereof may be redeemed, and if less than all of the principal sum hereof is to be redeemed, upon the surrender of this Bond to the Registrar there shall be issued to the Holder hereof, without charge therefor, for the then unredeemed balance of the principal sum hereof, Bonds of like series, maturity and interest rate in any of the authorized denominations provided by the Authorizing Certificate. If this Bond (or any portion of the principal sum hereof) is redeemable and shall have been duly called for redemption and notice of such redemption duly given as aforesaid, and if on or before the date fixed for such redemption, payment of the redemption price of this Bond (or the portion to be redeemed) payable upon such redemption and the interest accrued thereon to the date fixed for such redemption shall have been duly made or provided for, then this Bond (or the portion to be redeemed) shall become due and payable upon such date fixed for redemption and interest shall cease to accrue and become

payable from and after the date fixed for such redemption on the principal sum hereof to be redeemed.

This Bond is a general obligation of the County, and the interest and principal payments hereof are a first charge on the general fund of such County. The full faith and credit of the County are irrevocably pledged to the punctual payment of the principal of and interest on this Bond according to its terms.

Except as otherwise provided in the Authorizing Certificate, this Bond may be transferred, in whole but not in part, only to another nominee of the Securities Depository (as defined in the Authorizing Certificate) or to a successor Securities Depository or to a nominee of a successor Securities Depository. This Bond is transferable upon the Bond Register by the Registered Holder hereof, in person or by his attorney duly authorized in writing, at the aforementioned office of the Registrar but only in the manner, subject to the limitations and upon payment of the charges, if any, provided in the proceedings authorizing this Bond, and upon the surrender hereof to the Registrar for cancellation, together with a written instrument of transfer satisfactory in form to the Registrar and duly executed by the Registered Holder or the Registered Holder's duly authorized attorney, which may be the form endorsed hereon. Upon such transfer a new Bond or Bonds, of authorized denomination and of the same aggregate principal amount, issue, interest rate and maturity as the Bond surrendered, will be issued to the transferee in exchange for this Bond.

The County, any paying agent or any registrar may treat the person in whose name this Bond is registered on the Bond Register kept pursuant to the proceedings authorizing this Bond as the absolute owner of this Bond for all purposes, including payment, and neither the County nor any paying agent or registrar shall be affected by any notice to the contrary.

This Bond shall not be valid or obligatory unless the Certificate of Authentication hereon shall have been manually signed by an authorized officer of the Registrar.

It is hereby certified, recited and declared that all conditions, acts and things essential to the validity of this Bond and the series of which it is a part exist, have happened and have been done; that every requirement of law affecting the issuance thereof has been duly complied with; and that the amount of this Bond and the series of which it forms a part, together with all other indebtedness of the County of Kaua'i, is not in excess of any constitutional or statutory limitation on indebtedness.

IN WITNESS WHEREOF, THE COUNTY OF KAUA'I, STATE OF HAWAI'I, has caused this Bond to be signed by the manual or facsimile signature of its Director of Finance, to bear the facsimile signature of its Mayor, to be impressed with its seal or to bear a facsimile of its seal, and this Bond to be dated as of the date stated above.

[SEAL]

_____

Mayor, County of Kaua'i

_____

Director of Finance, County of Kaua'i

CERTIFICATE OF AUTHENTICATION

This Bond is one of the Bonds delivered pursuant to the within-mentioned proceedings.

Date of Authentication: _____

_____, as Registrar

By: _____
Authorized Officer

ASSIGNMENT

For value received, the undersigned hereby sells, assigns and transfers unto (please insert social security or other tax identifying number of assignee):

_____
(name and address of assignee)

_____

the within-mentioned bond and hereby irrevocably constitutes and appoints

_____,
attorney-in-fact, to transfer the same on the Bond Register in the office of the within-mentioned Registrar with full power of substitution in the premises.

Date: _____

Signature Guaranteed:

_____
(name of assignor)

_____

_____
(address of assignor)

NOTE: The signature to this assignment must correspond with the name as written on the face of the within Bond in every particular, without alteration or enlargement or any change whatsoever.

DEPARTMENT OF WATER

County of Kaua'i

"Water has no Substitute – Conserve It!"

Manager's Report No. 11-70

May 26, 2011

Subject: 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 $120,000 funding from the BAB for 250 feet of water line over a storm drain along the State Kaumualii Highway widening project.

There is an existing 15" water line from the Kokolau Tunnel approx. 2000' in the southerly direction that this line would replace. In the first request for funding of the 16" line replacement it was not known if this entire section of line could be installed as the 16" line stops at KCC. We believe DOW qualifies for an exemption under the OEQC rules.

The contractor has reduced the price from the $1200/ft. range for other portions of the line to $480/ft. for this proposed work. This portion over the drain will require removal of the guard rails to install the line should this work be done in the future. DOW will supply the pipe purchased from the Maui Water Department.

FUNDING:

Account No. 201-01 Bond -BAB		$28,099,741.89
Job # 10-02	4,249,687.00	
Additional Request	120,000.00	
Total		4,369,687.00
Balance Remaining - Account No. 201-01 Bond – BAB		$23,730,054.89

Respectfully Submitted by:

Keith Aoki

Concurred:

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

DRC/cab
Mgrp-Job No.10-02–DOT-Kiewit-Kaumualii Hwy Widening, Vicinity of Anonui Road to Vicinity of Lihue Mill Bridge (5-26-11):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!"

Manager's Report No. 11-71

May 26, 2011

Subject: Revision of Private Fire System Use Rate of Part IV of the Rules

Recommendation: Your approval to send the proposed amendments to the Private fire system to the DEBD Small Business Advisory Group is requested.

Background: Last year the private fire system rules were changed to allow charging for indirectly metered water going through the detector check assembly (DCA). The rules stated the charge would be the "normal" charge for water.

Staff has found "normal" to be elusive and subject to interpretation. "Normal" has Private Fire Line use billed on the 4th block without a minimum charge. With the proposed changes DOW would still get revenue for all use. Billing at the 4th block makes for some extremely high bills. The billing is based totally on the small meter that was not the staff's intent and I do not believe it was the Board intent in charging for the indirect use.

When this was first billed it was billed as though all the water went through the DCA meter. This meter is usually a 5/8" meter with low threshold blocks. The fire line is usually 8" and it is not metered. If it was directly metered it would be at the 8" meter block rate. The area ratio is indirectly used to determine the 8" line flow. It should be billed as though the 8" DCA is an 8" meter.

While going through this review some dual use lines have been found to not be charged for fire service even though the Full Flow fire lines are billed according to the large and small meter use. These proposed rules also correct that lapse.

Should the Board approve these changes they would go to the DEBD Small Business Advisory Group for approval to take it to public hearing before final rule amendment may take place.

We have held up the changes approved last month to send the Part IV changes as a package.

Respectfully submitted,

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

DRC/cab
Mgmrp-Revision of Private Fire System Use Rate of Part IV of the Rules (5-26-11):cab

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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 connection for automatic fire sprinklers or other private fire protection, there shall be a charge per month based on the size of the connection as follows:~~

	~~Effective July 1, 2001~~	~~Effective July 1, 2005~~
~~2 inch~~	~~$ 9.00~~	~~$ 12.00~~
~~3 inch~~	~~$ 20.00~~	~~$ 25.00~~
~~4 inch~~	~~$ 40.00~~	~~$ 50.00~~
~~6 inch~~	~~$ 105.00~~	~~$ 140.00~~
~~8 inch~~	~~$ 200.00~~	~~$ 260.00~~

1. **Types of Fire Lines**: There are two types of fire lines, not located on road rights of way, that are considered private fire lines:
   A. "Fire lines with Detector Check Assemblies" - Fire lines with detector check assemblies which are not be used for anything other than firefighting without written permission from DOW.
   B. "Fire lines with Full Flow Meters" - Fire lines with full flow meters allowed for dual use in order to provide normal consumption as well as fire flow. These dual use services are oversized, compared to normal service meters, in order to allow for higher than normal

consumption. The oversized meter has two meters, a Full Flow Meter and a Small Meter, both of which do not accurately read low flow; the monthly service charge for the low flow offsets the inaccuracy of the meter.

2. **Charges for Fire lines with Detector Check Assemblies**
   A. No Charge for Fire Consumption:
   Fire lines with Detector Check Assemblies, which are used for the sole purpose of firefighting, will not be charged a consumption charge in the case of an actual fire, provided that the use for firefighting purposes is verified in writing, by the County Fire Chief, stating the time and date the firefighting started and ended.
   B. Total Charges: Although water is not permitted to be used through Fire lines with Detector Check Assemblies for anything other than firefighting, there remains the possibility of leakage, testing, and other impermissible uses. Therefore, charges for Fire lines with Detector Check Assemblies shall equal the sum of all of the following:
      i. Private Fire Service Inlet Line Charge, as determined in Part 4, Section V, paragraph 4 below; **and**
      ii. Meter Reading Service Charge; **and**
         1. Meter Reading Service Charge is equal to the service charge correlated with the detector check assembly meter size as described and laid out in Part 4, Section I of DOW Rules and Regulations;
         2. The minimum use service charge imposed in Part 4, Section I of DOW Rules and Regulations shall not apply for the detector check assembly;
         3. Removal of the security tag shall result in a fine of $2,000.
      iii. Use Determination Charge.
         1. All consumption, including consumption for annual line testing and line leakage, will be billed for use through the: 1) Detector Check Assembly Meter; and 2) Unmetered Fire line
            a. Unmetered Fire line:
               i. Total unmetered fire line consumption shall be determined by taking the area ratio from the area of the detector check assembly meter cross-sectional area divided into the cross-sectional area of the inlet line, as listed in Part 4, Section V, paragraph 5 below, multiplied by the reading obtained from the detector check assembly meter.
            b. Detector Check Assembly Meter:
               i. The portion of the consumption obtained from the reading on the detector check assembly meter will be billed, according to Part 4, Section I, based on the detector check assembly meter reading from the first one thousand gallons use.
               ii. The difference of the consumption found from the Use Determination minus the detector check assembly meter reading will be billed at the Block Rate in Part 4, Section I, for a meter equivalent to the size of the line serving the detector check assembly for all remaining consumption without any minimum use charge

3. **Charges for Fire lines with Full Flow Meters**
   A. Total Charges: Charges for Fire lines with Full Flow Meters shall equal the sum of all of the following:
      i. Private Fire Service Inlet Line Charge, as determined in Part 4, Section V, paragraph 4 below; **and**

ii. Full Flow Meter Charge; **and**
   1. Full Flow Meter Charge shall equal the service charge imposed in Part 4, Section I and shall be based on the full flow meter size.
   2. Any consumption, including consumption for the annual line testing, line leakage, or fire use, measured on the meter, will be billed at the general use rate for water as listed in Part 4, Section 1 of these rules.
   3. Removal of the security tag shall result in a fine of $2,000.00.

iii. Small Meter Charge.
   1. The Small Meter Charge shall equal the block rate charge for the respective meter size, as laid out in Part 4, Section 1 of these rules.

4. **Private Fire Service Inlet Line Charge:** For the two types of private fire service connection allowed for the purpose of automatic fire sprinklers or other private fire protection, there shall be a Private Fire Service Inlet Charge, per month, based on the diameter of the inlet line connection as follows:

PRIVATE FIRE SERVICE INLET CHARGE
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

5. **Area Ratio Table**

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

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:

   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.

"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."

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.

DEPARTMENT OF WATER
County of Kaua'i

"Water has no Substitute – Conserve It!"

MANAGER'S REPORT NO. 11-72

May 26, 2011

Re: Request Board Approval of the Reorganization Plan to Combine the Engineering and Special Projects Division and Create a New Water Quality Division

RECOMENDATION:
Board approval is requested for the combining of the Engineering Division and Special Projects Division into a single Division titled Engineering and Construction Management Division and approve the creation of a new Water Quality Division.

FUNDING:
None. No additional positions are requested at this time.

BACKGROUND:
Please find the attached Current Organizational Chart for the Engineering Division and Special Projects Division. Below is a brief description of the current responsibilities of each Division:

- The Engineering Division is responsible for the oversight of privately and governmental funded water projects. The duties include engineering design review, construction management and construction inspection. The types of projects include water storage reservoirs, pump stations, pipelines and service laterals.

- The Special Projects Division is responsible for the oversight of Department funded water projects (CIP, CRP and CRPL). The duties include engineering design review, construction management and construction inspection. The types of projects include water storage reservoirs, pump stations, pipelines and other projects such as SCADA and AMR. Additionally, Special Projects also contains the Microbiological Laboratory. The Micro Lab performs water quality testing, as required under the Safe Drinking Water Act (SDWA) for all required microbiological and chemical constituents. As part of water quality assurance, the Micro Lab is also designated to receive, evaluate and respond to consumer complaints regarding water quality.

The Civil Engineer VI positions shown at the head of each Division are both vacant at this time due to recent retirements.

The proposed reorganized structure is shown on the attached Proposed Organizational Chart. It is proposed that Engineering and Special Projects be combined to improve work efficiencies and reduce cross-division overlapping duties. The division will have two sections, Engineering and Construction Management. The existing Civil Engineer VII position will be relocated from Administration and will serve as Chief of the Division.

The duties for the proposed new Engineering and Construction Management Division include but are not limited to the following:

1. Direct and oversee private, governmental and Department funded water projects.
2. Implement the capital programs identified in Water Plan 2020, including new facilities (well sources, storage tanks and waterlines) through its Capital Improvements Projects Program (CIP),

and maintain and upgrade existing water facilities through the Capital Rehabilitation and Replacement Projects (CRP/CRPL) Programs.

3. Administer engineering consultant and construction contracts; evaluate the feasibility of pipeline alignments and sites for water facilities; prepare plans and specifications and bid documents for new water facilities; and implement and inspect the Department's construction programs for compliance with the Department's standards and policies.
4. Expansion of the water system by design of the Department's projects and plan review for integration of private development water system improvements into the Department's system.
5. Providing the necessary construction, engineering and inspection services to ensure the construction of water facilities adheres to the standards and policies of the Department.

The duties for the proposed new Water Quality Division include but are not limited to the following:

1. Perform water quality testing, as required under the Safe Drinking Water Act (SDWA) for all required microbiological and chemical constituents.
2. Receive, evaluate and respond to consumer complaints regarding water quality.
3. Provide expertise in the water quality regulations promulgated by the SDWA.
4. Provide guidance and assistance to Engineering in planning to integrate surface water sources into Department water systems. Conduct all water quality testing per current SDWA standards.

Job titles and position descriptions within the proposed Engineering and CM Division will not change with the exception that one of the current Civil Engineer VI positions will be converted to a Construction Management Officer position. This conversion to CM Officer is sought to provide a specialist in the construction management field.

The above described reorganization plan is recommended to improve efficiencies throughout several Divisions, speed the implementation of WP2020 and keep water quality at the forefront.

Respectfully submitted,

William Eddy
Deputy Manager

Concurred:

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

DRC/WE/cab
Mgrrp-Reorganization Plan to Combine the Engineering and Special Projects Division and Create a New Water Quality Division (5-26-11):cab

DRAFT

COUNTY OF KAUAI
DEPARTMENT OF PERSONNEL SERVICES
LĪHU'E, KAUAI, HAWAII 96766

_____
(Date)

To: Director of Personnel Services, County of Kaua'i

From: David R. Craddick, Manager & Chief Engineer

Subject: Record of Classification Request and Action

DEPARTMENT/AGENCY REQUEST

Department/Division: Department: Water
Current Division: Special Projects Division
After Re-Org: Construction Management Division

Position Number: 2470

Present Class

Title, BU, SR/BC: Civil Engineer VI, Excluded Managerial, EM-5

Requested Class

Title, BU, SR/BC: Project Management Officer, Excluded Managerial, EM-5

Reason For Request:

How services were formerly provided:

Position number(s): _____

Position title(s): _____

Incumbent(s): _____

Appointing authority: _____
Department Head or Designee

Approval to proceed: _____
Mayor Bernard P. Carvalho, Jr.

