

MINUTES

DEPARTMENT OF WATER SUPPLY COUNTY OF HAWAI'I WATER BOARD MEETING

March 19, 2019

West Hawai'i Civic Center, Building G, 74-5044 Ane Keohokalole Highway, Kailua-Kona, Hawai'i

MEMBERS PRESENT: Mr. William Boswell, Jr., Chairperson
Mr. Eric Scicchitano, Vice-Chairperson
Mr. David De Luz, Jr.
Mr. Nestorio Domingo
Mr. Kenneth Sugai
Mr. Keith K. Okamoto, Manager-Chief Engineer, Department of Water Supply (ex-officio member)

ABSENT: Mr. Bryant Balog, Water Board Member
Mr. Leningrad Elarionoff, Water Board Member
Mr. Craig Takamine, Water Board Member
Ms. Kanoe Wilson, Water Board Member
Director, Planning Department (ex-officio member)
Director, Department of Public Works (ex-officio member)

OTHERS PRESENT: Ms. Diana Mellon-Lacey, Deputy Corporation Counsel
Mr. Jeff Zimpfer, National Park Service (10:03 a.m.)

Department of Water Supply Staff

Mr. Kawika Uyehara, Deputy
Ms. Nyssa Kushi, Information and Education Specialist
Mr. Kurt Inaba, Engineering Division Head
Mr. Richard Sumada, Waterworks Controller
Mr. Daryl Ikeda, Operations Division Head
Mr. Clyde Young, Operations Division
Mr. Eric Takamoto, Operations Division

- 1) CALL TO ORDER – Chairperson Boswell called the meeting to order at 10:00 a.m.
- 2) STATEMENTS FROM THE PUBLIC - None
- 3) APPROVAL OF MINUTES

ACTION: Mr. De Luz moved for approval of the Minutes of the February 26, 2019, Water Board Meeting; seconded by Mr. Scicchitano and carried unanimously by voice vote.

- 4) APPROVAL OF ADDENDUM AND/OR SUPPLEMENTAL AGENDA - None

5) **DEPARTMENT OF WATER SUPPLY PROPOSED OPERATING AND 5-YEAR CAPITAL IMPROVEMENT PROJECTS (C.I.P.) BUDGETS FOR FISCAL YEAR 2020:**

The Department’s Fiscal Year 2020 Operating Budget, totaling \$55,652,500, and 5-Year C.I.P. Budget for Fiscal Year 2020-2024, totaling \$122,700,000, have been distributed for the Board’s review. A public hearing was held prior to this meeting to accept testimony. The Board may change either Budget or adopt them as presented over two readings.

The Manager-Chief Engineer recommended that the Board approve the Department’s Fiscal Year 2020 Operating and C.I.P. Budgets on this first of two readings.

ACTION: Mr. Sugai moved for approval of the recommendation; seconded by Mr. Scicchitano. There being no discussion, Motion was carried unanimously by voice vote.

6) **SOUTH HILO:**

A. **JOB NO. 2019-1104, KULA‘IMANO WELL A REPAIR:**

This project consists of furnishing all labor, materials, tools and equipment necessary to remove the existing pumping assembly; install a Contractor supplied submersible pump and motor, column assembly, power cable, sounding tubes, and all appurtenant materials; electrical work; chlorinate the well and pumping assembly; and complete an efficiency test; in accordance with the specifications.

Bids for this project were opened on March 7, 2019, at 2:00 p.m., and the following are the bid results:

Bidder	Bid Amount
Derrick’s Well Drilling & Pump Services, LLC	\$224,000.00
Beylik Drilling & Pump Service, Inc.	\$261,220.00

Project Costs:

1) Low Bidder (Derrick’s Well Drilling & Pump Services, LLC)	\$224,000.00
2) Contingencies (10.0%)	<u>\$ 22,400.00</u>
Total Cost:	<u>\$246,400.00</u>

Funding for this project will be from DWS’s CIP Budget under Deepwell Pump Replacement. The contractor will have 210 calendar days to complete this project. The Engineering estimate for this project was \$323,000.00.

