

MINUTES

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

September 24, 2019

DWS Hilo Operations Center Conference Room, 889 Leilani Street, Hilo, Hawai‘i

MEMBERS PRESENT: Mr. William Boswell, Jr., Chairperson
Mr. Eric Scicchitano, Vice-Chairperson
Mr. Bryant Balog
Mr. David De Luz, Jr.
Mr. Leningrad Elarionoff
Mr. Zendo Kern
Mr. Kenneth Sugai
Ms. Julie Hugo (10:09 a.m.)
Mr. Keith K. Okamoto, Manager-Chief Engineer, Department of Water Supply (ex-officio member)
Mr. Michael Yee, Director, Planning Department (ex-officio member)

ABSENT: Mr. Nestorio Domingo, Water Board Member
Director, Department of Public Works (ex-officio member)

OTHERS PRESENT: Ms. Diana Mellon-Lacey, Deputy Corporation Counsel
Mr. Jeff Zimpfer (10:06 a.m.)
Ms. Bethany Morrison, Planning Department

Department of Water Supply Staff

Mr. Kawika Uyehara, Deputy
Mr. Warren Ching, Energy Management Analyst
Mr. Kurt Inaba, Engineering Division Head
Mr. Richard Sumada, Waterworks Controller
Mr. Daryl Ikeda, Chief of Operations
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. Elarionoff moved for approval of the Minutes of the August 27, 2019, Water Board Meeting; seconded by Mr. Balog and carried unanimously by voice vote.

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

5) POWER COST CHARGE:

Departmental power costs from all power sources increased since the last Power Cost Charge rate was determined. The Department proposes to increase the Power Cost Charge from \$1.96 to \$2.00 per thousand gallons as a result of this increase. Power cost charges over the past two years were as follows:

<u>Effective</u>	<u>PCC</u>
June 1, 2019	\$1.96
February 1, 2019	\$1.89
August 1, 2018	\$1.94
April 1, 2018	\$1.88
December 1, 2017	\$1.62
August 1, 2017	\$1.73

A Public Hearing will have been held prior to this Board meeting to accept public testimony on this change.

The Manager-Chief Engineer recommended that the Board approve the increase of the Power Cost Charge from \$1.96 to \$2.00, effective October 1, 2019.

ACTION: Mr. Elarionoff moved for approval; seconded by Mr. Kern and carried unanimously by voice vote.

6) SOUTH KOHALA:

A. **JOB NO. 2018-1089, LĀLĀMILO D DEEPWELL REPAIR – REQUEST FOR TIME EXTENSION:**

The contractor, Beylik Drilling & Pump Service, Inc. is requesting a contract time extension of 31 calendar days. The Department requested a change in the scope of work to add three (3) positive seal check valves based on recommendation from consultant. These delays were beyond the control of the contractor.

Note: There are additional costs of \$10,860.00 associated with this time extension. These associated costs are within the original contingency of \$25,900.00 for this project.

1st time extension – 122 calendar days

2nd time extension – 31 calendar days

The Manager-Chief Engineer recommended that the Board approve a contract time extension of 31 calendar days to Beylik Drilling & Pump Service, Inc., for JOB NO. 2018-1089, LĀLĀMILO D DEEPWELL REPAIR. If approved, the contract completion date will be revised from September 30, 2019, to October 31, 2019.

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

Mr. Elarionoff pointed out a typographical error in the contractor's email (supporting documents), indicating the ship date for the equipment to be 9/6/20149.

ACTION: Motion was carried unanimously by voice vote.

7) MISCELLANEOUS:

A. HAWAI'I COUNTY GENERAL PLAN UPDATE:

A presentation was made by the Planning Department's Director, Mr. Michael Yee, and Ms. Bethany Morrison, Planner.