Attachments: - Position Description
- Table of Organization (current or applicable organizational unit)

Form 400 (Rev 10-10)

DRAFT

Position No: 2470

County of Kaua'i
Position Description

1. For specific information on preparing position descriptions, please review the Department of Personnel Services (DPS) Personnel Procedures, Chapter A4.401. Preparation of Position Descriptions.
2. This form is a basic Word Table. To navigate around the form, use the TAB key to move forward, and SHIFT-TAB to move backward, or use your mouse to move to a specific field.
3. Complete every item; if not applicable, so indicate. Press F1 for Help with each item.
4. Be accurate. This is an official document upon which classification determinations will be based. In addition, it may be utilized for other personnel related processes, including performance evaluations.
5. When saving the document, the file name should include the position number followed by date (m-d-yy) in parentheses, e.g. 001 (10-10-10).
6. To complete processing, submit the completed position description through appropriate channels. Incomplete forms may be returned for completion.
7. By submitting this position description, the Appointing Authority certifies that the information provided herein is accurately described and the duties and responsibilities are consistent with the approved organization chart.
8. ***This position description is not considered official until action is taken by the Director of Personnel Services.***

Department of Personnel Services Use Only

Allocation:
Class Code:
Pay Range:
Effective:
BU:
Supervisory:
Act 64:
Other:
PPD:
Reference:
Appointing Authority:
Classification Approved:
Date:

Present Class	Civil Engineer VI	Department	Water
Present Pay Range	EM-5	Division	Special Projects
Present Class Code	2470	FLSA	
Position Status	Permanent	Other	
	F/T ☒ P/T ☐ # Hrs	Work Location	Lihue

Immediate Supervisor	Position No. 2350	Class Title and Pay Range Civil Engineer VII, EM-7
Subordinates	Position No. 2351 2484 2353 2357,2355,2483	Class Title and Pay Range Waterworks Project Manager, SR-24 Project Assistant, SR-18 Waterworks Inspector III, SR-21 Waterworks Inspctor II, SR-19
Licenses or Certificates required to perform the essential functions of this position	Possession of a valid motor vehicle operator's license.	
Equipment or tools regularly operated or used. (For trucks, provide GVW, TARE weight & license number.)	Personal computer, telephone, cellphone, digital camera.	
Special Work Requirements		

DESCRIPTION OF THE MAJOR DUTIES AND RESPONSIBILTIES ASSIGNED OR DELEGATED TO THIS POSITION.

t only those duties that are part of the regular work of this position throughout the year. List the duties in order of importance or quency and combine related details. Environmental and physical demands, hazards, and/or unusual isolation involved in the performance of the work must be identified for each duty or group of duties. Opposite each description of a duty or group of duties, enter the approximate percentage of time devoted to that work. Percentages of time for all duties and responsibilities must total 100%. Enter in the last column, the appropriate ADA indicator(s) as shown below:

(1) The performance of this function is the reason that the job exists.
(2) The number of other employees available to perform this function is limited.
(3) *This function is highly specialized, and employee is hired for special expertise or ability to perform this function.*

#	Description of Duties and Responsibilities	% of Time	ADA Indicator (s)
General Summary: (Describe the overall purpose and objective of this position) Under the general supervision of the Manager and Chief Engineer. Plans, directs, and manages activities of designated waterworks projects to ensure that goals and objectives are accomplished within the framework of time and funding parameters.			
1	*PLEASE COMPLETE THIS SECTION.*		
2			
3			
4			
5			
6	Performs other related duties as required.	5	

PROJECT MANAGEMENT OFFICER (EM-05)

Class Code: 15A2037

COUNTY OF KAUA'I
Established Date: Dec 1, 2009
Revision Date: Jan 12, 2010

SALARY RANGE

$5,529.00 - $7,561.00 Monthly
$66,348.00 - $90,732.00 Annually

RECRUITMENT NUMBER:

Recruitment No.:

Intra: Limited to civil service employees in the Department of Public Works
Inter: Limited to civil service employees of the County of Kauai
Open: Includes all interested individuals including members of the general public

Eligible lists may be used for temporary and permanent vacancies for the class of work during the life of the eligible list. Temporary appointments may lead to conversion to permanent employment.

DUTIES SUMMARY:

Plans, directs, and manages activities of designated projects to ensure that goals or objectives of projects are accomplished within prescribed time frame and funding parameters; and performs other related duties as required.

MINIMUM QUALIFICATION REQUIREMENTS:

Applicants must meet all the requirements for the position theya re seeking as of the filing date of their application, unless otherwise specified.

Please note that unless specifically indicated, the required education and experience may not be gained concurrently. Your possession of the required amount of experience will not in itself be accepted as proof of qualification for the position. Overall paid or unpaid expeirence must be of such scope adn responsibility as to conclusively demonstrate that you have the ability to perform the duties of the position.

Note: Calculation of experience is based on full-time, 40 hours work weeks. Part-time experience must be pro-rated. Example: Twelve months of experience at 20 hours per week is equivalent to six months of experience. In addition, hours worked in excess of 40 hours per week will not be credited. Example: Twelve months of experience at 60 hours per week is equivalent to one year, not one and one-half years.

Training and Experience:
A combination of education and experience substantially equivalent to graduation from an accredited college or university with a baccalaureate degree in project management,

engineering or a related field, and progressively responsible professional experience as applicable for positions requiring specific specializations:

a) (ENGINEERING/CONSTRUCTION) ...five (5) years of project management experience for major architectural, engineering or constructions projects, involving project development and long-range planning activities; two (2) years of which must have included administrative and supervisory work experience that demonstrated the applicant's knowledge of and ability to develop and manage policies and programs, and apply the principles, practices, techniques and methods of supervision.

License Requirement:
Possession of a valid motor vehicle operator's license as required of the position.

Knowledge of: principles and practices of project management; planning principles and practices as applied to assigned projects; principles and practices of public administration and supervision, organization and management; methods and practices used in the preparation of specifications, estimates and contracts; financing, estimating and budgeting design, development and implementation costs.

Ability to: function in a high-stress environment and meet project deadlines; manage contract negotiations; plan, organize, direct and coordinate programs and activities; formulate and modify policies and procedures; direct the conduct of feasibility and cost studies; interpret laws, rules, regulations and policies; secure and analyze facts and data and draw logical conclusions; use computer based project management systems; analyze and prepare clear and concise reports; develop and maintain effective working relationships with others.

Health and Physical Condition Requirements: Persons seeking appointment to positions in this class must meet the health and physical condition standards deemed necessary and proper for performance of the duties.

ADDITIONAL JOB INFORMATION:
Required Forms and Documentation:
1. Supplemental to the application
2. Evidence of education (degree or transcript). A legible photocopy will be accepted; however, DPS reserves the right to request for an official copy.
3. Copy of a valid motor vehicle operator's license

Note: Transcripts downloaded from the internet are not acceptable. Copy of your education degree or transcripts and driver's license must be submitted in order to be given credit. Copies will not be returned. Mail or drop off: Department of Personnel Services, 4444 Rice Street, Suite 140, Lihue, HI 96766 within **7 calendar days** from filing this application. Office hours are Monday through Friday (except holidays) from 7:45 a.m. to 4:30 p.m.

Examination: The examination will consist of a training and experience evaluation based on the applicant's education and experience as presented in the application. **Be certain to list all pertinent training and experience, as this may be important in determining your examination score. It is essential that the applicant describe fully the duties and responsibilities of each position held, specify the date of each position held (from and to, month and year), and indicate the number of hours worked per**

week. Candidates may be examined for their knowledge and abilities as mentioned above.

For further information about Equal Employment Opportunity, the Merit Civil Service System, Citizenship and other requirements, Reasonable Accommodation, Veterans Preference, Examination Requirements, and the Internal Complaint and Merit Appeals Board Processes please visit our website at www.kauai.gov.

Note: Persons selected for employment are required to pass a pre-employment physical at their own expense and a drug screening test.

DEPARTMENT OF PERSONNEL SERVICES
COUNTY OF KAUAI

POSITION DESCRIPTION

Permanent (XX) Temporary ( )

1. Position No. 2470 Type: Full-Time (XX) Part-Time ( )
2. Present Class & SR/BC: **Civil Engineer V, EM-3**
3. Department: **Water** Division: **Special Projects**
4. Physical Location: **Lihue, HI**
5. Incumbent: **Keith Fujimoto**

6. REQUESTED ACTION *(ADA Format)*
New Position-Initial Allocation ( ) Change in Duties & Responsibilities-Reallocation (X) _ Redescription-Review ( ) Effective Date_____
Requested Class Allocation **Civil Engineer VI** Salary Range: **EM-5** BC/WS:

7. DUTIES OF THE POSITION

List each duty assigned to the position separately. Arrange these duties in logical order beginning with those performed most frequently and followed by those performed occasionally. Be clear, complete, and concise. Stick to statements of fact; avoid the use of vague or general terms. Give an estimate of the average amount of time spent in performing each major duty. If a reallocation of the position is requested, show the exact changes in duties, reasons for these changes and the exact date when these changes occurred. If more space is needed, use a blank sheet and attach to this form.

Show % of Time

Administrative (a) (b) — 40%

- Plans and directs administrative and technical activities of the Water Plan 2020 Division;
- Develops, interprets and executes policies, standards and procedures;;
- Develops work programs, preparation of budget estimates and cost control procedures;
- Coordinates the review of work progress and cost reports to ensure timely completion of tasks and projects;
- Establishes overall priorities for the various activities supervised;
- May represent the department before governmental and civic organizations to explain the purposes, objectives and work programs of the department;
- May participate in conferences with officials of other governmental agencies for purposes of coordinating activities of the Division;
- Participates in the investigation and resolution of complaints involving the Division;
- Prepares and directs the preparation of technical and administrative reports and correspondence;
- Consults and advises personnel on difficult issues and resolves conflicts;
- Prepares budgets, makes assignments, tracks and monitors progress, manages and evaluates performance of all personnel in the Division; and
- Coordinates with other Division heads.

(continued on page 3)

8. Unusual isolation, hazards, physical hardship (describe) None.

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ACTION TAKEN
( ) Initial Allocation ( ) Reallocation ( ) Change in Class Title ( ) No Change ( ) Redescription Review

Class Civil Engineer VI Salary Range EM-5 Wage Board

Effective Date June 16, 2007 Date of Action February 22, 2008

Director of Personnel Services

9. SUPERVISION RECEIVED — Give the name and position title of the immediate supervisor of this position

Name — Title: Manager & Chief Engineer

10. RESPONSIBILITIES OF THE POSITION

a. **Supervisory Responsibilities**
Give the names and the position titles of the employees being supervised. Supervisory responsibility implies the control of the work of other employees. This control may be exercised in assigning work, reviewing work, taking disciplinary action against those supervised, training them or recommending them for promotion. Show the extent and nature of supervision exercised. If no employees are supervised, write "none" in this place.

Name	Title	Nature of Supervision

b. **Other Responsibilities**
Explain any other responsibilities which you have not shown in 7, "Duties of the Position" or in 10a, "Supervisory Responsibilities", such as any responsibilities for: custody, control or accountability for money, or real property; custody, and well-being of inmates, wards or patients, enforcement of statutes, rules or regulations. Indicate extent of responsibilities such as number of wards, amount of money, kind of law, etc.

c. **Tools and Equipment** List any tools or equipment used. Cellular phone, digital camera, and personal computer.

11. CERTIFICATE OF EMPLOYEE – I certify that the foregoing answers describe this position accurately and completely.

Employee's Signature — Date: 6/16/05

12. STATEMENT OF IMMEDIATE SUPERVISOR

a. Comment on statements of employees. Indicate any exceptions or additions.

b. Describe the nature and extent of supervision which you exercise over this position.

c. Indicate the qualifications absolutely necessary to perform the duties of the position. Keep in mind the position itself and the qualifications a new employee must bring to the position rather than the qualifications of the employee who now occupies it.

	Basic Qualifications Necessary for Work Performance
Education-General: (Circle highest year)	(Elementary and high school) 1 2 3 4 5 6 7 8 9 10 11 12
Special or Professional:	(College) 1 2 3 (4) / 1 2 3 4 / Kind: Civil Engineer
Work Experience-Kind and length in years:	A combination of education and experience substantially equivalent to graduation from an accredited college or university with major work in civil engineering and six years of professional civil engineering experience, two of which shall have included responsibility for supervising and coordinating the work of professional engineers engaged in several major engineering projects.
Knowledge of:	Civil engineering principles and practices; modern methods and practices used in the preparation of plans, specifications, estimates and reports; the sources of engineering information; surveying and construction practices; public works programs and financing; land conveyancing and the preparation of contracts; principles and practices of administration.
Ability to:	Plan, organize, and direct the work of a large number of engineering and technical employees; develop major engineering work programs; prepare and justify budget requests; prepare administrative as well as engineering reports and correspondence.
Physical requirements:	Person seeking appointment to positions in this class must meet the health and physical condition standards deemed necessary and proper for performance of the duties.

d. Licenses or Certificates Required: Possession of a certificate of registration as a professional engineer in the State of Hawaii. Possession of a valid motor vehicle operator's license.

13. CERTIFICATE OF IMMEDIATE SUPERVISOR – I certify that the above statements are accurate and complete.

Immediate Supervisor's Signature — Date:

14. STATEMENT OF DEPARTMENT HEAD

Indicate any inaccuracies or statements with which you disagree. Please comment on the basic qualifications suggested by the supervisor.

15. CERTIFICATE OF THE DEPARTMENT HEAD – I certify that the above statements are accurate and complete to the best of my knowledge.

Department Head's Signature — Date: 6/16/05

Any Additional Comments Required?

POSITION DESCRIPTION
Position Number 2470
Civil Engineer VI

Duties of the Position (Continued)

Technical (55%) (a) (b)

- Coordinates and administers engineering consultant contracts;
- Coordinates the review of construction plans of private developers;
- Implement and inspect the Department's construction program of all water facilities for adherence to the DOW standards and policies;
- Conducts research to evaluate new materials and equipment;
- Develop as needed and maintain the Department's Water System Standards;
- Coordinates and implements some of the Department's State and Federal Programs;
- Administers and coordinates the activities and functions of the Microbiological Laboratory;
- Monitors the integrity and quality of the Department's water source and systems in conformance with all applicable Federal and State laws, ordinances, rules and regulations; and
- Coordinates and administers SCADA, AMR, GIS, and any other special projects or maintenance projects which require engineering and procurement support for the Department.

Other Related Duties (5%)

- Performs other related duties as needed.

MAR 1 8 2010

DEPARTMENT OF PERSONNEL SERVICES
COUNTY OF KAUAI

POSITION DESCRIPTION

Permanent (XX) Temporary ( )

1. Position No.: **2351** Type: Full-Time (XX) Part-Time ( )
2. Present Class & SR/WB: **Civil Engineer III, SR-22**
3. Department: **WATER**
4. Division: **Special Projects**
5. Physical Location: **Lihue, Hawaii**
6. Incumbent: **Dustin Moises**

6. REQUESTED ACTION
New Position Initial Allocation ( ) Change in Duties & Responsibilities Reallocation ( ) Redescription Review (XX) Effective Date 7/
Requested Class Allocation **Principal Project Manager** Salary Range **SR-26** Wage Board

7. DUTIES OF THE POSITION

List each duty assigned to the position separately. Arrange these duties in logical order beginning with those performed most frequently and followed by those performed occasionally. Be clear, complete, and concise. Stick to statements of fact; avoid the use of vague or general terms. Give an estimate of the average amount of time spent in performing each major duty. If a reallocation of the position is requested, show the exact changes in duties, reasons for these changes and the exact date when these changes occurred. If more space is needed, use a blank sheet and attach to this form.

	Show % of Time
Under the supervision of the Special Projects Division Head. Coordinates and manages large scale, highly complex waterworks capital projects involving multiple agencies and stakeholders.	
Supervises, directs and evaluates assigned professional and paraprofessional technical staff, coordinating daily work activities, organizing, prioritizing and assigning work, monitoring status of work and inspects completed work; Coordinates and conducts staff training activities, such as providing direction, guidance and assistance to employees, contractors and work groups; Ensures compliance with Federal, State and County codes; Coordinates acquisition and maintenance of required permitting; Researches code requirements; Coordinates efforts involving multiple departments and consultants, (a)(b);	35%
Coordinates process for bidding and contracting of services; Prepares Requests for Proposal (RFPS), including the preparation of bid packages; Compiles contract language, including specifications package; Conducts pre-bid and preconstruction meetings; Issues addendums to clarify questionable issues; Participates in negotiations of scope of services and fees for service agreements; Makes recommendation for selection of vendors and awarding of contracts, (a)(b);	30%
Assists with development and implementation of departmental budget, including the preparation and administration of project budgets; preparation of cost estimates and justifications; Monitors expenditures to ensure compliance with approved budget; Provides technical advice, information and assistance with issues related to assigned projects; Prepares reports, analyses and records (a)(b);	25%
Assists in developing and implementing departmental policies and procedures, (a)(b);	5%
Performs other related duties as required.	5%

8. Unusual isolation, hazards, physical hardship (describe)

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ACTION TAKEN

( ) Initial Allocation (X) Reallocation ( ) Change in Class Title ( ) No Change ( ) Redescription Review

To Class Waterworks Project Manager Salary Range SR-24 Wage Board

Effective Date April 1, 2010 Date of Action July 7, 2010

Director of Personnel Services

See Other Side

9. SUPERVISION RECEIVED — Give the name and position title of the immediate supervisor of this position.

Name: Keith Fujimoto — Title: Civil Engineer VI (Special Projects Division Head)

RESPONSIBILITIES OF THE POSITION

a. **Supervisory Responsibilities**

Give the names and the position titles of the employees being supervised. Supervisory responsibility implies the control of the work of other employees. This control may be exercised in assigning work, reviewing work, taking disciplinary action against those supervised, training them or recommending them for promotion. Show the extent and nature of supervision exercised. If no employees are supervised, write "none" in this place.

Name	Title	Nature of Supervision
(vacant)	Civil Engineer I	Besides general overall supervision, responsible for issuing assignments, monitoring, training and assisting when needed for the progress and completion of the work (similar to all subordinates)
Joseph Peirrera	Waterworks Inspector III	(see previous duties)
Chad Yamamoto	Waterworks Inspector I	(see previous duties)

b. **Other Responsibilities**

Explain any other responsibilities which you have not shown in 7, "Duties of the Position" or in 10a, "Supervisory Responsibilities", such as any responsibilities for: custody, control or accountability for money, or real property; custody, and well-being of inmates, wards or patients; enforcement of statutes, rules or regulations. Indicate extent of responsibilities such as number of wards, amount of money, kind of law, etc.

c. Tools and Equipment — List any tools or equipment used.

Personal computer, telephone, digital camera, may use pager and cellular phone.