Well History:

Kula‘imano Well A:

Original Installation: July 1981

Repaired: November 2008 – Final Contract Amount \$49,428.91

Last Repaired: January 2015 – Final Contract Amount \$115,867.89

Mitigation Measures:

This project will implement the mitigation measures of conducting a borehole alignment survey, installation of motor temperature monitoring, and replacing the main service surge protection device.

The Manager-Chief Engineer recommended that the Board award the contract for JOB NO. 2019-1104, KULA'IMANO WELL A REPAIR, to the lowest responsible bidder, Derrick's Well Drilling & Pump Services, LLC, for their bid amount of \$224,000.00, plus \$22,400.00 for contingencies, for a total contract amount of \$246,400.00. It is further recommended that either the Chairperson or the Vice-Chairperson be authorized to sign the contract, subject to review as to form and legality by Corporation Counsel.

MOTION: Mr. Scicchitano moved for approval of the recommendation; seconded by Mr. Domingo.

The Manager-Chief Engineer explained that this project will implement the Permitted Action Group recommendations for borehole alignment survey to see how straight the hole is. The well is not very deep, but the TDH (total dynamic head) is high because it pushes up to a tank at a higher elevation. If the hole is straight enough, a line shaft will also be an option. Staff suspected that the hole was not straight, which is why a submersible pump and motor are in there, even though the well is at a lower elevation. Also, more monitoring equipment will be put in this well and some electrical work is included.

Mr. Young stated that the surge suppression devices will be upgraded and any potential power quality issues will be addressed.

Chairperson Boswell asked what the primarily source of the surge protection would be.

Mr. Young replied that the surge suppression comes after the breaker and is similar to a unit you might use for a computer, only on a larger, industrial scale, capable of handling 480 volts. It will not stop a lightening strike but hopefully address most of the voltage transients, or surges, in the system, if there are any.

Mr. De Luz asked if there is a capacity for sensors to see if the shaft moves over time due to seismic activity and different soil types.

Chairperson Boswell stated that if they are done in construction when they are new, you would be able to get a history on them ten to twenty years down the road.

Mr. Young stated that the Department was thinking of putting it in on a routine basis but has to determine how many years it would be appropriate.

The Manager-Chief Engineer stated that in the past, the type of alignment survey that was done to hold the drilling contractor accountable was very simplistic compared to the gyroscopic survey.

Mr. De Luz mentioned previous discussion about redundancy, or having two wells on one site and related it to his experience with refrigeration and new technology of smaller, more high-capacity motors that do not draw power as significantly. He guessed the efficiency of a motor sometimes is more relevant than the capacity, if there is redundancy. Unfortunately, the initial cost of the infrastructure is probably more significant.

The Manager-Chief Engineer noted that after 2017, instructions to the Department's engineers is to keep an eye on efficiency but to factor in redundancy and reliability. Although there might be a certain brand out there with an outrageous efficiency, if it is not proven in the industry, it may be a risk.

Mr. De Luz stated that the reason he brought the issue of resiliency up is because it is not as understood as it should be. Customers, unfortunately, may not have an appreciation of what resiliency is all about. When the Department looks at having its water rate study, it may want to look at that more strategically as far as what it takes to have the two important factors, one being distribution, and the other being reliability. It is not as simple as just turning on the faucet and the water comes out, like turning on a light switch.

The Manager-Chief Engineer appreciated those comments.

ACTION: Motion was carried unanimously by voice vote.

7) SOUTH KOHALA:

A. JOB NO. 2018-1085, PARKER #1 DEEPWELL REPAIR – PHASE 2:

This project consists of furnishing all labor, materials, tools and equipment necessary install a Department supplied submersible pump and motor, existing column assembly, power cable, sounding tubes, and all appurtenant materials; electrical work; chlorinate the well and pumping assembly; and complete an efficiency test; in accordance with the specifications.