11. CERTIFICATE OF EMPLOYEE — I certify that the foregoing answers describe this position accurately and completely.

Employee's Signature: [signature] Date: 3/16/10

12. **STATEMENT OF IMMEDIATE SUPERVISOR**

a. Comment on statements of employees. Indicate any exceptions or additions.

b. Describe the nature and extent of supervision which you exercise over this position.

c. Indicate the qualifications absolutely necessary to perform the duties of the position. Keep in mind the position itself and the qualifications a new employee must bring to the position rather than the qualifications of the employee who now occupies it.

cation-General: (Circle highest year)	Basic Qualifications Necessary for Work Performance
	(Elementary and high school) 1 2 3 4 5 6 7 8 9 10 11 12
Special or Professional:	(College) 1 2 3 **(4)** / 1 2 3 4 / Kind:
Work Experience-Kind and length in years:	A combination of education and experience substantially equivalent to graduation from an accredited college or university with major work in project management, engineering, construction administration or a related field; supplemented by four (4) years of experience that demonstrated competency in project management, budget administration, contract administration, and responsible experience in the specific area of assignment.
Knowledge of:	project management principles, techniques and tools; cost benefit analysis, planning and budgeting techniques; engineering principles and practices; public administration and management principles, including general administration; human resources management and fiscal management and accounting; Federal, State and local regulatory codes related to the assigned area; contract negotiations and administration; current technology and trends in the profession.
Ability to:	coordinate, manage and tract multiple project activities on several projects concurrently; utilize computer-based project management tools; manage multi-disciplinary project teams; assign, monitor, supervise and evaluate staff work performed; anticipate and evaluate project risks, identify mitigating factors and resolve problems; communicate effectively both orally and in writing; establish and maintain effective working relations and communications with others; analyze and project consequences of decisions and/or recommendations.
Physical requirements:	Persons seeking appointment to positions in this class must meet the health and physical condition standards deemed necessary and proper for performance of the duties.

d. Licenses or Certificates Required: A valid motor vehicle operator's license.

13. CERTIFICATE OF IMMEDIATE SUPERVISOR — I certify that the above statements are accurate and complete.

Immediate Supervisor's Signature: [signature] Date: 3/15/10

14. **STATEMENT OF DEPARTMENT HEAD**

Indicate any inaccuracies or statements with which you disagree. Please comment on the basic qualifications suggested by the supervisor.

CERTIFICATE OF THE DEPARTMENT HEAD — I certify that the above statements are accurate and complete to the best of my knowledge.

Department Head's Signature: [signature] Date: 3/17/10

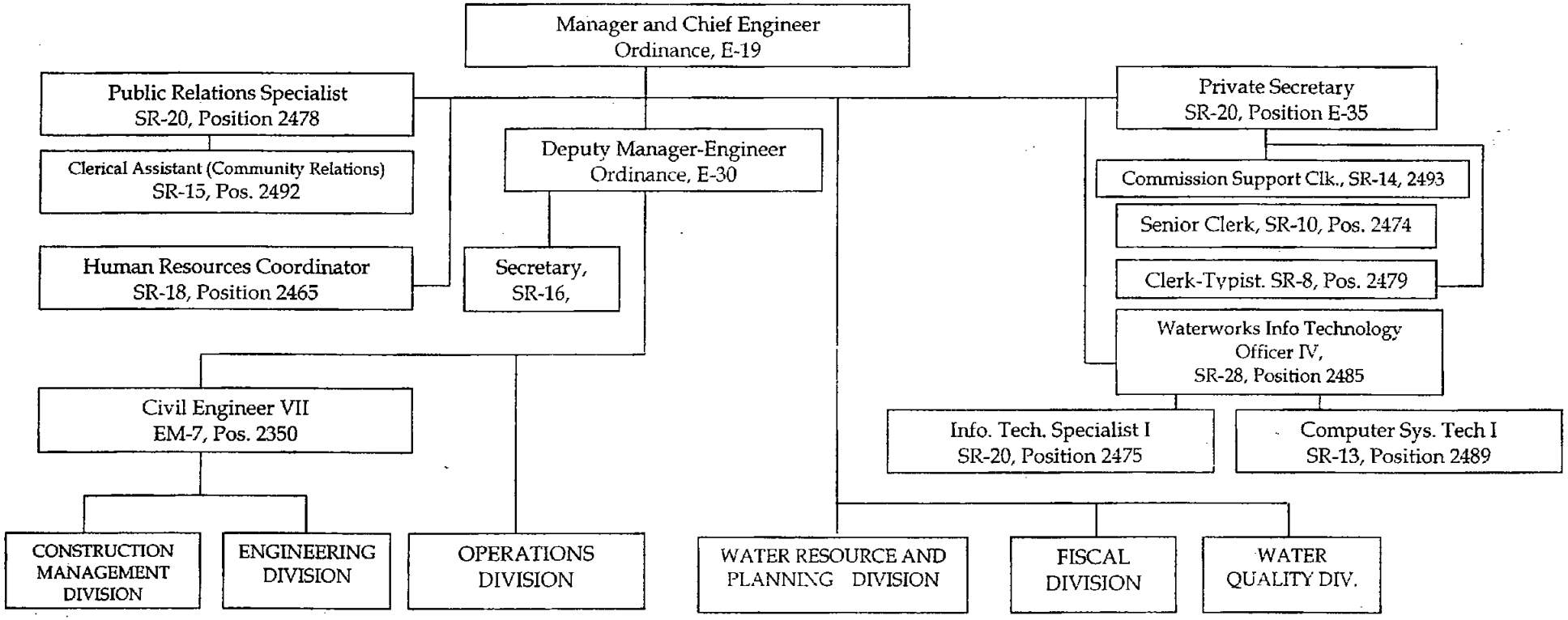
15. Any Additional Comments Required:

DRAFT

PREPARED BY: _____
DEPARTMENT HEAD DATE

APPROVED BY: _____
BOARD CHAIRPERSON DATE

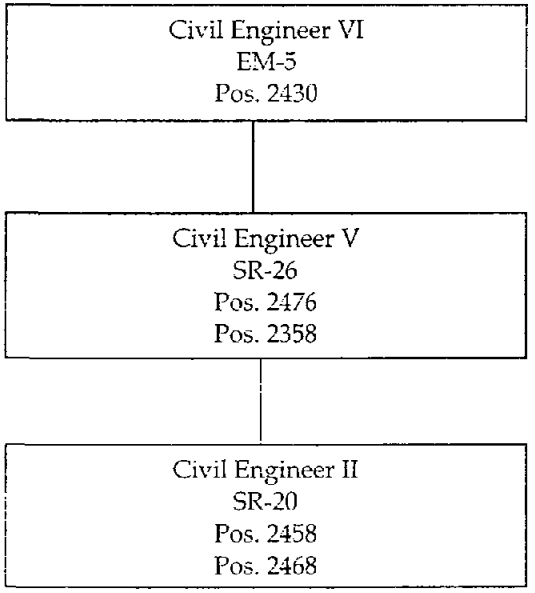
COUNTY OF KAUAI
KAUAI DEPARTMENT OF WATER
ORGANIZATION CHART
ADMINISTRATION



PREPARED BY: _____
DEPARTMENT HEAD DATE

APPROVED BY: _____
BOARD CHAIRPERSON DATE

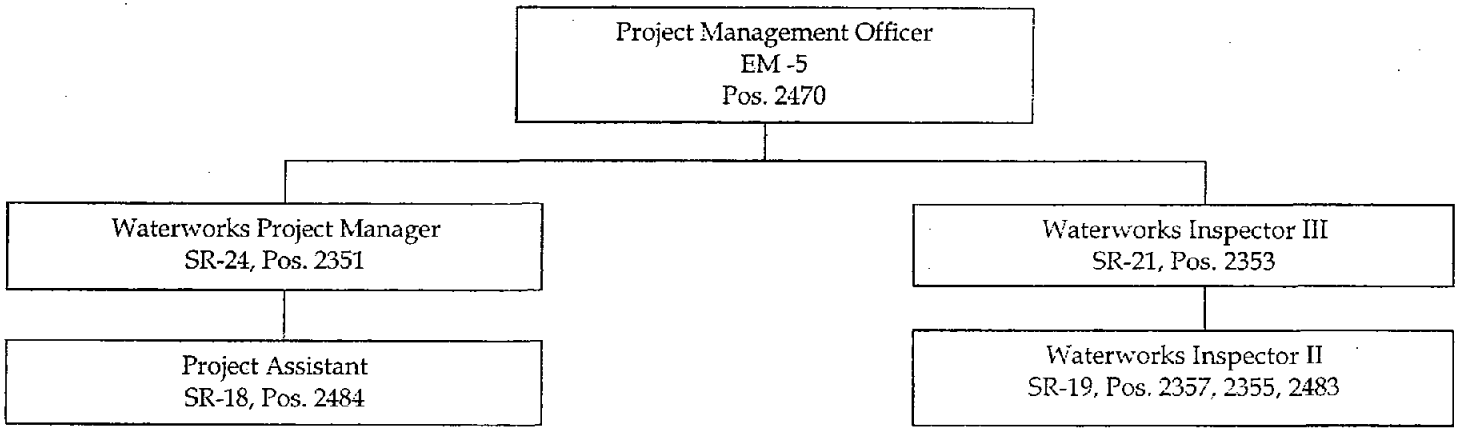
COUNTY OF KAUAI
KAUAI DEPARTMENT OF WATER
ORGANIZATIONAL CHART
ENGINEERING DIVISION



PREPARED BY: _____
DEPARTMENT HEAD DATE

APPROVED BY: _____
BOARD CHAIRPERSON DATE

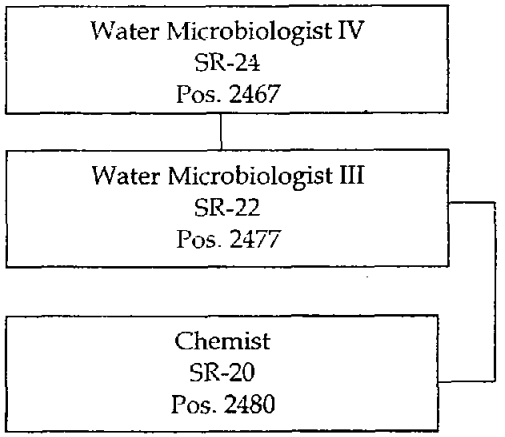
COUNTY OF KAUAI
KAUAI DEPARTMENT OF WATER
ORGANIZATIONAL CHART
CONSTRUCTION MANAGEMENT DIVISION



PREPARED BY: _____
DEPARTMENT HEAD DATE

APPROVED BY: _____
BOARD CHAIRPERSON DATE

COUNTY OF KAUAI
KAUAI DEPARTMENT OF WATER
ORGANIZATIONAL CHART
WATER QUALITY DIVISION



DEPARTMENT OF WATER
COUNTY OF KAUAI

Function Statement

BOARD OF WATER SUPPLY
Determines policies and prescribe regulations for the operation and control of all the County-owned water systems on Kauai.

ADMINISTRATION OFFICE
Administer and manage the affairs of the Department in accordance with policies and regulations adopted by the Board and the provisions of the County Charter.

FISCAL DIVISION
Administer the affairs of the Fiscal Division and all programs assigned to it. Assists the Manager in development of the annual budget. Conducts technical studies in the review, analysis, development and establishment of procedures for budgetary, utility and revenue and customer accounting systems and directs their modification and installation. Insures the acquisition of valid and consistent data for use in planning and budgetary, performance control and evaluating managerial decisions and reporting requirements. Prepare financial and statistical reports; conduct internal audits and financial and statistical studies of the Department. Compile and analyze financial, consumption and statistical data for reports and rate making.

Accounting Section
Maintain inventories and property records; prepares time sheets and employee leave records; audit and process disbursement vouchers; responsible for purchasing, storing and issuing of office supplies; maintain physical and fiscal control of storerooms and responsible for purchasing of Department's materials and supplies. Process and maintain all accounts receivables and payables and prepares financial statements, statement of demands, status of the budget and other information required by management. Conducts preparation of annual audit.

Billing Section
Conduct the Department's water-billing operations and its related functions which includes meter reading, pre-auditing water billing data, and maintaining accounts receivable. Establish and maintain meter reading routes and meter reading. Prepare water revenue estimates and unaccounted water reports. Administer and process meter applications and new services. formulate, establish and maintain cashiering service for payment of bills. Maintain records of delinquent and inactive accounts. Service walk-in and mail customers on billing, payment and collection matters; and perform all office and field collection work required to maintain an effective bill collection program. Handle inquiries regarding DOW rates and high water bills.

OPERATIONS DIVISION
Administer the affairs of the Operations Division and all programs assigned to it. Conducts operational hydraulic analysis and determines systems weaknesses for improvements and corrections. Makes hydraulic calculations and analysis on consumer service complaints and recommends solutions. Responsible for implementing programs for pump efficiency testing, analyzing recording charts, insuring water quality, preventive maintenance, safety and employee motivation and control. Provide engineering analysis and support for field and plant operations. Liaison to management and other divisions.

Field Section
Conduct all major repair operations involving water mains, hydrants, reservoirs and pump stations. Construct pipelines and appurtenances and miscellaneous force account and jobbing projects. Conduct all carpentry, masonry and heavy equipment operations. Install new service connections and meters. Conduct the installation of interconnections

of new water mains to the existing system. Maintain DOW pump stations, reservoir sites and all other physical water facilities. Provide staffing for 24-hour control of the Department's islandwide water systems.

Plant Section

Investigate and determine causes of abnormalities, interruptions and reductions in water supply. Monitor the quality of water and as needed locate the source and eliminate contamination and other adverse conditions. Maintain 24-hour control over the Department's islandwide water systems. Responsible for all electrical, mechanical and automotive work for the Department. Plan, modify, install, operate and maintain all water system equipment including, but not limited to, electric motors, pumps, hydraulic valves, chlorination equipment, water treatment facilities, reservoirs, valves meters, communication system, welding equipment and leak detection operations. Operate disinfection program to produce good quality water.

WATER RESOURCE AND PLANNING DIVISION

Review and coordinate the planning of water systems of proposed developments (hotels, subdivisions, etc.) to assure compatibility with the Department's water general plan. Determine hydraulic criteria for reservoirs, pumping stations and water mains. Evaluate and develop water network requirements. Conduct long-range planning and research and make analytical studies of water consumption and maximum demand to meet the water needs of Kauai. Prepare population projections and estimates for future water use. Prepare reviews of subdivision and zoning amendments requests as it applies to water. Conduct investigations to obtain and analyze data to determine capabilities of existing water sources. Conduct investigation for the development of potential sources. Conduct and/or administer studies relating to the protection of water sheds and water resources. Maintains maps and records of all water facilities.

ENGINEERING DIVISION

Directs & reviews the specifications & plans for waterworks facilities for both public & private constructed projects. Coordinates construction projects other than WP 2020 (Water Plan 2020). Conducts inspections & monitors work in progress, making final inspections of completed work. Coordinates procurement of professional services & other purchases of goods & services except for Water Plan 2020 projects.

SPECIAL PROJECTS DIVISION

Coordinates & administers engineering consultant contracts. Coordinates & reviews construction plans of private developers. Maintains the department's Water System Standards. Coordinates & implements some of the department's State & Federal programs. Administer and coordinate activities and functions of the Water Quality Laboratory. Monitors integrity & quality of the department's water source & system. Coordinates & administers SCADA, AMR, GIS & any other special projects or maintenance projects which require engineering & procurement support for the department.

DEPARTMENT OF WATER

County of Kaua'i

"Water has no Substitute – Conserve It!"

Manager's Report No. 11-73

May 26, 2011

Re: Request board approval to receive and expend funds from the Department of Health Safe Drinking Water Branch to Develop and Initiate Implementation of a Source Water/Wellhead Protection Program (formerly referred to as Wellhead Protection Program) for the County of Kauai

Recommendation:
It is recommended that the Board approve the grant application and actions to receive and expend the funds as described in the grant application to the Department of Health Safe Drinking Water Branch to develop and initiate implementation of a Source Water/Wellhead Protection Program for the County of Kauai.

Background:
On February 17, 2011, the board granted their approval to apply for grant funding from the Department of Health Safe Drinking Water Branch to develop and initiate implementation of a wellhead protection program for the County of Kauai, with the following conditions:

a. That none of the monies from this grant be used for the establishment of any civil service positions.
b. That none of the monies from the grant be used for promulgation of any kind of ordinance.

The scope of work reflects compliance with both of these conditions and will allow the department to move forward with development of a protection program and begin implementing portions of the program, working toward protecting our water sources for the future.

Respectfully submitted,

Faith Shiramizu
Public Relations Specialist

Concurred:

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

DRC/FS/cab
Mgrrp-Receive and Expend DOH Funds for Source Water Protection Program (5-26-11):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!"

MANAGER'S REPORT No. 11-74

May 12, 2011

Re: Job No. WRP 01 FY 05-06 Kauai Water Use and Development Plan Update, County of Kauai

RECOMMENDATION: It is recommended that the Board approve reallocation of funds currently budgeted for the Maintenance and Support of the Hydraulic Model, GIS Implementation Support, and 106b CIP Reserve Fund to increase the budget for the County Water Use and Development Plan Update.

The proposal from Fukunaga and Associates for Job No. WRP 01 FY 05-06 Kauai Water Use and Development Plan Update is for $514,000, and the current budget for this item is at $300,000.

FUNDING: Contractual Services #27

Water Resources and Planning:	
Maintenance and Support of the Hydraulic Model	$50,000
GIS Implementation Support	$150,000
County Water Use and Development Plan Update	$300,000
106b CIP Reserve Fund	$14,000
Net Available	$514,000

BACKGROUND:

The State Water Code, Chapter 174C, Hawaii Revised Statutes (HRS), requires that the Commission on Water Resource Management (CWRM) implement and utilize comprehensive water resource planning in its regulation and management of our State's water resources. The State Water Code calls for coordination between the CWRM, the counties, and other state agencies to "formulate an integrated and coordinated program for the protection, conservation, and management of waters in each county..." The State Framework for Updating the Hawaii Water Plan was created to effectively implement these requirements, and one component of this is the County Water Use and Development Plan Update.

Fukunaga and Associates was selected by the manager on September 8, 2010 for Job No. WRP 01 FY 05-06 Kauai Water Use and Development Plan Update after being ranked No. 1 by the selection committee. The scope of work (See Attached: Appendix A - Scope of Work) and the proposal was accepted by the manager on April 20, 2011.

Respectfully submitted,

Gregg Fujikawa, P.E.
Chief of Water Resources and Planning Division

Concurred:

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

Attachments: Appendix A – Scope of Work

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

APPENDIX A

SCOPE OF WORK
Job No.WRP 01
Kauai Water Use and Development Plan Update (KWUDP)
for
Department of Water, County of Kauai

General Description

The contractor will update the Kauai Water Use and Development Plan in accordance with the State Water Code. The Kauai Water Use and Development Plan (KWUDP) is intended to insure that the future water needs of the county are met. Updating of the KWUDP shall be in compliance with the overall goals and objectives of the Hawaii Water Plan (HWP), the required provisions outlined in Section 174C-31, Hawaii Revised Statues and the recommended guidelines in the Statewide Framework for Updating the Hawaii Water Plan. These requirements will include but not be limited to the following requirements:

1. Preparation of a KWUDP that sets forth "the allocation of water to land use" in Kauai County which shall be adopted by ordinance and submitted to the Commission on Water Resource Management (CWRM) for approval and adoption.
2. Requirement for periodic updates and modifications to the KWUDP to maintain consistency with County zoning and land use policies.
3. Appropriate recognition of the current and future development needs of the Department of Hawaiian Home Lands (DHHL)
4. Preparation of "regional plans for water development including recommended and alternative plans, costs, adequacy of plans and relationship to water resource protection and quality plan."

The KWUDP update process shall incorporate the following recommended elements:

- Submission of a county-Specific WUDP update Project Description to CWRM for review and approval
- Coordination of plan development with CWRM
- Stakeholder and public involvement in the development of plan recommendations
- Defining the county public participation process
- Objectives and criteria
- Consistency with the Hawaii Water Plan
- Current and future water demand forecasts

- Water system profiles
- Development of strategies and evaluation of alternatives
- Discussion of uncertainties
- Final strategy selection
- Documentation of methodology for application in future plan updates
- Implementation plan divided into three periods – ie.Near term (initial 5 years), Medium-term(subsequent 5 years, Long-term(final 10years)
- Underlying assumptions and background data and sources

Project Description:

The KWUDP Update will include the development of a project description and schedule for updating the KWUPD. The project description will include but not be limited to the following elements:

- Establishing priorities and objectives – Identify specific issues relating to land use, water use and resource development, and the relative priority of the issues to be addressed in the update of the KWUDP. Provide CWRM with the proposed methodology for identifying planning objectives and evaluation criteria as required to meet the HWP framework requirements.
- Establishment of KWUDP schedule – Specific as possible in outlining the different stages and activities of the planning effort.

Scope Tasks:

Task 1 – Develop KWUDP Update Outline , Project Organization

Purpose: To provide an outline of the KWUDP Update for review by DOW prior to plan development.

Confirm goals and objectives with DOW, Board of Water Supply, CWRM, County Agencies including the Administration and Planning Departments, Kauai County Council. Include progress briefings to DOW, CWRM, Planning and Kauai County Council. Develop work plan and schedule, client communications plan, organize KWUDP project team, design stake holders/ community consultation plan. Request/ receive access to current state and county GIS files. Develop procedure for implementation and timing for posting project on the DOW website.

Task 2 – Information Collection, Data Gathering

Purpose: To collect information and data necessary for development of the KWUDP update.

Gather, organize and analyze available data on use of water resources including; historical uses; current uses and major users – domestic, commercial, industrial, agricultural, institutional and governmental; potential future uses, based on land use policies, including County Zoning, Community Plans, major planned projects and long range plans of the Department of Hawaian Home Lands (DHHL).

Work includes inventory existing water system infrastructure from available references including information from DOW, State of Hawaii Department's of Health, Agriculture, and Land and Natural Resources. Gather, organize and analyze available data and reports on water resources and systems from Federal, State, County, private and other sources, including but not limited to information on regional island hydrology, stream flow, stream diversions, ground water, wells, and well yields, existing water supply reservoirs and major transmission lines, existing water reuse and conservation programs, drought planning issues, riparian lands, water quality and source water protection plans. Data on ground water hydrologic units and surface water hydrographic units will be researched and documented, in accordance with the State Water Resource Protection Plan. Also included will be field reconnaissance of critical areas that may be identified by public agencies and by community members.

Identify all available water sources to meet demands, including but not limited to ground water, surface water, reclaimed wastewater and stormwater, desalination, and water conservation.

Task 3 – Preliminary Analysis

Purpose: To develop preliminary analysis for the KWUDP update

Review existing plans, policies, rules and laws regulating land and water uses, including but not limited to relevant federal regulations, State of Hawaii Water Code, the Hawaii Plan, the State Water Projects Plan (SWPP), the Agricultural Water Use and Development Plan (AWUDP), State Land Use classifications and policies, the Statewide Framework for Updating the Hawaii Water Plan, the County of Kauai Ordinance No. ___ relating to the adoption of the Kauai Water Use and Development Plan, the Kauai County General Plan, the Kauai Comprehensive Zoning Ordinance, various Kauai neighborhood and regional development plans; issues relating to public water rights for water resources management.

Develop forecasts of future water demands for State, County and private sector users, annually for the first five years, then in five year increments to include a 20 year planning period. Develop a range of water demand forecasts. The "base case" scenario "will be based on the Kauai Planning Department population projections. The future use forecasts will include SWPP and AWUDP forecasts of water requirements as well as forecasts for Federal and private sector water users.

Develop a preliminary analysis of water resource management and development options and strategies to provide for future water needs.

Task 4 – Project Description

Purpose: To establish priorities and objectives for the specific issues relating to land use, water use and resource development, and the relative priority of the issues to be addressed in the update of the KWUDP for review and approval by CWRM; to establish a KWUDP Update schedule; to present the project description to CWRM for their review and approval.

Identify specific issues relating to land use, water use and resource development, and the relative priority of the issues to be addressed in the update of the KWUDP. Provide CWRM with the proposed methodology for identifying planning objectives and evaluation criteria as required to meet the HWP framework requirements.

Task 5 – Public Information Meeting/ Preliminary Stakeholders Consultations and Identification of Water Issues

Purpose: Define and establish public participation and public information elements for the project.

Develop a list of potential stakeholder advisory group organizations and individuals, including federal, state and county agencies, non-profit organizations, social service organizations, community organizations, watershed partnerships and alliances and major land owners.

Provide the services of a professional facilitator, familiar with the local community interests and issues, to participate in the stakeholders meetings and to conduct public informational and input meetings. ***There will be eight (8) presentations to the public. This will include two presentations to each side of the island (North, South, East, West), and meeting minutes. The first round of meetings will present the scope of work, and the second will resent the draft report.***

Assist in the development of a stakeholder advisory group that will be invited to participate as active reviewers of the update of the KWUDP.

Prior to approval of the project description by CWRM conduct and record first stake holder advisory group meeting to inform them of the KWUDP Update commencement and process. Inform the advisory group of the scope and schedule for the project and solicit comments on water resource issues, problems and needs.

After the approval of the project description by CWRM conduct the first general public informational meeting to inform the public about the scope and schedule for the planning project, and to solicit comments on water resources issues, problems and needs.

Write a working paper that summarizes the ideas and issues that were discussed in the stakeholder and public informational meetings, and provide meeting minutes. Also preliminarily define critical water resource values and planning principles there were exposed in these discussions.

Task 6 – Develop KWUDP Update.

Purpose: To revise and refine scenarios for future water use and identify future water demands and requirements for both potable and non-potable water.

In consultation with DOW and CWRM staff, and other water resource agencies, assess feasibility of and any uncertainties associated with groundwater, surface water, and alternative water resource development for future potable and non-potable water supply. Ie. Inter system transfer, surface water, recycled water, water conservation, desalination of brackish and sea water and source water protection. Impact on surface and ground water withdrawal on stream flow and near shore quality will be considered.

Organize options/alternatives and define water source and infrastructure strategies that could meet future water requirements; short range (1-5 years), mid range (6-10 years), long range (11 to 20 +years). Provide guidelines for the allocation of water to future public and private facilities and land uses. The short range plan will contain the most details on recommendations of water and water supply infrastructure requirements, as well as alternatives for demand-side management measures.

Review the DOW Capital Improvement Program plans and cost estimates and identify items that may be affected by the findings of the KWUDP.

Convene second stakeholder advisory group meeting to discuss preliminary water resources management and infrastructure strategies.

Organize in a narrative and graphic form, including a summary of overall water resources community insight, water demand scenarios and projections (including a list of large water and land development projects), analysis of existing water resources, strategies for meeting future water demands through various water resource management and infrastructure strategies, and an implementation plan for specific water resource development projects and programs: short, mid and long range.

Task 7 - Draft KWUDP Update Report

Purpose: To compile material and develop a draft report

Compile material from work elements 1 thru 6 into a preliminary DRAFT Report for the KWUDP Update

Print __copies of the preliminary DRAFT Report and submit to the DOW and the KWUDP project team for internal review.

Incorporate review comments and finalize the official DRAFT Report. Print ___copies of the report and send to DOW and the KWUDP project team and the KWUDP advisory group members for their review and comments.

Conduct and record second and final general public informational meeting to present the DRAFT Report to the public.

Compile comments received from the KWUDP advisory group and the general public and revise the DRAFT Report as appropriate.

Task 8 – Plan Approval

Purpose: To present Final Report to the DOW Board of Water Supply, Kauai County Council and CWRM for review for approval and adoption.

Coordinate, conduct, record and assist DOW in public presentations and required public hearings of the KWUDP Update to the Kauai Board of Water Supply, Kauai County Council and CWRM for the approval and adoption of the KWUDP Update.

Assistance will include developing a power point slideshow summarizing the findings and recommendations of the KWUDP Update and developing presentation graphics and handouts.

Task 9 - Final KWUDP Report

Purpose: To prepare, print and distribute final report

Print ___copies of a Pre-Final Report and submit to DOW and the KWUDP project team for review and comment.

Incorporate review comments and finalize the Report

Print __ copies of the Final Report and send to DOW and the KWUDP project team and the KWUDP advisory group members. Also post a pdf copy of the Final Report on the DOW web site.

Task 10 - Project Management

Purpose: To provide project management and executive oversight during the development of the KWUDP Update.

DEPARTMENT OF WATER
County of Kaua'i

"Water has no Substitute – Conserve It!"

MANAGER'S REPORT No. 11-75

May 26, 2011

Re: New Budget Line Item for Board Policy #25 –Small Claims Settlement

Background:

Board Policy #25 was unanimously approved in the April 28, 2011 board meeting authorizing the County Attorney to investigate, settle and pay all claims filed against the Board of Water Supply, County of Kauai where such claims amount to TEN THOUSAND DOLLARS ($10,000) or less provided there are sufficient appropriations for such settlements;

It is recommended the Board approve transfer of appropriation to fund a new budget line item for Small Claims as follows:

Funding:

Budget Item:

60	Insurance & Bonds	$	200,000
60a	Small Claims		(10,000)
	Remaining Balance	$	190,000

Certification of Funding:

MARITES YANO
Waterworks Controller

CONCURRED:

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

DRC/MY/cab
Mgrrp- New Budget Line Item for Board Policy #25 –Small Claims Settlement (5-26-11):cab

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DEPARTMENT OF WATER
County of Kaua'i

"Water has no Substitute – Conserve It!"

BOARD REPORT

May 26, 2011

Re: Resolution No. 11, (10/11), Congratulations Serafin Galvez, 2010 DOW Employee of the Year

It is requested that the Board approve Resolution No. 11 *(10/11),* Congratulations Serafin Galvez, 2010 DOW Employee of the Year.

The resolution is not included in your agenda packet; however, it will be available and read at the Thursday, May 26, 2011 Board Meeting.

Respectfully submitted,

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

cab
Mgrrp/Res. #11 (10/11) Serafin Galvez EOY (5-26-11):cab

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Board's Goals for DO\ ,anager for Year 2010

(Goals2:rn) 12/10)

ITEM NO.	GOAL	Status	DEADLINE	Measure
1	**BAB BOND AND WATER PLAN 2020**			
	A. Get $60 Million General Obligation Bond approved and issued.	Done 3/31/10	3/31/2010	**Money in Bank**
	1. Encumber $20 million bond proceeds by end of the Calendar Year.	**Done $22.3m**	12/31/2010	**Signed Contracts**
	B. Develop a plan for completing projects identified in the Bond Issue. This plan should include Department staffing requirements and a timeline to complete projects either in-house or through consultant contracts.	DONE	5/31/2010	**Approved Plan. Amended Budget**
	C. Obtain professional services to perform and conduct a comprehensive Financial Management Study, Water Rate Analysis, and Cost of Service study to provide a sound Financial Management Plan for the next five years for the Board and the Department. Re-visit Water Plan 2020.	Draft given to Staff Dec 10,10 Waiting on corrections	7/31/2010: Hire consultant 04/30/2011 Public Hearing Report	**Consultant working on study with commitment to finish in time for Public Hearing process.**
	D. Re-visit Water Plan 2020. Update and re-prioritize projects and submit for Board Approval	See Bond Spend down	4/30/2010 for Bond Float Projects. 11/30/2010 for non-Bond Items.	**Approved Priority list**
	E. Develop a public relations campaign to inform and update the public on:	DONE		
	1. 2020 Plan	See above		**Public presentations**
	2. Explanation of the Bond Float and its relevance to the 2020 plan	See above	10/30/2011	**Public Presentations**
	3. Development of significant talking points that describe the need for the rate hike, as well as the prioritization of the projects. This discussion should be easily understood by our customers.	See above	12/31/2011	**List**
	4. Development and implementation of a clear plan to educate the ratepayers of the upcoming rate hike before setting the public hearing. Hiring a PR consultant may be a viable option.	See above	1/31/2011	**Presentation Public - Ready**
	5. Explanation of the future plans/challenges and our plans to accomplish/manage them.	See above	1/31/2011	**Presentation Public – Ready**

Board's Goals for DOW Manager for Year 2010

(Goals2:rn) 12/10)

ITEM NO.	GOAL	Status	DEADLINE	Measure
2	**PERSONNEL AND ACCOUNTING**			
	A. Develop an approved succession plan for the entire Department with a timetable to implement the first three goals, allowing the Operations Division implementation priority.	Pretty Much Done but this is an ongoing moving target 351 years of DOW talent gone	6/30/2010	**Approved Proposed Organizational chart**
	B. Fill all vacant positions critical for implementation of Water Plan 2020 in accordance with the accepted budget.	DONE	10/31/2010	**Filled Positions**
	Promote or replace all retired positions with well-qualified persons within 6 to 8 months and **hire a qualified Deputy** within 8 to 10 months.	DONE	12/31/2010	**Filled Positions**
	C. Implement cross training so that employees can effectively fill temporary and/or pending retirement positions, thus enabling employees to acknowledge their capabilities in performing additional responsibilities as result of cross training, which in turn will provide the Department with qualified replacement personnel.	On going	On-going	**Program functional. Cross training hours recorded and in personnel files.**
	D. Complete the reorganization of the Operations Division.		10/31/2010	**Positions advertised**
3	**STANDARDS**			
	A. Choose industry benchmarks appropriate to similar sized water facilities and compare our stance relating to those benchmarks. Publicize these results annually or semi-annually.	Working on it.	11/30/2010 Updated every 6 months	**Chart in Main Office Lobby**

Board's Goals for DO' lanager for Year 2010

(Goals2:rn) 12/10)

4	**FACILITIES**			
	A. Develop plans to ease the "crowded" work environment in the administrative/accounting/engineering divisions. (The Engineering section appears to be sitting on top each other, which, from the customer's perspective looking in the window, reflects an unorganized department.)	**Since we are designing a new building crowding view changed.**	6/30/2010	**Housecleaning**
	B. Analyze the office logistics. Presently the office is very crowded: Plans delineating several solutions need to be drawn up for selection.	**Consultant on Board April 2010**	9/30/2010	**Hire Consultant**
ITEM NO.	**GOAL**	**Status**	**DEADLINE**	**Measure**
5	**INTER AGENCY CO-ORDINATION**			
	A. Integrate our CIP plan with the County's 6 year CIP Plan to take advantage of the economies of scale.	**Sent DOW Plan May 2010**	4/15/10	**Completed plan submitted to Mayor's Office**
	B. Ensure our water infrastructure is in place for County sponsored or supported Affordable Housing Development Projects.	**This needs to be redone**	4/15/10	**Plan draft included as part of 6 year County CIP Plan**

Reports

DEPARTMENT OF WATER
Budget Status Summary
March 31, 2011

I. WATER UTILITY FUND

	Current Month	Year to Date	
Beginning Balance 07/1/2010			$ 14,362,449.56
Add: Revenues	$ 2,369,007.50	$ 15,882,673.53	$ 15,882,673.53
TOTAL RESOURCES:			**$ 30,245,123.09**
Less: Expenditures	$ 1,087,125.18	$ 16,776,193.39	$ 16,776,193.39
TOTAL EXPENDITURES:			**$ 16,776,193.39**
Ending Balance			**$ 13,468,929.70**

II. FACILITIES RESERVE CHARGE

Beginning Balance 07/1/2010			$ 5,535,242.86
Add: Revenues	$ 30,697.13	$ 409,108.42	$ 409,108.42
TOTAL RESOURCES:			**$ 5,944,351.28**
Less: Expenditures	$ 329,464.65	$ 2,054,050.35	$ 2,054,050.35
TOTAL EXPENDITURES:			**$ 2,054,050.35**
Ending Balance			**$ 3,890,300.93**

III. BOND FUND

Beginning Balance 07/1/2010			$ 553,408.97
Add: Revenues	$ -	$ -	$ -
TOTAL RESOURCES:			**$ 553,408.97**
Less: Expenditures	$ -	$ 20,476.13	$ 20,476.13
Ending Balance			**$ 532,932.84**