Bids for this project were opened on March 7, 2019, at 1:30 p.m., and the following are the bid results:

Bidder	Bid Amount
Beylik Drilling & Pump Service, Inc.	\$83,200.00
Derrick's Well Drilling & Pump Services, LLC	\$100,224.00
Water Resources International, Inc.	\$148,000.00

Project Costs:

1) Low Bidder (Beylik Drilling & Pump Service, Inc.)	\$83,200.00
2) Contingencies (~10.0%)	<u>8,300.00</u>
Total Cost:	<u>\$91,500.00</u>

Funding for this project will be from DWS's CIP Budget under Deepwell Pump Replacement. The contractor will have 60 calendar days to complete this project. The Engineering estimate for this project was \$105,000.00.

Well History:

Parker #1 Deepwell:

Original Installation: March 2000

Repaired: June 2002 – Final Contract Amount \$102,622.00

Repaired: August 2006 – Final Contract Amount \$84,540.00

Last Repaired: September 2016 – Final Contract Amount \$494,705.88

Mitigation Measures:

The first phase of this project conducted a borehole alignment survey. This second phase will implement the mitigation measures of conducting installation of motor temperature monitoring.

The Manager-Chief Engineer recommended that the Board award the contract for JOB NO. 2018-1085, PARKER #1 DEEPWELL REPAIR - Phase 2, to the lowest responsible bidder, Beylik Drilling & Pump Service, Inc., for their bid amount of \$83,200.00, plus \$8,300.00 for contingencies, for a total contract amount of \$91,500.00. It is further recommended that either the Chairperson or the Vice-Chairperson be authorized to sign the contract, subject to review as to form and legality by Corporation Counsel.

MOTION: Mr. Sugai moved for approval of the recommendation; seconded by Mr. Domingo.

The Manager-Chief Engineer mentioned that the Department is supplying the pump and motor for this job, resulting in the lower cost. The scope of the project is to push/pull the pump and motor.

Mr. Domingo was concerned about the September 2016 repair, costing almost half a million dollars, and here it is only two and a half years later. The Department did not get its investment back.

Chairperson Boswell noted that 2016 was prior to the year the Permitted Interaction Group was formed in which it was determined that there were other directions in which to go and a better understanding was gained on deepwell repairs. In 2016, they replaced the pump, motor, and the column, and they are still good. What is being done now is the implementation of Brown and Caldwell's recommendations, catching the second phase of that 2016 work. Aside from paying for the push/pull of the pump, motor, cable, etc., added measures are being put in.

The Manager-Chief Engineer agreed. The last repair was a different scope of work. It would have been good if it lasted longer, and that is the reason why the well will be evaluated to include what was learned since then.

Mr. Young added that there were some significant costs in the last repair such as VFD (variable frequency drive) and some of the electrical equipment. One thing that probably did not help matters was that the spare pump and motor used on the last repair sat in storage for just under ten years. That is one of the issues with using spare equipment.

Chairperson Boswell noted that it would have been stored horizontally.

Mr. Domingo thanked staff for including the history in the write-up.

Mr. De Luz understood that the Department is implementing the new recommendations on a project-based process, but it may help the Board if the Department could share its plan on how it will be done as there are many moving parts to the process. Example, if a particular well goes down, based upon protocol, what different parts of the process would be initiated due to its circumstances and experiences with that particular well.

The Manager-Chief Engineer stated that the Department could provide an outline of what came out of the Permitted Interaction Group, which is basically the strategy moving forward, such as whether it be implementation of power monitoring equipment, or gyroscopic studies, which will almost become standard, moving forward.

Mr. De Luz stated that it would be good to see that reference to a certain strategy as they are implemented. It may even make it easier for new members coming on the Board.

Mr. Scicchitano agreed that was a good point.

ACTION: Motion was carried unanimously by voice vote.