IV. WATERWORK BUILD AMERICA PROJECT FUND

Beginning Balance 07/1/2010			$ 58,723,019.84
Add: Revenues	$ -	$ -	$ -
TOTAL RESOURCES:			**$ 58,723,019.84**
Less: Expenditures	$ 767,408.77	$ 8,863,162.31	$ 8,863,162.31
Ending Balance			**$ 49,859,857.53**

TOTAL - ALL FUNDS at March 31, 2011 **$ 67,752,021.00**

STATEMENT OF REVENUES AND EXPENDITURES
WATER UTILITY FUND
March 31, 2011

REVENUES:

Cash on hand as of July 1, 2010		**$ 14,362,449.56**
Add: Revenues To Date		$ 15,882,673.53
Sub-Total		**$ 30,245,123.09**
EXPENDITURES:		
Less: Expenditures to Date		$ 16,776,193.39
BALANCE AT THE END OF THE MONTH		**$ 13,468,929.70**

SHORT TERM INVESTMENTS - WATER UTILITY FUND

BANK OF HAWAII

TCD#	8000423145-103	0.45000%	INT. DUE	05/12/11	$ 439,000.00	
TCD#	8000423145-110	0.17000%	INT. DUE	06/30/11	$ 500,000.00	
TCD#	8000423145-114	0.20000%	INT. DUE	02/18/11	$ 160,000.00	
TCD#			INT. DUE			

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						**$ 5,190,529.98**

SUB-TOTAL FROM PAGE A						$	**5,190,529.98**
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#	31331JRT2	2.62000%	INT. DUE	06/15/15	$ 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#	313384FU8	0.47900%	INT. DUE	05/19/11	$ 995,300.00	$	**4,190,369.44**
TOTAL SHORT-TERM INVESTMENTS - WATER UTILITY						$	**9,380,899.42**
CASH ON HAND WITH TREASURER - COK				03/31/11		$	**2,116,270.85**
CASH ON HAND-BOH Savings				03/31/11		$	**2,172,151.73**
CASH ON HAND - FHB Savings				03/31/11		$	**25,814.61**
LESS:	March Claims Payable-1					$	**(805,385.21)**
	3/31/11 Payroll					$	**(20.00)**
	February Claims Payable-3		05/12/11			$	**78,206.37**
	Due to W/U, BAB Fund A/P					$	**500,991.93**
	Due to W/U, BAB Fund					$	-
CASH BALANCE AT THE END OF THE MONTH						$	**13,468,929.70**

0.00

DEPARTMENT OF WATER
County of Kauai
STATUS OF THE BUDGET
JULY 1, 2010 TO JUNE 30, 2011
March 31, 2011

WATER UTILITY FUND **% Budget Elapsed 75.00%**

	CASH RECEIPTS:	BUDGETED RECEIPTS	TOTAL RECEIPTS TO DATE	RECEIPTS FOR THE MONTH	%	BALANCE OF BUDGET OVER TOTAL ACTUAL RECEIPTS
BEGINNING CASH BALANCE		**$ 14,362,449.56**	**$ 14,362,449.56**	$ -		$ -
1	Water Sales	$ 20,301,300.00	$ 14,486,299.23	$ 1,487,270.63	71%	$ 5,815,000.77
2	Net Miscellaneous Receipts	$ 112,000.00	$ 12,672.00	$ 2,000.00	11%	$ 99,328.00
3	Interest Income	$ 260,000.00	$ 47,121.49	$ 5,019.93	18%	$ 212,878.51
4	County Service Charge	$ 833,500.00	$ -		0%	$ 833,500.00
5	State Revolving Fund	$ 3,843,000.00	$ 363,380.86	$ 363,380.86	9%	$ 3,479,619.14
5a	Other Receipts	$ -	$ 101,216.25	$ -	0%	$ (101,216.25)
5b	OTHER - BAB Subsidy	**$ 871,800.00**	$ 871,983.70	$ 511,336.08	100%	$ (183.70)
	TOTAL RESOURCES	**$ 40,584,049.56**	**$ 30,245,123.09**	**$ 2,369,007.50**	**75%**	**$ 10,338,926.47**
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	$ 5,390,400.00	$ 3,045,350.27	1,674.27 $ 345,435.98	56%	$ 2,345,049.73
16	Provision for Accrued Vacation	$ 100,000.00	$ 47,800.66		48%	$ 52,199.34
TOTAL SALARIES:		**$ 5,490,400.00**	**$ 3,093,150.93**	**$ 347,110.25**	**56%**	**$ 2,397,249.07**
	NORMAL EXPENDITURES					
19	**COUNTY SERVICE CHRG**	**$ 833,500.00**	$ -	$ -	**0%**	**$ 833,500.00**
	ADMINISTRATIVE OFFICE and ENGINEERING:					
21	Utilities	$ 195,300.00	$ 131,747.30	$ 15,258.99	67%	$ 63,552.70
22	Postage and Printing	$ 113,000.00	$ 82,967.35	$ 10,933.61	73%	$ 30,032.65
24	Office Equipment Maintenance	$ 113,100.00 ~~$ 151,100.00~~	$ 27,902.01	$ 2,734.77	18%	$ 85,197.99
24b	05/19/06 Con 461 Four Winds Group MMIS Phases I & II	[redacted]	$ 38,000.00	$ 7,000.00	30%	$ 86,709.63

	ITEM	BUDGETED AMOUNT	TOTAL ACTUAL EXPENDITURES TO DATE	EXPENDITURES FOR THE MONTH	%	BALANCE OF BUDGET OVER TOTAL ACTUAL EXPENDITURES
		$ 699,200.00				
		~~$ 975,700.00~~				
		~~$ 990,700.00~~				
27	Contractual Services	~~$ 1,070,700.00~~	$ 94,596.72	$ 17,719.72	9%	$ 604,603.28
			$ -			
27a	Con 521 R. W. Beck Inc.	$ 80,000.00	$ 70,188.00	$ 8,228.00		$ 9,812.00
			$ -			
27b	Con 506 R. W. Beck Inc. FRC Study for DOW	$ 20,110.00	$ 16,540.00		82%	$ 3,570.00
			$ -			
27c	County of Kauai, Dept of Fin. Bond Consultation Fee	$ 15,000.00	$ -		0%	$ 15,000.00
			$ -			
	Travel and Incidentals -		$ -			
28	Board	$ 17,000.00	$ 3,228.61	$ 400.80	19%	$ 13,771.39
			$ -			
			$ -			
			$ -			
			$ -			
	Travel and Incidentals -		$ -			
29	Staff	$ 32,500.00	$ 20,991.45	$ 4,846.62	65%	$ 11,508.55
			$ -			
30	Collector's Commission	$ -	$ -		0%	$ -
			$ -			
			$ -			
31	Miscellaneous	$ 16,000.00	$ 6,282.89	$ 1,284.96	39%	$ 9,717.11
		$ 13,000.00	$ -			
32	Auditing Fee	~~$ 79,000.00~~	$ -		0%	$ 13,000.00
			FINAL	FINAL		
32c	Annual Audit	$ 66,000.00	$ 66,000.00		100%	$ -
	Contract No. 477 KMH, LLP		$ -			
			$ -			
			$ -			
33	In-Service Training	$ 53,100.00	$ 37,533.41	$ 17,008.56	71%	$ 15,566.59
			$ -			
34	Supplies - Office & Eng.	$ 33,000.00	$ 23,081.92	$ (3,634.96)	70%	$ 9,918.08
			$ -			
35	Operating Reserve Fund	$ -	$ -		0%	$ -
		$ 86,908.00				
		~~$ 196,500.00~~				
36	Public Relations	~~$ 346,500.00~~	$ 23,769.96	4,901.06	7%	$ 63,138.04
36.1	Grant: The Nature Conservanc	$ 150,000.00	$ 75,000.00		50%	$ 75,000.00
	Con 531 Limtiaco Co, Inc.					
36.2	Public Relations Services	$ 109,592.00	$ 33,532.96	$ 12,421.64		$ 76,059.04
	Computer Support and		$ -			
37	Supplies	$ 84,500.00	$ 31,372.93	$ 1,083.73	37%	$ 53,127.07
			$ -			
	Microlab Materials and		$ -			
38	Supplies	$ 19,100.00	$ 7,796.15	$ 732.82	41%	$ 11,303.85
			$ -			
	TOTAL ADM, OFF & ENG	**$ 2,041,119.63**	**$ 790,531.66**	**$ 100,920.32**	**39%**	**$ 1,250,587.97**

	ITEM	BUDGETED AMOUNT	TOTAL ACTUAL EXPENDITURES TO DATE	EXPENDITURES FOR THE MONTH	%	BALANCE OF BUDGET OVER TOTAL ACTUAL EXPENDITURES
OPERATIONS AND MAINTENANCE:						
40	Vehicle - Materials & Service	$ 107,600.00	$ 86,489.54	$ 7,399.48	80%	$ 21,110.46
41	Vehicle - Fuel	$ 126,000.00	$ 77,308.60	$ 16,419.36	61%	$ 48,691.40
42	Utilities	$ 56,100.00	$ 51,303.19	$ 6,048.21	91%	$ 4,796.81
43	Meter Parts	$ 8,300.00	$ 2,576.58		31%	$ 5,723.42
43a	Electrical Parts	$ 15,000.00	$ 10,042.00	$ 162.46	67%	$ 4,958.00
44	Miscellaneous	$ 5,000.00	$ -		0%	$ 5,000.00
44a	Misc. - Tapping Team	$ 8,000.00	$ -		0%	$ 8,000.00
45	Contractual Services	$ 408,000.00	$ 2,282.81	$ 270.83	1%	$ 405,717.19
47	Materials and Supplies	$ 227,000.00	$ 114,374.78	$ 4,600.22	50%	$ 112,625.22
48	Collective Bargaining Items	$ 24,000.00	$ 13,004.62	$ 2,148.97	54%	$ 10,995.38
51	Pump Electrical	$ 3,000,000.00	$ 1,985,665.69	$ 195,859.14	66%	$ 1,014,334.31
55	Purchase of Water	$ 2,248,700.00	$ 1,116,254.68	$ 125,859.13	50%	$ 1,132,445.32
58	Chemicals	$ 35,700.00	$ 32,450.04	$ 2,823.48	91%	$ 3,249.96
59	Safe Drinking Water Act Program	$ 150,000.00	$ 3,135.41	$ 1,158.18	2%	$ 146,864.59
59h	Contract No. 500 03/09 MWH Laboratories (thru 12/10)	$ 36,050.00	$ -		0%	$ 36,050.00
59i	Contract No. 508 12/09 MWH Laboratories (thru 12/10)	$ 45,300.00	$ 29,900.00		66%	$ 15,400.00
	TOTAL OPERATIONS:	**$ 6,500,750.00**	**$ 3,524,787.94**	**$ 362,749.46**	54%	**$ 2,975,962.06**
		$ 6,500,750.00	$ 3,524,787.94	$ 362,749.46		$ 2,975,962.06
INSURANCE AND EMPLOYEE BENEFITS:						
60	Insurance and Bonds	$ 200,000.00	$ -		0%	$ 200,000.00
61	Workmen's Compensation Insurance	$ 150,000.00	$ -		0%	$ 150,000.00
62	Retirement System	$ 823,500.00	$ 466,012.63	$ 50,614.92	57%	$ 357,487.37
63	FICA Taxes - Employer's	$ 420,000.00	$ 234,126.63	$ 24,177.55	56%	$ 185,873.37
64	Health, Life, & Dental (EUTF)	$ 417,100.00	$ 263,902.83	$ 29,637.20	63%	$ 153,197.17

	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	$ 1,072,000.00 $ ~~795,500.00~~	$ 225,582.70	$ 67,900.92	28%	$ 846,417.30
	TOTAL INSURANCE & EMPLOYEE BENEFITS	**$ 3,082,600.00**	**$ 1,189,624.79**	**$ 172,330.59**	**39%**	**$ 1,892,975.21**
	TOTAL NORMAL EXPENDITURES:	**$ 12,457,969.63**	**$ 5,504,944.39**	**$ 636,000.37**	**44%**	**$ 6,953,025.24**
		$ 12,371,260.00 $ 86,709.63	$ 5,504,944.39	$ 636,000.37		$ 6,866,315.61 $ 86,709.63
	DEBT SERVICE REQUIREMENT:					
80	SRF Loan Job 97-5 Hanapepe River Crossing	$ 98,564.00	$ 98,564.17		100%	$ (0.17)
81	SRF Loan Job 97-6 Hanapepe 27" Steel Pipe	$ 54,929.00	$ 54,929.47		100%	$ (0.47)
82	SRF Loan Job 98-33 WK-21 Wailua Hmstds Well #3	$ 31,676.00	$ 31,675.28		100%	$ 0.72
83	SRF Loan Job 97-2 PLH-31 Lihue Steel Tanks 1 & 2	$ 100,788.00	$ 100,787.29		100%	$ 0.71
84	SRF Loan Job 98-6 WK-07 Ornellas 0.2 MG Tank	$ 65,137.00	$ 65,137.86		100%	$ (0.86)
85	SRF Loan Job 97-11 WK-03 16" W/L Along Kuhio Hwy	$ 185,577.00	$ 185,577.91		100%	$ (0.91)
86	DOW Bond 2005 Issue	$ 217,450.00	$ 217,450.00		100%	$ -
87	DOW Bond 2005 Series, Partial Refund 2001 Series A	$ 149,988.00	$ 149,987.50		100%	$ 0.50
88	SRF Loan Job 98-2 KP-07 KP-08 16" W/L on Poipu Rd	$ 413,901.00	$ 413,900.37		100%	$ 0.63
89	SRF Loan Job WK -42 PH I Stable 1.0 MG Tank	s/b 489,999.07 $ 628,500.00	$ 489,999.07		78%	$ 138,500.93
90	SRF Loan Job KW -27 Kaumualii Hwy 12" Main Repl	s/b 319593 $ 386,200.00	$ 319,592.81		83%	$ 66,607.19
91	SRF Loan Job K -7, LO-13 Waha, Wawae & Niho Rds	$ 163,100.00	$ 156,868.07		96%	$ 6,231.93
92	DOW Bond Series 2010A	$ 2,490,862.00	$ 2,490,862.08		100%	$ (0.08)
93	FmHa $300,000 @5% 20 year Bond	$ 18,550.00	$ 18,550.00	$ 16,525.00	100%	$ -
94	SRF Loan Job Kapilimao 0.5 MG Tank		$ 73,940.43		#####	$ (73,940.43)
97	DOW Bond 2001A Issue Series 2005A Refunded	$ 670,575.00	$ 670,575.05		100%	$ (0.05)
98	SRF Loan Job 97-1 Kokolau Tunnel Repairs	$ 129,907.00	$ 130,905.67		101%	$ (998.67)
99	SRF Loan Job 96-4 Kapilimao Valley Well	$ 70,641.00	$ 70,640.91	$ 35,133.43	100%	$ 0.09
	SRF Loan					$ -
	TOTAL DEBT SERVICE REQ	**$ 5,876,345.00**	**$ 5,739,943.94**	**$ 51,658.43**	**98%**	**$ 136,401.06**
		$ 5,876,345.00 $ -	$ 5,739,943.94 $ 5,739,943.94	$ 51,658.43		$ 136,401.06
	TOTAL SALARIES, NORMAL EXPENDITURES, AND DEBT SERVICE REQUIREMENTS:	**$ 23,824,714.63**	**$ 14,338,039.26**	**$ 1,034,769.05**	**60%**	**$ 9,486,675.37**
	PROOF	$ 23,824,714.63	$ 14,338,039.26	$ 1,034,769.05		$ 9,486,675.37

ITEM	BUDGETED AMOUNT	TOTAL ACTUAL EXPENDITURES TO DATE	EXPENDITURES FOR THE MONTH	%	BALANCE OF BUDGET OVER TOTAL ACTUAL EXPENDITURES
CAPITAL EXPENDITURES:					
101 Capital Improvements	$ 1,076,600.00 ~~$ 2,576,600.00~~	$ -		0%	$ 1,076,600.00
101b Capital Rehabilitation	$ 3,088,494.00 ~~$ 3,088,494.00~~	$ -		0%	$ 3,088,494.00
102 Misc. Other Capital Expenditures, OPS	$ 600,000.00	$ 551,681.10	$ (21,390.37)	92%	$ 48,318.90
103 (Lease Computers) Office and Engineering	$ 554,700.00	$ 69,161.06	$ 8,879.28	12%	$ 485,538.94
105 Recording Meters	$ -	$ -		0%	$ -
106 Vehicles and Equipment	$ 147,844.38 ~~$ 246,000.00~~	$ 52,409.77		21%	$ 95,434.61
106b CIP Reserve Fund	$ 2,967,189.48 ~~$ 2,967,189.48~~ ~~$ 3,015,229.48~~ ~~$ 3,101,939.11~~	$ (284,622.00)	$ (284,622.00)	-9%	$ 3,251,811.48

	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	$ 180,000.00	$ 57,962.34	$ 57,962.34	32%	$ 122,037.66
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
409	6/1/1994 Contract #282, **K-10** ParEn, Inc., Job 94-3, Kalaheo 0.5 MG Tank	$ 1,771.54	$ -		0%	$ 1,771.54
464	11/20/02 (106b) Contract #309, Job 97-1 **PLH-02** SSFM Engineers, Repair Kokolau Tunnel	$ 118,381.66	$ -		0%	$ 118,381.66
472	11/2/1998 Contract #323 Job 97-2 **PLH-11 PLH-31** CH2M Hill Lihue (2) Steel Tanks	$ 3,765.00	$ -		0%	$ 3,765.00
476	1/4/1999 Contract #326, Job 97-3 **H-09** Nishimura, Katayama Refurbish Hanalei Tank	$ 23,605.00	$ -		0%	$ 23,605.00
491	6/10/1999 Contract #336, Job 98-7 **K-05** M&E Pacific Inc. Kukuiolono 0.2 MG Tank	$ 16,840.00	$ -		0%	$ 16,840.00
494	6/15/1999 Contract #343, Job 94-4 Timberline Engineering Design SCADA System	$ 113,314.00	$ -		0%	$ 113,314.00
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	$ 10,571.00	$ 3,933.00		37%	$ 6,638.00
520	6/2/2000 **WKK-14** Contract No. 356 Austin, Tsutsumi & Assoc. Job 97-10 Kilauea Booster	$ 6,948.29	$ -		0%	$ 6,948.29

	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	$ 6,639.00	$ 3,489.00		53%	$ 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	$ 107,837.00	$ 23,500.00	$ 1,500.00	22%	$ 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
	1/14/03 (101b, 106b)					
589	Con 405 Kodani & Assoc. **WK-12** Job 02-19 Waipouli Main Replacement	$ 78,730.00 ~~$ 30,690.00~~	$ 78,730.00	$ 24,000.00	0%	$ -
	2/05/03 (101b, 106b)					
591	Con 408 Wagner Eng. Inc. **H-01 H-02 H-03** Job 02-17 Maka Ridge Deepwell, Tank	$ 44,380.20	$ 14,781.00		33%	$ 29,599.20
	2/12/03 (101b, 106b)					
592	Con 409 Esaki Surveying **WK-36** Job 02-16 Ohana Anolani & Kuamoo Rds	$ 39,022.55	$ 10,967.55		28%	$ 28,055.00
	8/28/03 (27d)	ok				
600	Con 407 Esaki Surveying Job 02-26 As-Needed Surveying Services	~~$ 10,000.00~~	$ -		0%	$ 10,000.00
	9/03/03 (101b)					
601	Con 420 Hawaii Pacific Eng, Job 02-08 **HE-08** Eleele Twin 0.4 MG Tanks	$ 139,819.00	$ 116,050.92	$ 7,563.21	83%	$ 23,768.08
	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
608	2/19/04 (101) Con 427 Belt Collins HI **WK-08, WK-09 Job 02-14** Kapaa Hmtds 0.5 MG Tank & 1.0 MG Storage tank	$ 33,950.00	$ -	$ -	0%	$ 33,950.00
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	$ 35,190.55	$ 1,803.90	$ -	5%	$ 33,386.65
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	$ 50,058.47	$ -		0%	$ 50,058.47
621	10/19/04 (101) Con 440 Kodani & Assoc. **WKK-15** Job 02-06 Kilauea 1.0MG Tanks	$ 89,594.80	$ 58,894.80	$ 57,624.80	66%	$ 30,700.00
630	6/30/05 (101b, 106b) Con 447 Fukunaga & Assoc **WK-14** Job 04-02 Vivian Heights Main Repl	S 5,791.00	$ -		0%	S 5,791.00
633	7/12/05 (106b) Con 7296 Kodani & Assoc. **HE-11** Lele Rd to Salt Pond Rd 6" Main Repl.	$ 3,500.00	$ -	$ -	0%	$ 3,500.00
634	10/20/05 (101b) **WK-30** Con 450 ParEn Inc. Job 04-03 Waipouli-Olohena Rd. Pipeline	$ 174,900.00	$ -	$ -	0%	$ 174,900.00
635	9/07/05 (101b) Con 449 HI Pacific Eng Inc **KW-16** Job 05-01 Waimea Main Replacement	$ 24,294.50	$ 12,147.25	$ -	50%	$ 12,147.25

	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	$ 33,080.00	$ 6,675.90	$ -	20%	$ 26,404.10
637	11/16/05 (101b, 106b) Con 452 Akinaka & Assoc. **K-7** Job 05-07 Waha, Niho, Wawae Rds Main Repl.	$ 216,000.00	$ -		0%	$ 216,000.00
638	11/16/05 (101b, 106b) Con 453 Belt Collins HI **PLH-30** Job 05-05 Nawiliwili, Niumalu & Kupolo Main	$ 52,174.00	$ 24,946.00		48%	$ 27,228.00
640	01/12/06 (101b) Con 455 Fukunaga & Assoc **KW-27** Job 05-04 Kaumualii Hwy 12" Main Repl, Kekaha	$ 23,700.00	$ 13,700.00		58%	$ 10,000.00
644	38936 Con 464 Kodani & Assoc. "As-Needed" Eng, Surveying & Govt Permit Services	$ 30,000.00	$ -		0%	$ 30,000.00
645	5/19/06 (101, 106b) Con 460 Brown & Caldwell **KW-25** Job 05-03 Kapilimao 0.5 MG Tank	$ 18,083.40	$ 7,671.30		42%	$ 10,412.10
647	06/10/06 (101b) Con 462 Eng Solutions Inc **KW-05 KW-20** Job 04-06 Waimea Well A & Kekaha B	$ 41,255.60	$ -		0%	$ 41,255.60
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
664	8/21/07 (101b, 106b) Con 479 SSFM International **WK-2** Job 02-24 Renovate Akulikuli Tunnel, Phase 2	$ 245,984.00	$ -		0%	$ 245,984.00
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
671	6/30/08 (106, 106b) Con 490 FluidIQs, LLC SCADA Sys Consulting & Maintenance Services	$ 100,000.00	$ -		0%	$ 100,000.00
673	07/02/08 (101) Con 491 Kauai Builders Ltd **WK-42** Phase I, 1.0 MG Stable Tank & Control Valves	s/b 515222.54 $ 696,293.80	$ 74,961.37		11%	$ 621,332.43

	ITEM	BUDGETED AMOUNT	TOTAL ACTUAL EXPENDITURES TO DATE	EXPENDITURES FOR THE MONTH	%	BALANCE OF BUDGET OVER TOTAL ACTUAL EXPENDITURES
674	07/02/08 (101b) Con 493 Earthworks Pacific **WK-32** Job 02-18 Phase I (D-1) Kaehulua Rd Waterline and **WK-14** Job 04-02 Phase II (Waterline B) Apopo Road Waterline	$ 213,658.00	**FINAL** $ 213,658.00	**FINAL**	100%	$ -
675	9/24/08 (101b) Con 495 Cushnie Const. Co. **KW-03** Job 03-01 8-Inch W/L Replacement on Elepaio Rd	$ 15,708.68	$ -		0%	$ 15,708.68
676	11/28/08 (101) Con 497 Kauai Builders Ltd. **KW-25** Job 05-03 Kapilimao 0.5 MG Storage Tank	$ 1,273,770.98	$ 953,129.59	$ 176,162.19	75%	$ 320,641.39
678	12/15/08 (101b) Con 498 Earthworks Pacific **KW-27** Job 05-04 12" Main Repl Elepaio Rd to Huakai Rd	$ 742,804.67	$ -		0%	$ 742,804.67
679	2/04/09 (101b) Con 499 Koga Engineering **K-7, LO-13** Job 05-07 (Phase 1) Waha, Wawae & Niho Roads	$ 56,400.00	$ -		0%	$ 56,400.00
680	03/31/09 (101) JFA-USGS Cooperative Monitoring of Ground Water Levels FY 2009		$ -		#####	$ -
682	7/10/09 (101B) Con 502 Cushnie Const. Inc. Job 04-04 PLH-09 Lihue Town Pipeline Replacement	$ 76,446.88	**FINAL** $ 17,895.00		23%	$ 58,551.88
683	7/31/09 (101b) Con 503 Goodfellow Bros. Job 04-06 KW-05 Kekaha (Waipao) Well "B" Renovations	$ (113,739.55) $ 114,114.61	**$ (78,206.37)** $ 78,206.37		69%	$ 375.06
689	12/22/09 (106) Con 509 CUMMINS WEST, INC. International Trucks of Hawaii Furnish & Deliver (1) 260000 LB GVWR Standard Cab & Chassis	$ 96,983.12	**FINAL** $ 96,983.12		100%	$ -
690	2/28/2010 Con 510 SSFM International, Inc. Job No. 05-03, KW-25 Kapilimao 0.5 MG Tank & Job No. 03-03	$ 471,250.00	$ 47,094.01		10%	$ 424,155.99
691	2/28/2010 Con 511,Belt Collins Hawaii, Ltd. Job # K-01, Yamada Tank Site Acquisition, Kalaheo Water Syst	$ 17,082.00	**FINAL** $ 17,082.00	**FINAL**	100%	$ -

	ITEM	BUDGETED AMOUNT	TOTAL ACTUAL EXPENDITURES TO DATE	EXPENDITURES FOR THE MONTH	%	BALANCE OF BUDGET OVER TOTAL ACTUAL EXPENDITURES
	3/31/2010					
692	Con 512, Architects hawaii, Ltd. Job No. PLH-39, Lihue Baseyard Improvements for the DOW	$ 279,719.00	$ 174,793.15	$ 24,676.68	62%	$ 104,925.85
	4/30/2010					
693	USGS Joint funding Agrmt. Water Monitoring Program for the Period 10/1/09 to 3/31/10	$ 18,675.00	$ 18,675.00		100%	$ -
694	Con 532, Allied Machinery Corp (106) GS-2010-5, One (1) Compact Excavator and Equipment Trailer	$ 98,155.62	$ -			$ 98,155.62
	3/24/2011					
687	Con 507, Koga Engineering & Construction, Job 02-03, KW-14 12" W/L Kaumualii Hwy, Waimea	$ 1,500,000.00				$ 1,500,000.00
		$ -	$ -	$ -	0%	$ -
		$ -	$ -	$ -	0%	$ -
		$ -	$ -	$ -	0%	$ -
		$ -	$ -	$ -	0%	$ -
TOTAL CAPITAL EXPENDITURES:		**$ 19,612,784.86**	**$ 2,438,154.13**	**$ 52,356.13**		**$ 14,207,441.25**
		$ 16,846,044.56	$ 2,438,154.13	$ 52,356.13		$ 14,407,890.43
TOTAL SALARIES, NORMAL EXPENDITURES, DEBT REQUIREMENTS AND CAPITAL EXPENDITURES:		$ (2,766,740.30) **$ 43,437,499.49**	**$ 16,776,193.39**	**$ 1,087,125.18**	**39%**	$ 200,449.18 **$ 23,694,116.62**

STATEMENT OF REVENUES AND EXPENDITURES
FACILITIES RESERVE CHARGE FUND
March 31, 2011

REVENUES:

Cash on hand as of July 1, 2010							**$ 5,535,242.86**
Add: Revenues To Date							$ 409,108.42
Sub-Total							**$ 5,944,351.28**

EXPENDITURES:

Less: Expenditures To Date							$ 2,054,050.35
BALANCE AT THE END OF THE MONTH							**$ 3,890,300.93**

SHORT TERM INVESTMENTS-FRC

BANK OF HAWAII

CUSIP#	8000423145-112	0.17000%	INT. DUE	06/30/11	$	300,000.00

CENTRAL PACIFIC BANK

CUSIP#	8000738263	0.90000%	INT. DUE		$	-

FIRST HAWAIIAN BANK

CUSIP#	T30020090	0.15000%	INT. DUE	02/16/12	$	500,000.00
CUSIP#	R1102180001	0.10000%	INT. DUE	06/23/11	$	500,000.00

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#	3128X8DX7	2.15000%	INT. DUE			

VINING SPARKS

TOTAL SHORT-TERM INVESTMENTS - FRC							**$ 3,222,812.50**
CASH ON WITH TREASURER - COK				02/28/11	$	(389,224.73)	
CASH ON HAND - FHB Savings (30-288435)				02/28/11	$	1,101,555.81	
Due to WU					$	-	
Less: CLAIMS PAYABLE PAID ON				02/28/11	$	(44,842.65)	**$ 667,488.43**
CASH BALANCE AT THE END OF THE MONTH							**$ 3,890,300.93**

DEPARTMENT OF WATER
County of Kauai
STATUS OF THE BUDGET
JULY 1, 2010 TO JUNE 30, 2011
March 31, 2011

FACILITIES RESERVE CHARGE

% Budget Elapsed 75.00%

CASH RECEIPTS	BUDGETED RECEIPTS	ACTUAL RECEIPTS TO DATE	RECEIPTS FOR THE MONTH	%	BALANCE OF BUDGET OVER ACTUAL RECEIPTS
BEGINNING CASH BALANCE	$ 5,535,242.86	$ -	$ -		$ 5,535,242.86
(FRC Refunds) 4a Facilities Reserve Charge	$ 499,200.00	$ 372,600.00	$ 27,600.00	75%	$ 126,600.00
5a Interest Earned	$ 90,000.00	$ 36,508.42	$ 3,097.13	41%	$ 53,491.58
TOTAL RESOURCES	$ 6,124,442.86	$ 409,108.42	$ 30,697.13	7%	$ 5,715,334.44

CAPITAL EXPENDITURES	BUDGETED AMOUNT	TOTAL ACTUAL EXPENDITURES TO DATE	EXPENDITURES FOR THE MONTH	%	BALANCE OF BUDGET OVER TOTAL ACTUAL EXPENDITURES
301 FRC CIP	$ 2,950,800.00 ~~$ 4,338,400.00~~ ~~$ 2,133,400.00~~ ~~$ 4,338,400.00~~	$ -	$ -	0%	$ 2,950,800.00
301b FRC Fund Balance	$ 619,304.02 ~~$ 781,804.02~~	$ 284,622.00	$ 284,622.00	36%	$ 334,682.02
301c FRC Offset Refund - Kukuiula Development CoLLC	$ 1,387,600.00	$ 1,387,600.00			$ -
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	$ 62,996.00	$ -		##### 0%	$ 62,996.00
3/8/06 (301, 301b) 318 Con 457 Kodani & Assoc Inc **H-8 HW-12** Job 05-02 Drill & Test Wainiha Well No. 4	$ 355,470.00 ~~$ 192,970.00~~	$ 37,000.00	$ 12,000.00	##### 19%	$ 318,470.00
		$ -			$ -

	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
323	01/03/08 (301) Con 427 Belt Collins Hawaii **WK-08** Kapaa Hmstds 0.5 MG Tank & Kapahi 1.0 MG Tank	$ 175,915.34	$ 126,554.60	$ 21,896.00	72%	$ 49,360.74
324	03/31/08 (301, 301b) Con 488 HDR Engineering **WK-39** Kapaa Hmstds Well No. 4 Drill & Test	$ 226,416.50	$ 10,946.65	$ 10,946.65	5%	$ 215,469.85
325	7/2/2008 (301) Con 492 Earthworks Pacific **WK-42** Phase II Offsite Waterline on Kaapuni Road for Stable Tank	$ 232,910.00	$ 207,327.10		89%	$ 25,582.90
326	7/31/2010 (301) Con 518 Unlimited Builders, LLC Job # 02-02 (Piiwai 677" 0.5 MG Storage Tank & Conn Pipeline	$ (2,205,000.00) $ 2,205,000.00	$ (549,588.21) $ 549,588.21		-25% 25%	$ (1,655,411.79) $ 1,655,411.79
		$ -	$ -			$ -
		$ -	$ -			$ -
		$ -	$ -			$ -
		$ -	$ -		#####	$ -
		$ -	$ -		#####	$ -
		$ -	$ -			$ -
	TOTAL EXPENDITURES	**$ 6,124,442.86**	**$ 2,054,050.35**	**$ 329,464.65**		**$ 4,070,392.51**

STATEMENT OF REVENUES AND EXPENDITURES
BOND FUND
March 31, 2011

REVENUES:

Cash on hand as of July 1, 2010		**$ 553,408.97**
Add: Revenues To Date		$ -
Sub-Total		**$ 553,408.97**
EXPENDITURES:		
Less: Expenditures To Date		$ 20,476.13
BALANCE AT THE END OF THE MONTH		**$ 532,932.84**

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				03/31/11	$ 532,932.84	
LESS CLAIMS PAYABLE ON					$ -	**$ 532,932.84**
BALANCE AT THE END OF THE MONTH						**$ 532,932.84**

0.00

DEPARTMENT OF WATER
County of Kauai
STATUS OF THE BUDGET
JULY 1, 2010 TO JUNE 30, 2011
March 31, 2011

BOND FUND % Budget Elapsed 75.00%

CASH RECEIPTS:	BUDGETED RECEIPTS	TOTAL ACTUAL RECEIPTS TO DATE	RECEIPTS FOR THE MONTH	%	BALANCE OF BUDGET OVER TOTAL ACTUAL RECEIPTS
BEGINNING CASH BALANCE	**$ 553,408.97**	**$ -**	**$ -**		**$ 553,408.97**
	$ -	$ -	$ -	0%	$ -
TOTAL RESOURCES	**$ 553,408.97**	**$ -**	**$ -**	**0%**	**$ 553,408.97**
CAPITAL EXPENDITURES:	**BUDGETED AMOUNT**	**TOTAL ACTUAL EXPENDITURES TO DATE**	**EXPENDITURES FOR THE MONTH**	**%**	**BALANCE OF BUDGET OVER TOTAL ACTUAL EXPENDITURES**
201 Bond - CIP	$ 200,656.55	$ -	$ -	0%	$ 200,656.55
216 07/08/08 Con 494 Kauai Builders **WK-08** Job 02-14 Kapaa Hmstds 0.5 MG Tank & **WK-15** Job 03-03 Hardening of Generator Shelters at Makaleha Tank Site	$ 352,752.42	$ 20,476.13		6%	$ 332,276.29
	$ -	$ -	-	0%	$ -
	$ -	$ -	$ -	0%	$ -
	$ -	$ -	$ -	0%	$ -
TOTAL EXPENDITURES	**$ 553,408.97**	**$ 20,476.13**	**$ -**	**4%**	**$ 532,932.84**

STATEMENT OF REVENUES AND EXPENDITURES
BOND - BAB FUND
March 31, 2011

REVENUES:

Cash on hand as of July 1, 2010	**$ 58,723,019.84**
Add: Revenues To Date	$ -
Sub-Total	**$ 58,723,019.84**

EXPENDITURES:

Less: Expenditures To Date	$ 8,863,162.31
BALANCE AT THE END OF THE MONTH	**$ 49,859,857.53**

SHORT TERM INVESTMENTS - BOND

BANK OF HAWAII

FIRST HAWAIIAN BANK

CUSIP#	1062140	1.1340%	INT. DUE	10/31/13	$ 51,500,000.00	
TOTAL SHORT-TERM INVESTMENTS - BOND						**$ 51,500,000.00**
CASH ON HAND WITH TREASURER - COK				01/31/11	(132,093.34)	
Due to W/U - BAB - Bond Fund AP				12/31/10	(500.991.73)	
Due to W/U - BAB - Bond Fund Transfer					(319,113.26)	
LESS CLAIMS PAYABLE ON				02/28/11	(687,944.14)	**$ (1,640,142.47)**
BALANCE AT THE END OF THE MONTH						**$ 49,859,857.53**

DEPARTMENT OF WATER
County of Kauai
STATUS OF THE BUDGET
JULY 1, 2010 TO JUNE 30, 2011
March 31, 2011

BUILD AMERICA BONDS (BABs) - FUND

% Budget Elapsed 75.00%

	CASH RECEIPTS:	BUDGETED RECEIPTS	TOTAL ACTUAL RECEIPTS TO DATE	RECEIPTS FOR THE MONTH	%	BALANCE OF BUDGET OVER TOTAL ACTUAL RECEIPTS
	BEGINNING CASH BALANCE	**$ 58,723,019.84**	**$ -**	**$ -**		**$ 58,723,019.84**
	Bond Proceeds	$ -	$ -	$ -	0%	$ -
	Interest Income	$ 420,000.00			0%	$ 420,000.00
	TOTAL RESOURCES	**$ 59,143,019.84**	**$ -**	**$ -**	**0%**	**$ 59,143,019.84**
	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**	28,010,741.89 ~~28,099,741.89~~ ~~$ 28,402,138.36~~ ~~$ 28,983,287.74~~ ~~$ 29,032,801.22~~ ~~$ 30,035,551.22~~ ~~$ 30,111,751.22~~ ~~$ 32,156,751.22~~ ~~$ 33,999,751.22~~ ~~$ 34,373,117.26~~ ~~$ 34,874,108.99~~ ~~$ 37,079,108.99~~ ~~$ 37,639,271.99~~ ~~$ 37,728,271.99~~ ~~$ 38,774,071.99~~ ~~$ 41,468,071.99~~ ~~$ 43,468,071.99~~ ~~$ 44,218,831.99~~ ~~$ 45,082,690.20~~	$ -		0%	$ 28,010,741.89
201-01	**BOND - BAB, CIP** Job# 10-02	$ 4,249,687.00 ~~$ 4,350,000.00~~ ~~$ 4,500,000.00~~ ~~$ 2,500,000.00~~	$ -	$ -	0%	$ 4,249,687.00
218	5/11/2010 CON 513 Jennings Pacific, LLC Job No. 02-18, WK - 32 Kapaa Hmstds Pipe Repl	$ 2,842,000.00	$ 1,215,973.35	$ 181,984.85	43%	$ 1,626,026.65
219	5/11/10 CON 514 Earthworks Pacific Job No. 04-02, WK-14, Pipeline Repl for Vivian hts	$ 2,686,000.00	$ 1,626,152.24	$ 311,515.17	61%	$ 1,059,847.76
220	6/30/10 CON 516 Unlimited Builders, LLC Job No. 03-02, HW-02, Wainiha Booster Pump Stn	$ 1,728,000.00	$ -		0%	$ 1,728,000.00
684	8/11/09 Con 504 Goodfellow Bros., Inc. Job 05-01 KW-16 Waimea Main Replacement	$ 3,272,994.98 ~~$ 3,223,481.50~~ ~~$ 2,359,623.29~~	$ 2,348,979.54	$ 74,612.63	100%	$ 924,015.44
687	12/18/09 Con 507 Koga Engineering & Const. Job 02-03, KW-14 12" WL Waimea Canyon Drive	$ 1,944,706.35 ~~$ 1,944,706.35~~	$ 668,438.29		34%	$ 1,276,268.06
221	9/30/10 Con 520 (201-01) Fukunaga & Associates Job # 10-01, Ani-01a Pipeline Repl - Anini RD	$ 750,760.00	$ 85,400.00		11%	$ 665,360.00
222	9/30/10 Con 519 (201-01) Park Engineering Job # 10-02, Upsizing of the Kaumualii Hwy. 16"	$ 150,000.00	$ 135,897.30		91%	$ 14,102.70
	TOTAL EXPENDITURES	**$ 45,634,890.22**	**$ 6,080,840.72**	**$ 568,112.65**	**13%**	**$ 39,554,049.50**

DEPARTMENT OF WATER
County of Kauai
STATUS OF THE BUDGET
JULY 1, 2010 TO JUNE 30, 2011
March 31, 2011

BUILD AMERICA BONDS (BABs) - FUND **% Budget Elapsed 75.00%**

	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	$ 2,694,000.00	$ 205,598.25		8%	$ 2,488,401.75
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	$ 89,000.00	$ -		0%	$ 89,000.00
226	11/30/10 Con 526 Fluid Systems Hawaii Job 10-02, Solicitation GS-2010-4, Furnishing & Delivering of 24" Dia. Gatevalve	$ 100,313.00	$ -		0%	$ 100,313.00
227	Con 525 KW-20 R. Electric Waimea Well A Renovations	$ 560,163.00	$ 7,600.00		1%	$ 552,563.00
326	Con # 518 (LO-04) Unlimited Builders, LLC Job # 02-02, Piiwai 677" 0.5MG Storage Tank and Connecting Pipeline - Lawai	$ 2,205,000.00	$ 1,040,780.84	$ 166,821.12	47%	$ 1,164,219.16
228	Agreement 10/1/09 Aukahi Farms, LLC Koloa Tank Site Acquisiton	$ 500,991.73	$ 500,991.73		100%	$ -
	SUB - TOTAL	$ 7,195,267.73	$ 1,754,970.82	$ 166,821.12		$ 5,440,296.91

DEPARTMENT OF WATER
County of Kauai
STATUS OF THE BUDGET
JULY 1, 2010 TO JUNE 30, 2011
March 31, 2011

BUILD AMERICA BONDS (BABs) - FUND **% Budget Elapsed 75.00%**

	CAPITAL EXPENDITURES:	BUDGETED AMOUNT	TOTAL ACTUAL EXPENDITURES TO DATE	EXPENDITURES FOR THE MONTH	%	BALANCE OF BUDGET OVER TOTAL ACTUAL EXPENDITURES
229	PO. 36592 KUKUIULA DEV'T. CO. Piiwai Tank/Akemana Tank Agreement dated 10/15/10, Relocation Premium Charge	$ 373,366.04	$ 373,366.04		100%	$ -
230	Con 529 (201-01) Oceanic Company, Inc. Job 02-08, HE-08 Rehabilitation of Eleele Twin 0.4 MG Steel Tanks	$ 1,843,000.00	$ -		0%	$ 1,843,000.00
231	Con 530 (201-01) Earthworks Pacific Job 02-19, WK-12 Waipouli Main Replacement	$ 2,045,000.00	$ -		0%	$ 2,045,000.00
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	$ 76,200.00	$ -		0%	$ 76,200.00
233	Con 533 (201-01) Belt Collins Hawaii, Ltd. Job K-01, K-12, Kalaheo 1111' and 1222' Water System Improvements	$ 1,002,750.00			0%	$ 1,002,750.00
683	Con 503 (201-01) Goodfellow Brothers, Inc. Job 04-06, KW-05, Kekaha Well "B"" Renovations	$ 113,739.55 $ 467,409.83	$ 78,206.37 $ 240,906.89		65%	$ 35,533.18 $ 226,502.94
234	Agreement 2/14/11 Mildred Fujiko Yamada Kukuiolono Water Tank Site - Kalaheo	$ 302,396.47	$ 302,396.47		100%	$ -
589	1/14/03 (101b, 106b) Con 405 Kodani & Assoc. **WK-12** Job 02-19 Waipouli Main Replacement	$ 89,000.00	$ 32,475.00	$ 32,475.00	36%	$ 56,525.00
	TOTAL EXPENDITURES	**$ 59,143,019.84**	**$ 8,863,162.31**	**$ 767,408.77**		**$ 50,279,857.53**

DEPARTMENT OF WATER
County of Kaua'i

"Water has no Substitute – Conserve It!"

PR SPECIALIST REPORT

May 26, 2011

RE: PUBLIC RELATIONS UPDATE FOR APRIL, 2011

Public Relations Services: Most of the pieces worked on are completed or near completion.

- Micro-website – there will be a link on our website to a micro-website which will include
  - "The Value of Water" (formerly referred to as "The Story of Water")
  - Water Plan 2020 background information
  - Water Plan 2020 Progress Report
- Community Outreach – A series of speaking engagements at community organization meetings are being set up for David.
  - Talking points for these meetings have been finalized
  - A leave-behind brochure is being finalized and prepared for printing (this brochure will be available at all of David's speaking engagements)
- News Releases – A monthly news release will be sent to the media with an update of projects that are in design, construction or completion.

Source Water Protection Plan: Draft grant application presented for approval at this board meeting.

WaterSense: On May 9th, the fourth graders at Kilauea School were treated to a huge Subway sandwich, chips, drinks and cookies as well as DOW items that included low flow shower heads and kitchen aerators. The teachers were presented with a check for $500.00 for future school needs. Steven from the Lihue Subway came prepared to assemble the 10.5 foot sandwich and was happy to instruct selected students, teachers Heather Cornell and Heather Devin and principal Sherry Scott in actually assembling the sandwich. Kudos again to Joy for organizing this event, to Lihue Subway for being a partner by providing the lunch, to Dennis Fujimoto for being there to recognize and promote the value of this event and to David for supporting our efforts.

Community Events: Joy and I attended the Koloa Elementary School Career Day event on April 27th. We were introduced to three groups of students made up of 4th & 5th graders and did a power point presentation that gave some general background information about the "water industry" as well as specifics about the department. The different careers within the water industry, the type of schooling needed to be in certain positions and general pay ranges were also included in the presentation.

On May 12th, we participated in the 16th Annual Agriculture and Environmental Awareness Day co-hosted by the Kauai County Farm Bureau and UH College of Tropical Agriculture & Human Resources (CTAHR). The water model display was updated to be used for this event (thanks to Bill for assisting with current information). Over 500 students from around the island showed up despite the inclement weather. Thanks also to Russell Coyaso and Darren Galas for assisting with the set up and Scott Shibuya for assisting Russell with the delivery of the water model.

Service Awards Banquet: The County Service Awards Banquet will be held on June 21, 2011 at the Kauai War Memorial Convention Hall. Employees with 15, 20, 25, 30, 35 and 40 years of service, each department's Outstanding Employee of the Year and Retirees from 2010 will be recognized. Joy is serving as our representative on this committee.

Respectfully submitted,

Faith Shiramizu
DOW Public Relations Specialist

Mgrrp/PR Specialist Report (5-26-11):cab

Operations Division Report for the Month of April 2011

Personnel

- An interview was held on April 21st with the single candidate for Chief of Operations. The results of the interview and subsequent background check were positive. We hope to successfully fill this position in May. The Waterworks Field Superintendent recruitment is on hold for the time being. The Ops Reorg effort continues and emphasis will next be placed on creating and filling the vacant Telecom Technician and Water Plant Operator II positions.
- Ops Field Crews attended a "Signal Person and Rigging" workshop held at DOW. Ops personnel also attended a "Policy Against Discrimination and Harassment" workshop.
- Please see the attached labor report for Operations Division as compiled by the Fiscal Division.

Source and Storage

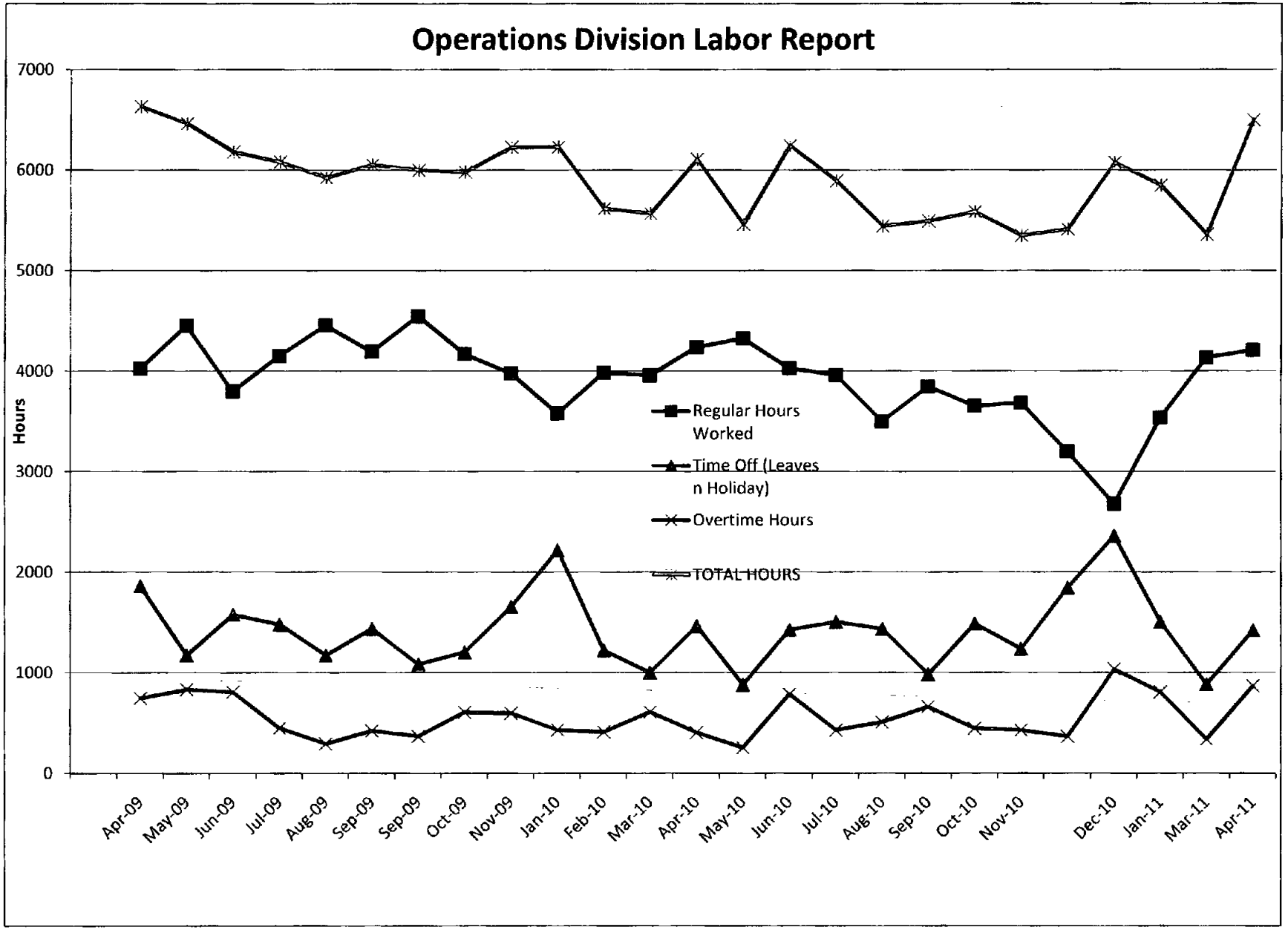
- Puhi Well #4 deep well pump has failed and is no longer producing water. Ops is producing a RFP for the pump replacement.
- Rehabilitation of the twin Eleele Steel Tanks is underway. Ops crews operated valves to drain Tank #1 and also to allow the contractor to disconnect and temporarily cap piping to allow work on the tank. A temporary pipe jumper was fabricated to supply to Eleele while the piping was being capped.
- Plans are being developed with Special Projects for the Rehabilitation of Haena Steel Tank. Temporary storage tanks with controls will be utilized while the tank is being reconditioned.

Distribution

- The East Crew is continuing a project to abandon a 4" GS pipeline (1924) on Kuhio Hwy and Malolo Road in Hanalei. Several service laterals were transferred from the 4" to a parallel 8" AC pipeline. The 4" was cut and capped in one location and another cut and cap will be done at Weke Road.
- West Crew completed a difficult repair of the 8" AC pipeline that serves Brydeswood Subdivision. The West Crew also completed a major repair on a 12" tee at the intersection of Hoone and Kuai Roads in Poipu.
- Ops working with Engineering Div on transporting and painting some 24" piping and fittings for the Kaumualii Hwy project.
- Hydrant crew is working with a vendor to replace defective gaskets on hydrants installed between Kekaha and Waimea.

Fleet, Inventory, Warehouse and Baseyard Area

- Maintenance Crew is gutting the interior of the small storage container located in the DOW baseyard. The container will be used for document storage


Operations Division Labor Report
7000
6000
5000
4000
3000
2000
1000
0
Hours
Regular Hours Worked
Time Off (Leaves n Holiday)
Overtime Hours
TOTAL HOURS
Apr-09
May-09
Jun-09
Jul-09
Aug-09
Sep-09
Sep-09
Oct-09
Nov-09
Jan-10
Feb-10
Mar-10
Apr-10
May-10
Jun-10
Jul-10
Aug-10
Sep-10
Oct-10
Nov-10
Dec-10
Jan-11
Mar-11
Apr-11

DEPARTMENT OF WATER
County of Kaua'i

"Water has no Substitute – Conserve It!"