B. JOB NO. 2017-1065, WAIMEA DEEPWELL REPAIR – REQUEST FOR ADDITIONAL FUNDS:

The contractor, Beylik Drilling & Pump Service, Inc. is requesting a contract change order for price escalation due to a significant project suspension by the Department and additional work. The description of price escalation, additional work, and associated fees are as follows (see attached):

ITEM	DESCRIPTION	AMOUNT
1.	Price escalation fees	\$ 24,300.00
2.	(88) 8" x 20' Schedule 40 Galv. column pipe	\$171,950.00
3.	Centrilift Technical Service Call	\$ 15,312.00
	TOTAL	\$211,562.00

Original Contract Amount: \$ 50,700.00
 Original Contingency amount: \$ 5,000.00
 1st Additional Contingency request: \$ 12,800.00
 2nd Additional Contingency request: \$ 211,562.00

Total Revised Contract Amount: \$ 280,062.00

The contractor, Beylik Drilling & Pump Service, Inc., is also requesting a contract time extension of 30 calendar days. It was discovered upon well extraction that the well was installed with black pipe during the previous emergency repair. The column pipe is in a condition unsuitable for reuse due to severe corrosion. These factors were beyond the control of the contractor and the original scope of the repair.

Agenda recommendation was that the Board approve an increase in contingency of \$211,562.00 to Beylik Drilling & Pump Service, Inc., for a total project cost of \$280,062.00, and approve a contract time extension of 30 calendar days for JOB NO. 2017-1065, WAIMEA DEEPWELL REPAIR. If approved, the contract completion date will be revised from May 6, 2019, to June 5, 2019.

The Manager-Chief Engineer announced that after internal review, it was decided to remove it from the Agenda.

8) NORTH KONA:

A. JOB NO. 2018-1082 HONOKŌHAU DEEPWELL REPAIR – CHANGE ORDER REQUEST:

The contractor, Beylik Drilling & Pump Service, Inc., is requesting a contract change order for the additional work in association with the installation of the well. The description of additional work and associated fees are as follows (see attached):

ITEM	DESCRIPTION	AMOUNT
1.	Delivery of pump assembly equipment to jobsite	\$ 800.00
2.	Splicing work for medium voltage shielded cable	\$ 5,485.00
3.	Modification work to motor shroud, 1 st installation attempt, and additional PVC sounding tubing	\$38,500.00
	TOTAL	\$ 44,785.00

Original Contract Amount:	\$ 119,000.00
Original Contingency amount:	\$ 11,900.00
1 st Additional Contingency request:	\$ 24,550.00
2 nd Additional Contingency request:	\$ <u>44,785.00</u>
Total Revised Contract Amount:	\$ 200,235.00

The contractor, Beylik Drilling & Pump Service, Inc., is also requesting a contract time extension of 78 calendar days. The contractor encountered fit-up issues with the Department supplied spare pump and motor equipment. The work to resolve these issues caused delays and affected the contractor's ability to complete the project by the original completion deadline. These factors were beyond the control of the contractor and the original scope of the repair.

The Manager-Chief Engineer recommended that the Board approve an increase in contingency of \$44,785.00 to Beylik Drilling & Pump Service, Inc., for a total project cost of \$200,235.00, and approve a contract time extension of 78 calendar days for JOB NO. 2018-1082, HONOKŌHAU DEEPWELL REPAIR. If approved, the contract completion date will be revised from September 30, 2018, to December 17, 2018.

MOTION: Mr. De Luz moved for approval of the recommendation; seconded by Mr. Sugai.

The Manager-Chief Engineer announced that staff confirmed with Corporation Counsel that the amounts provided on the Agenda needed to be modified due to the General Excise (GE) tax increase. When originally submitted, the contractor was using the old GE rate; but because of the one-quarter of a percent increase, it **adds \$220.96** to the total of \$44,785.00. That total is now **\$45,005.96**. It will effectively change the total revised contract amount to **\$200,455.96**. There are a lot of details going into this additional contingency request that Mr. Young should be able to address.

Mr. Scicchitano commented on the completion date, which has already passed and if that was correct.

The Manager-Chief Engineer replied that was correct and apologized that this is one that slipped through the cracks. It should have been brought to the Board at the end of last year. The job is basically done. Honokōhau is operational, but housekeeping-wise, this additional contingency and time extension were not addressed in December of last year.

Mr. Domingo asked what kind of fit-up issues there were.

Mr. Young replied it was the coupling of the pump and motor together and the shroud.

Mr. Domingo asked if the contractor was not made aware of it prior to start-up of the job.

The Manager-Chief Engineer stated that what happens, more often than you would imagine, is the shop drawings, for example, on the pump indicate a certain diameter. (Mr. Takamoto added that the actual dimension was larger than specified.) It did not provide enough clearance for the power cable to fit through the shroud because the diameter of the bowl was too large. They had to re-machine the upper section of the shroud.

Mr. Domingo asked if, as result of that, the Department encountered 78 calendar days extension to mitigate the problem.

The Manager-Chief Engineer replied that was correct. They take time to re-machine.

ACTION: Motion was carried unanimously by voice vote.

B. JOB NO. 2017-1077, HUALĀLAI DEEPWELL REPAIR – REQUEST FOR ADDITIONAL FUNDS:

The contractor, Beylik Drilling & Pump Service, Inc., is requesting a contract change order for additional work in association with the installation of the Hualālai Deepwell. The description of additional work and associated fees are as follows (see attached):

ITEM	DESCRIPTION	AMOUNT
1.	5,000 LF of #2 AWG Armored Power Cable	\$98,300.00
2.	(2) Centrilift Technical Service Call	\$30,624.00
3.	Well Installation and Extraction Cost - Beylik	\$110,000.00
4.	Splicing of Shielded Power Cable to MLE	\$5,485.00
5.	(4) 1-1/4" x 10' 304SS Sounding Tube	\$320.00
6.	Delivery of Simflo Pump	\$800.00
7.	10" x 8" Column Crossover Adapter	\$1,650.00
8.	Installation of SS JB for PT's & CT's	\$6,068.00
9.	Additional TRMS CT's	\$20,500.00
	TOTAL	\$273,747.00

Original Contract Amount: \$696,080.00
 Original Contingency Amount: \$ 69,520.00
 1st Additional Contingency Request: \$204,497.00
 Total Revised Contract Amount: \$970,097.00

The Manager-Chief Engineer recommended that the Board approve an increase in contingency of \$204,497.00 to Beylik Drilling & Pump Service, Inc., for JOB NO. 2017-1077, HUALĀLAI DEEPWELL REPAIR. If approved, the total revised contract amount shall be \$970,097.00.

MOTION: Mr. De Luz moved for approval of the recommendation; seconded by Mr. Scicchitano.

The Manager-Chief Engineer stated this is the same as the previous item, regarding the GE tax increase. There is an extra increase of **\$211.07**. At the bottom of the table, the total will be revised to **\$273,958.07** which will result in a **total revised contract amount of 970,308.07**.

The Manager-Chief Engineer explained that the well was installed; however, during start-up, the megger reading was not acceptable. After some deliberation, it was decided to pull it back out. Various components such as the power cable, motor lead, and the motor were tested and showed issues with both the motor lead cable and the power cable. The power cable is material supplied by the Department of Water Supply. The motor lead cable was supplied by the contractor so that would be under warranty. The contractor will replace it. The length of cable supplied by the Department is questionable now. The Department would rather have Centrilift provide everything--the cable and motor lead, and double-check the motor (the reason for two trips for the Centrilift technician). The motor lead and splice of their cable will be done by them at their factory. Although it is good to have spare pumps, motors, and spare parts, when something does not work, there is a shared responsibility. It is not as clean when it comes to who is responsible for the unit not working. With that in mind, the Department did not want to go through this again. The decision was made to have everything Centrilift. That way, it is basically their package from top to bottom. The high-ticket items 8 and 9 are for power quality monitoring equipment and associated junction boxes. The Department is buying 5,000 feet of cable because that is how it is manufactured. There will be some spare cable after that, but it can be used in another Centrilift package.

Chairperson Boswell asked if it is the standardization that the Department is looking at or if this application fits better than most.