MANAGER'S UPDATE

May 26, 2011

MANAGER'S UPDATE for APRIL 2011 to MAY 2011

Congresswoman Hirono wrote support letters on behalf of Hawaii Rural Water requesting program funds for the Tech assistance and Training for the 2012 federal budget.

Governor Abercrombie released $1.4 million in State funds for the Waimea Canyon Pipeline project. This was with assistance from Sen. Kouchi, Representatives Tokioka and Morikawa, Mayor Carvalho and council members.

CONTRACTS AWARDED BY THE MANAGER:
None

PUMP INSTALLATION PERMITS:
- Kalaheo Well #1, State Well #2-5631-001, and
- Kalaheo Well #2, State Well #2-5631-002

WAIVER, RELEASE AND INDEMNITY AGREEMENTS SIGNED BY THE MANAGER:
None

PERSONNEL MATTERS UPDATE:

Updated May 11, 2011

RECRUITMENT & POSITION CHANGES

Ops Division:
1. Water Field Operations Superintendent. DPS to forward list of eligible.
2. Chief of Operations interview held on April 21, 2011. Pending selection.
3. Pipefitter Helper. Reallocation submitted to DPS for review and approval.
4. Pipefitter Positions. Updating positions to include DSO Grade I certification. Notice to update positions submitted to DPS.

Fiscal Division:
1. Accountant III. Going through Internal Departmental Recruitment. Pending.

Engineering and Special Projects Divisions:
1. Civil Engineer II (Engineering Division). Pending eligible list.
2. Civil Engineer II (Water Resources & Planning Division). Pending eligible list.

Administration Division:
1. Reallocate Commission Support Clerk to Board Secretary. Pending DPS review.
2. Private Secretary position duties clarified to show Private Secretary / Admin. Office Manager position duties. Pending DPS review.

3. Deputy-Manager Secretary. Continuing recruitment to fill Deputy Secretary position. Job announcement planned for posting within the week of May 22, 2011.

SUMMARY OF WARRANT VOUCHERS PAID – April 30, 2011
Warrant vouchers were paid in the amount of $1,957,659.08
Please see attached Warrant Vouchers Report.

STAFF REPORTS - FY 11 – 5:
Conveyance of Water Facility:

1.	Pioneer Hi-Bred International, Inc.	TMK: (4) 1-2-002: Por. 1	Kekaha	$8,100.00

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 (5-26-11):cab

MAZIE K. HIRONO
2ND DISTRICT, HAWAI'I

1132 LONGWORTH HOUSE OFFICE BUILDING
WASHINGTON, DC 20515
PHONE: (202) 225-4906
FAX: (202) 225-4987

HAWAI'I OFFICE
5104 PRINCE KUHIO FEDERAL BUILDING
HONOLULU, HI 96850
PHONE: (808) 541-1986
FAX: (808) 538-9233

NEIGHBOR ISLAND TOLL FREE NUMBERS
BIG ISLAND (808) 935-3756
KAUA'I/NI'IHAU (808) 245-1931
MAUI (808) 242-1815
LANA'I (808) 565-7199
MOLOKA'I (808) 552-0160
Website: www.house.gov/Hirono

Congress of the United States
House of Representatives
Washington, DC 20515
May 20, 2011

COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE
SUBCOMMITTEE ON AVIATION
SUBCOMMITTEE ON HIGHWAYS AND TRANSIT
SUBCOMMITTEE ON THE COAST GUARD AND MARITIME TRANSPORTATION
SUBCOMMITTEE ON WATER RESOURCES AND ENVIRONMENT

COMMITTEE ON EDUCATION AND THE WORKFORCE
SUBCOMMITTEE ON EARLY CHILDHOOD, ELEMENTARY AND SECONDARY EDUCATION
SUBCOMMITTEE ON WORKFORCE PROTECTIONS

COMMITTEE ON ETHICS

HOUSE DEMOCRACY PARTNERSHIP

The Honorable Mike Simpson
Chairman
Subcommittee on Interior, Environment, and Related Agencies
Committee on Appropriations
U.S. House of Representatives
H-307, The Capitol
Washington, DC 20515

The Honorable Jim Moran
Ranking Member
Subcommittee on Interior, Environment, and Related Agencies
Committee on Appropriations
U.S. House of Representatives
1016 Longworth House Office Building
Washington, DC 20515

Dear Chairman Simpson and Ranking Member Moran:

As you begin working to draft the FY 2012 Interior, Environment, and Related Agencies Appropriations bill, I request that you consider supporting technical and training assistance for rural and small water systems.

Rural and small water systems must comply with important federal laws and regulations intended to protect our environment and ensure that citizens have access to safe, affordable, and clean drinking water. The Safe Drinking Water Act authorizes the Environmental Protection Agency (EPA) to provide training and technical assistance to rural and small water systems to ensure that they are in compliance with these vital federal law and regulations.

During these difficult economic times, we must do all we can to ensure that our communities have the resources necessary to protect public health and preserve our environment affordably. Therefore, I request that the Committee include report language directing the EPA to use $15 million of the funds the Committee will allocate for Environmental Programs and Management to establish a competitive grant program to provide funds for training and technical assistance to rural and small water systems.

Requested Report Language:

Environmental Protection Agency

Environmental Programs and Management—The Committee recognizes the need to ensure that rural and small water systems have the ability to comply with all necessary federal regulations to protect the health and safety of the communities they serve. The Committee provides $15 million of FY2012 Environmental Programs and Management funds to be used for the purpose of establishing a competitive grant program for training and technical assistance for rural and small water systems.

I appreciate your consideration of this request.

Sincerely,

Mazie K. Hirono
Member of Congress

PRINTED ON RECYCLED PAPER

MAZIE K. HIRONO
2ND DISTRICT, HAWAI'I

1410 LONGWORTH HOUSE OFFICE BUILDING
WASHINGTON, DC 20515
PHONE: (202) 225-4906
FAX: (202) 225-4987

HAWAI'I OFFICE
5104 PRINCE KUHIO FEDERAL BUILDING
HONOLULU, HI 96850
PHONE: (808) 541-1986
FAX: (808) 538-0233

NEIGHBOR ISLAND TOLL FREE NUMBERS
BIG ISLAND (808) 935-3756
KAUA'I / NI'IHAU (808) 245-1951
MAUI (808) 242-1818
LANA'I (808) 565-7199
MOLOKA'I (808) 552-0160
Website: www.house.gov/Hirono

Congress of the United States
House of Representatives
Washington, DC 20515

COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE
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SUBCOMMITTEE ON WORKFORCE PROTECTIONS

COMMITTEE ON ETHICS

HOUSE DEMOCRACY PARTNERSHIP

May 13, 2011

The Honorable Jack Kingston
Chairman
Appropriations Subcommittee on
Agriculture, Rural Development,
and Related Agencies
Room 2362-A Rayburn HOB
Washington, DC 20515

The Honorable Sam Farr
Ranking Member
Appropriations Subcommittee on
Agriculture, Rural Development,
and Related Agencies
Room 2362-A Rayburn HOB
Washington, DC 20515

Dear Chairman Kingston and Ranking Member Farr:

I write in support of funding for two programs of vital importance to water systems in rural communities across the country in the FY2012 Agriculture, Rural Development, Food and Drug Administration, and Related Agencies Appropriations bill.

Both of these programs are administered by the U.S. Department of Agriculture and support training and technical assistance for rural communities. This training and technical assistance allows these communities to properly manage, operate, and maintain their water systems.

The first program that the Subcommittee should support is the circuit rider program. This program is funded through the Rural Water and Waste Disposal Program Account of the Rural Utility Service. I request that the Subcommittee provide a funding level of $15.45 million for this account, which will maintain support for 116 circuit riders. Circuit riders provide necessary training to water system personnel, which is a valuable service in rural communities.

The second program that the Subcommittee should support is the Grassroots Source Water Protection Program. This program is funded through the Farm Service Agency's source water protection program and provides resources that allow water protection specialists in 43 states to develop locally-driven plans to protect the ground and surface waters vital to the health of small and rural communities. I request that the Subcommittee provide $6.4 million for this program.

I appreciate the Subcommittee's consideration of these requests.

Sincerely,

Mazie K. Hirono

Mazie K. Hirono
Member of Congress

DEPT OF WATER
COUNTY OF KAUA'I

11 MAY 13 P3:58

PRINTED ON RECYCLED PAPER

NEIL ABERCROMBIE
GOVERNOR

11 APR 29 P1:14

DEPT. OF WATER
COUNTY OF KAUAI

KALBERT K. YOUNG
DIRECTOR

DEAN K. HIRATA
DEPUTY DIRECTOR

STATE OF HAWAII
DEPARTMENT OF BUDGET AND FINANCE
P.O. BOX 150
HONOLULU, HAWAII 96810-0150

EMPLOYEES' RETIREMENT SYSTEM
HAWAII EMPLOYER-UNION HEALTH BENEFITS TRUST FUND
OFFICE OF THE PUBLIC DEFENDER
PUBLIC UTILITIES COMMISSION

ADMINISTRATIVE AND RESEARCH OFFICE
BUDGET, PROGRAM PLANNING AND MANAGEMENT DIVISION
FINANCIAL ADMINISTRATION DIVISION
OFFICE OF ECONOMIC RECOVERY AND REINVESTMENT (ARRA)

April 14, 2011

Mr. David R. Craddick, P.E.
Manager and Chief Engineer
County of Kauai, Department of Water
4398 Pua Loke Street
Lihue, Hawaii 96766

Dear Mr. Craddick:

I am pleased to inform you that I am releasing $1,431,562 in capital improvement program funds, as appropriated by Act 162, SLH 2009, as amended by Act 180, SLH 2010, to complete the replacement of the 8-inch waterline with a 12-inch waterline to improve water services to the Waimea Canyon School and surrounding facilities. I understand that the project will increase the water flow required to meet the County of Kauai's Water System Standards adopted in 2002 for the school and the residents in the town of Waimea.

Sincerely,

NEIL ABERCROMBIE
Governor of Hawaii

Attachments

c: Honorable Ronald D. Kouchi
Honorable Bernard P. Carvalho, Jr.

STATE OF HAWAII

ALLOTMENT ADVICE

11 APR 29 P1:14

DEPT. OF WATER
COUNTY OF KAUAI

TO: The Honorable Bernard P. Carvalho, Jr., Mayor

ADVICE NO. 11-0252
xxxxxxxx

County of Kauai

COMPTROLLER'S NO. _____
xxxxxxxx

I have this day approved the following allotment/transfer from the general obligation bond fund appropriation authorized by Section 62, SLH 2009, as amended by Act 180, SLH 2010, for the purpose indicated:

TC	F	YR	APP	D	ALLOT CAT	SOURCE/ OBJECT	ITEM	TITLE AND PURPOSE OF ALLOTMENT	MOF	AMOUNT	
xxx	x	xx	xxx	xx	xx	xxxx	xxxxxx	(20 x)	x	xxxxxxxxxx	xx
531	B	09	403	X	20		K-15	WAIMEA CANYON SCHOOL WATERLINE IMPROVEMENTS, KAUAI CONSTRUCTION FOR THE INSTALLATION OF APPROXIMATELY 2,000 LINEAR FEET OF 12-INCH WATERLINE ALONG KAUMUALII HIGHWAY BETWEEN HUAKAI AND MOANA ROADS AND APPROXIMATELY 1,900 LINEAR FEET OF 12-INCH WATERLINE ALONG WAIMEA CANYON DRIVE BETWEEN KAUMUALII HIGHWAY AND HAINA ROAD. PURPOSE: TO FINANCE THE CONSTRUCTION OF 12-INCH WATERLINE ALONG KAUMUALII HIGHWAY FOR THE DEPARTMENT OF WATER TO COMPLETE THE WAIMEA CANYON SCHOOL WATERLINE PROJECT. TOTAL ALLOTMENT - $1,431,562.00		1,431,562	00

Neil Abercrombie
GOVERNOR, STATE OF HAWAII

DIRECTOR OF BUDGET AND FINANCE

DATE: April 14, 2011

PROVED FOR B&F BY DAGS - AUGUST 1, 1999

STATE ACCOUNTING FORM A-15
JULY 1, 1999 (REVISED)

DEPARTMENT OF WATER
Summary of Warrant Vouchers Paid
April 30, 2011

WATER UTILITY FUND		
Other Expenses, Department of Water		
Capital Expenditures	$ 631,591.47	
Other Expenses, Department of Water		
Normal Expenditures	$ 523,032.12	
TOTAL WATER UTILITY FUND	$ 1,154,623.59	$ 1,154,623.59
BOND FUND		
TOTAL BOND FUND		$ -
F R C FUND		
BELT COLLINS HAWAII, LTD.	$ 30,662.20	
HDR ENGINEERING	$ 54,733.25	
TOTAL FRC FUND	$ 85,395.45	$ 85,395.45
BOND - BAB		
JENNINGS PACIFIC, LLC	$ 175,486.85	
BCP CONSTRUCTION OF HAWAII, INC.	$ 138,129.62	
FLUID SYSTEMS HAWAII, INC	$ 39,860.00	
KODANI & ASSOCIATES, INC.	$ 22,080.00	
GOODFELLOW BROTHERS, INC.	$ 181,388.99	
UNLIMITED BUILDERS, LLC	$ 160,694.58	
TOTAL BAB BOND FUND	$ 717,640.04	$ 717,640.04
TOTAL CLAIMS PAYABLE		$ 1,957,659.08
WATER UTILITY FUND		
4/30/11 AP	$ 1,154,623.59	
Due from BAB Fund, Transfer Adjustment		$ 1,154,623.59
BOND FUND		$ -
F R C FUND		$ 85,395.45
BOND - BAB:		
4/30/11 AP	$ 717,640.04	
Due to Water Utility Fund, Adjustment	$ -	$ 717,640.04
BANK TRANSFER -		$ 1,957,659.08

Bank Transfer Adjustments:
Due to W/U - Transfer Adjustment

DEPARTMENT OF WATER

WATER UTILITY FUND

RECAP OF NORMAL EXPENDITURES

April 30, 2011

	BUDGET CODE		AMOUNT
REFUND - REVENUES FROM WATER SALES	1	$	1,934.66
REFUND - FRC	4.1	$	9,200.00
UTILITIES - ADMINSTRATION & OFFICE	21	$	15,689.72
POSTAGE & PRINTING	22	$	4,735.82
CONTRACTUAL SERVICES - ADMINISTRATION & OFFICE	27	$	3,951.95
TRAVEL & INCIDENTALS -STAFF	29	$	5,771.68
MISCELLANEOUS - ADMINISTRATION & OFFICE	31	$	905.01
IN-SERVICE TRAINING	33	$	6,294.35
SUPPLIES - OFFICE & JANITORIAL	34	$	893.79
PUBLIC RELATIONS	36	$	3,512.54
PUBLIC RELATIONS - Grants	36.2	$	11,697.35
COMPUTER SUPPORT & SUPPLIES	37	$	770.83
MICROLAB MATERIALS & SUPPLIES	38	$	1,509.79
VEHICLE & EQUIPMENT MAINTENANCE	40	$	21,526.68
VEHICLE - FUEL	41	$	11,866.61
UTILITIES	42	$	6,705.39
ELECTRICAL PARTS	43.1	$	450.87
CONTRACTUAL SERVICES - OPERATIONS	45	$	20,243.91
MATERIALS & SUPPLIES - OPERATIONS	47	$	24,167.70
COLLECTIVE BARGAINING ITEMS	48	$	1,715.08
PUMP ELECTRICAL	51	$	235,296.59
WATER PURCHASE	55	$	130,779.74
CHEMICALS	58	$	3,412.06
TOTAL NORMAL EXPENDITURES		**$**	**523,032.12**

DEPARTMENT OF WATER

WATER UTILITY FUND

RECAP OF CAPITAL EXPENDITURES

April 30, 2011

CAPITAL EXPENDITURES:	BUDGET CODE	AMOUNT
CAPITAL IMPROVEMENT PROJECTS	101	
MISCELLANEOUS CAPITAL EXPENDITURES	102	$ 131,128.77
OFFICE & ENGINEERING EQUIPMENT	103	$ 582.41
SUB-TOTAL		**$ 131,711.18**
WATER UTILITY FUND		
CON 512 ARCHITECTS HAWAII, LTD.	692	$ 48,957.07
CON 420 HDR Engineering, Inc.	601	$ 8,314.60
CON 428 BROWN & CALDWELL	609	$ 1,926.25
CON 449 PAREN, INC.	634	$ 38,620.00
CON 453 BELT COLLINS HAWAII LTD.	638	$ 2,250.00
CON 462 KENNEDY/JENKS CONSULTANTS	647	$ 4,049.97
CON 507 KOGA ENGINEERING	687	$ 395,762.40
CONTRACT PAYMENTS - WU		$ 499,880.29
TOTAL WATER UTILITY -CAPITAL EXPENDITURES		**$ 631,591.47**
BOND		
CON		
CON		
CONTRACT PAYMENTS - BOND:		**$ -**
FRC		
CON 427 BELT COLLINS HAWAII, LTD.	323	$ 30,662.20
CON 488 HDR ENGINEERING	324	$ 54,733.25
FRC PAYMENTS		**$ 85,395.45**
BOND - BAB		
CON 513 JENNINGS PACIFIC, LLC	218	$ 175,486.85
CON 523 BCP CONSTRUCTION OF HAWAII, INC.	223	$ 138,129.62
CON 526 FLUID SYSTEMS HAWAII, INC	226	$ 39,860.00
CON 405 KODANI & ASSOCIATES, INC.	589	$ 22,080.00
CON 504 GOODFELLOW BROTHERS, INC.	684	$ 181,388.99
CON 518 UNLIMITED BUILDERS, LLC	326	$ 160,694.58
CONTRACT PAYMENTS - BAB		**$ 717,640.04**
TOTAL CAPITAL EXPENDITURES		**$ 1,434,626.96**