The Manager-Chief Engineer replied that in other applications such as an SME motor and a National pump, they are supposed to talk to each other to make sure the thrust bearing in the motor is equivalent or satisfies the forces from the pump and then it is a separate cable manufacturer. The contractor is held accountable if they are supplying all of those components. But as seen in the past, it can turn into a pointing fingers game between the motor and pump manufacturers when something goes wrong. Centrilift is a slimline type of pump and motor. This is not used all of the time, but this is one of the rare occasions where there is a full package from motor, pump, and power cable all the way to the top. The Department does not want to get locked into that option either; but in this particular case, it is the best option.

Mr. Young added that the alignment of this well made it a good candidate for slimline.

Mr. Domingo stated that the \$273,958.07 and the first additional contingency do not match and there did not seem to be a contingency dollar amount on this project.

The Manager-Chief Engineer explained that you have to add the two because no contingency has been used on this project so far. The original contingency amount was \$69,520.00, but a total of \$273,958.07 is needed so the Board is being asked to approve an additional \$204,497.00.

Mr. De Luz asked if this was essentially a collaborative effort between the Department, the third party (Centrilift) and the primary contractor.

The Manager-Chief Engineer replied that was correct.

Mr. De Luz asked if it is a pass-through with the principle contractor or whether it is added on.

The Manager-Chief Engineer replied that the contractor will add on his administrative costs.

Mr. De Luz thought that perhaps the Department should consider a policy change for that. The reason for his suggestion was that he did not think the contractor gave the Department any efficiency for the push/pull. He charged the full amount. Even though the Department made the call to pull it out, there should be a little give and take in this type of situation. He had a hard time with this having 15% more added to the cost. Although it is a unique situation, he felt that the contractor took advantage of the situation. On another note, he asked if the Department could give a better idea of what the Department required; what additional was from the contractor; and what amount was made a warrantable item to give the Board a better understanding. Technically, the \$273,000.00 was not a contractor request. Because of the extenuating circumstances in this case, the Department initiated the work to prevent potential problems later on, which is good. It is basically a resiliency factor. What he wanted to make sure of is that people understand it is more like items 3 to 9 for the contractor's request. Some of the work is repetitive because they had to pull the equipment out and put it back in; but it gives it more clarity for him.

Chairperson Boswell asked if \$110,000.00 is a recognizable amount for a push and pull.

Mr. Young replied it was.

Mr. De Luz thought there should be a little give and take on the first two requirements, maybe a 5% pass through. It is not costing them any money other than administratively to bill.

Chairperson Boswell thought it was interesting how a contractor thinks about it and how a business man thinks about it.

Mr. De Luz commented that for public projects, contractors take advantage of the situation because they can get away with it. In the private sector, that would not fly.

Mr. Young commented that the Department still has to get the test results back from the factory. Even though there are costs you can see now, there may be some more coming, so it could go against the contractor if some of the cost items change or go down.

Mr. De Luz noted that it was more of a pet peeve with him. Unfortunately, practice may dictate otherwise.

The Manager-Chief Engineer stated that certain things, the Department is obligated on, based on procurement; but it does keep an eye on things and holds the contractor accountable on what they are responsible for.

Mr. Domingo asked if the write-ups could provide explanations for the acronyms being used to help the Board understand fully (Example #8 and #9).

The Manager-Chief Engineer agreed, it should have been spelled out and it will be done better going forward.

ACTION: Motion was carried unanimously by voice vote.

9) MISCELLANEOUS:

A. MONTHLY PROGRESS REPORT:

Chairperson Boswell had one question on the North Kona Mid-Level Deep Well Development-- if the Board can know which landowner the Department is talking with.

Mr. Inaba replied that it is adjacent to the State parcel and is owned by Komo Brothers. Initial contact was made with them through the Department's consultant. They seem amenable to working something out with DWS. There is a little concern about the topography from the consultant's standpoint, so they are taking a look at that whole top section.

Chairperson Boswell asked if it was the NELHA site.

Mr. Inaba replied it is not.

The Manager-Chief Engineer stated it is going to be for DWS to explore whether a mid-level deep well is a viable option for the Department.

Chairperson Boswell noted there is one major water crossing to get across to the south.

The Manager-Chief Engineer stated that the Department's consultant wants to stay further south or as close as possible to the DLNR well that they drilled because it is a known well as far as thickness of the aquifer. They suspect the further you go north, it tapers and becomes thinner.

Chairperson Boswell asked if that was the well the DWS participated in.

The Manager-Chief Engineer replied it was not. That is a different monitoring well on Hina Lani.

Mr. Inaba added that everyone was waiting for the testing of the DLNR well and it tested positive for possible production. The thought is to get as close to that existing well as possible.

Chairperson Boswell stated that one of the larger goals will be storage and transmission because Hienaloli was not necessarily set up for transmission.

Mr. Inaba agreed, that will have to be looked at as well. It is going to be a be a separate transmission makai off Queen Ka'ahumanu Highway.

The Manager-Chief Engineer noted another benefit would be the energy savings as it will not have to be pumped to as high an elevation. It has some built-in head.

Chairperson Boswell stated that it looks promising.

Mr. Inaba mentioned that precautions would be needed as far as sound barriers because it would likely be a lineshaft well.

B. REVIEW OF MONTHLY FINANCIAL STATEMENTS:

Mr. De Luz asked if the EUTF/ERS (Employees' Union Trust Fund and Employee's Retirement System) are billed monthly or if it is done on an annual basis.

Mr. Sumada replied it is monthly.

Mr. De Luz stated that because of that, the liability cannot be put on the balance sheet because it becomes more of an operational expense in how it is recorded.

Mr. Sumada explained that the auditors discuss the net pension liability and the net OPEB (Other Post-Employment Benefits) liability in the notes to the financial statements. These amounts are included in long-term debt.

Mr. De Luz stated that is what he had thought. In reference to understanding the month-to-month balance sheet, the auditors' report could be looked to for clarity.

Mr. Sumada stated that the auditors' report does contain a lot of detail.

C. MANAGER-CHIEF ENGINEER'S REPORT:

The Manager-Chief Engineer provided an update on the following:

1. North Kona Wells - the Deputy gave the Board an update on the wells. As of today, ten out of fourteen wells are operating. The ones that are offline are the same as last month-- Hualālai, Palani, Wai'aha, and Makalei. For reinstallation of Hualālai, the long lead item is going to be the power cable. The estimates from Centrilift are about 12 weeks to manufacture it. That pushes the project into early July this year. Once the power cable is available on site, the contractor estimates one week for installation. Palani Well is under contract with Beylik Drilling. Project completion is August of this year. Wai'aha Well is in the same status as last month. It is in a litigative hold. For Makalei Well, which is by Makalei Fire Station, this is the well that was turned over to the Department by the developer last year. It is still under warranty. The preliminary schedule is to start extracting next week Monday. It will be upon

the developer to work with their contractors and the manufacturer to figure out what happened and for the replacement and repair schedule thereafter. Whatever gets put back into the well, the Department will have opportunity to comment on as far as quantity and GPM (gallons per minute). Higher chlorides are being found when pumping at 800 gpm; therefore, discussion will take place on that because it is covered in the water development agreement. It may mean lowering the GPM and motor horsepower, but additional updates will come next meeting.

Chairperson Boswell asked if this has similar issues as the Kau 1 Well.

Mr. Inaba replied that initially, it was a lot better; but then chlorides increased with pumping.

The Manager-Chief Engineer stated that it is actually tapping the basal aquifer so it is more similar in quality to the Huehue Ranch wells, the Kukio wells. It has both dissolved CO₂ as well as total dissolved solids, like silica. Although it meets potable water quality standards set by EPA (Environmental Protection Agency) and DOH (Department of Health), it is not what customers are used to with the high-quality, high-level wells. Part of the well development agreement, which is basically for the Palamanui area, was that if the water quality is adversely impacted by the pumping rate, it needs to be adjusted. Therefore, whatever goes back down into the hole will be monitored for water quality. If it continues to elevate the chlorides, then it is still too high of a pump rate. The burden is being placed on the developer and his consultant to figure out what the next steps will be. They will be required to put in power quality monitoring equipment, etc.

Chairperson Boswell asked what happens to their equivalent unit count in a case like this where the Department has already accepted that well--if it affects the count.

The Manager-Chief Engineer replied it will. It is covered in the water development agreement. They knew, going into this, that their equivalent units could be affected based on productivity of the well.

Mr. Inaba added that it had a trial operating period prior to granting the equivalent units.

Chairperson Boswell noted it is like what the Kau Well currently has (a three-year period).

Mr. Inaba explained that this is the same well. The Makalei Well used to be known as Kau well; however, it had to be renamed because the Department had trouble calls going to the wrong district (the Ka'ū District). This well was developed by the original developer of the Makalei Estates Subdivision.

D. EXECUTIVE SESSION: REGARDING OPEN LITIGATION:

The Board anticipates convening an executive meeting for the purposes of discussing the legal rights, duties and liabilities of the Board concerning open litigation against the Board, as authorized by Hawai'i County Charter Section 74.6 and Hawai'i Revised Statutes ("HRS"), Section 92-4 and 92-5(a)(4). The Board wishes to have its attorney present, in order to consult with the board's attorney on its questions and issues pertaining to the board's powers, duties, privileges, immunities, and liabilities pursuant to HRS Section 92-5(a)(4). A two-thirds vote of the members present, pursuant to HRS Section 92-4, is necessary to hold an executive meeting, provided that the affirmative vote constitutes a majority of the board.

ACTION: Mr. Scicchitano moved that the Board enter into Executive Session; seconded by Mr. De Luz and carried by roll call vote (Ayes: 5 - Mr. De Luz, Mr. Domingo, Mr. Scicchitano, Mr. Sugai, and Chairperson Boswell; Absent: 4 - Mr. Balog, Mr. Elarionoff, Mr. Takamine, and Ms. Wilson). (Executive Session began at 11:05 a.m. and ended at 12:03 p.m.)

E. **CHAIRPERSON'S REPORT:**

1. Chairperson Boswell stated that this section is where he is supposed to report on matters of interest to the Board, and he felt that the Board does that as a result of the conversations they have throughout the Agenda. He opened it up for Board Members to bring up anything in particular they may have.

Mr. De Luz mentioned that it might help expedite efficiency within the Department if, in reviewing the agenda prior to going out, if the Chairperson and the Manager-Chief Engineer could ascertain which members of staff are required to be at a particular meeting. He appreciated having the Engineers come before the Board; but if there is nothing to address on the agenda, they probably have other things they need to get to, especially when meetings are in Kona and they need to travel.

Chairperson Boswell mentioned the technical expertise they bring, and sometimes it is difficult to know things like bid results and where the discussion will end up. Although the Manager-Chief Engineer and the Deputy have knowledge about the agenda items, it may not be fair to ask them to speak on it at the same level as the project engineers. He has pondered that question too, relating to operating costs per hour for their time.

Mr. De Luz stated it was only a suggestion in case their schedules could be used otherwise. He appreciated having them come out to the Board Meetings.

10) **ANNOUNCEMENTS:**

1. **Next Regular Meeting:**

The next meeting of the Water Board will be April 23, 2019, 10:00 a.m. at the Department of Water Supply, Hilo Operations Center Conference Room; 889 Leilani Street, Hilo, Hawai'i.

2. **Following Meeting:**

The following meeting of the Water Board will be May 28, 2019, 10:00 a.m., at the West Hawai'i Civic Center, Community Meeting Hale (Building G); 74-5044 Ane Keohokalole Highway, Kailua-Kona, Hawai'i.

11) **ADJOURNMENT**

ACTION: Mr. Scicchitano moved to adjourn the meeting; seconded by Mr. Sugai and carried unanimously by voice vote. (Meeting adjourned at 12:07 p.m.)

Recording Secretary

(Approved by Water Board on April 23, 2019)