Mr. Yee explained about the Planning Department (Planning) and that it is sometimes confused with the Building Department. The Planning Department deals with land-use issues. If someone submits a building permit and it comes before Planning, they double check whether their building is meeting the various requirements such as water, fire, etc. That is the regulatory side. The other end of the spectrum is long-range planning, and Ms. Morrison is part of that staff. It involves the General Plan for this island. It is a very important document and does not just sit on the shelf. It is an active document on how to go about development of the island. From the General Plan, back about 2008, Mayor Kim helped create the Community Development Plans (CDP) which go into more specific implementation within certain areas. The long-range planning team works with communities to develop the General Plan and the CDP and have action committees to oversee the implementation of those CDP's in their communities. The last General Plan was done in 2005 and is supposed to be updated every ten years. There is more robust community engagement than back in the early 2000's. They have been going out to the communities to get feedback and have had four speak-out sessions, plus there will be more of them. Having the Water Board's input is an important piece when considering how important water is to development.

Ms. Morrison reviewed her Power Point presentation. She has been working on this project since its inception. This is the guiding document for the County, mandated by Hawai'i Revised Statutes and by County Charter. Its function is the umbrella plan for everything done in the County. Any public improvements or land-use decisions need to be consistent with the Plan. It guides the long-range vision for this island. This is the fourth comprehensive update since the first plan, which was in 1971. The General Plan in effect now is from 2005. This current update to the Plan was initiated in 2015.

Planning is trying to capture changes in technology and the economy that have taken place since 2005. In 2016, they began their research and analysis, making sure current information from various studies is incorporated. In 2017, they began to draft the Plan and reaching out to community groups to understand what their planning priorities are and making sure they are included in the Plan. Because this is an island-wide plan, some of the communities have very specific priorities, and they are being left to the Community Development Plan process. In 2019, they started review of the draft and will be doing refinements at the end of this year, then move forward into the adoption phase. This will go before both Leeward and Windward Planning Commissions and finally to the County Council for adoption. They have been gathering a lot of geographic data about this island and putting it into a Geographic Information Systems (GIS) program. You can feed it various objectives and it can run different models. The modeling was used to understand growth patterns and was used to analyze existing zoning, capacity, and where people could just go through the building permit process without changing zones. On the research and analysis piece, the Water Use and Development Plan was used to understand water priorities and other water plans, such as the State Water Plan, were also incorporated. As they started drafting, they began to meet with agencies and stakeholder groups in their planning efforts. They have been meeting with staff from Department of Water Supply to understand what the issues are, what their priorities are, and how they relate to land-use policies for the County.

Some initial findings from that research found that most people live outside of the urban cores, in rural areas and also in very low-density housing. The population density is about three residents per

acre, which is very low compared to other municipalities of the same size. What that tends to do is stretch resources out into these rural low-density places, whether it be providing fire, EMS service, or water. It creates a bit of a challenge, geographically.

The other important factor was a calculation of population and job trends for the next 25 years. SMS Research did that work. They anticipate that the population will be 296,000 by 2040, and it was about 195,000 in 2015. That number is great, but more important is where the population tends to go. They looked at zoning capacity to understand where people could go without any changes to land-use policies. It was found that there is enough zoned capacity to handle a population of 852,000 without any changes to the land-use policies. What it reveals is that there is a need to look closer about where that zoning is and if it is in the appropriate locations. Just because you can handle population, does not mean the infrastructure or services are there to provide for what that zoning might lend to. Places like Hawaiian Paradise Park and Hawaiian Ocean View Estates still have a lot of capacity to fill in on the vacant lots.

Mr. Kern asked if “zoned capacity” meant zoning on land, whether there is infrastructure or not.

Ms. Morrison replied that was correct.

Mr. Kern asked if the Watumull [Investment Company] property in Kings Landing, about 2,000 acres, zoned Ag1, would be counted in there.

Ms. Morrison replied yes.

Mr. Kern stated that you could not necessarily go and get a building permit on that property.

Ms. Morrison replied that it would be calculated at the Ag1 zoning. They assume people could subdivide and get the building permits at that level. It is the most conservative, but it is good to understand where the existing zoning is happening. Because of the existing zoning, it is where it is easiest for people to go and build without having to go through a lot of infrastructure improvements and development costs. Housing tends to flow out into those areas because it is the quickest and easiest way to build. It has led to development patterns out to rural areas more than the urban core where you might need to upgrade infrastructure and costs might be too much for developers to bear and make up the recovery. These challenges have exposed affordable housing for this island. The most affordable tends to be away from services and infrastructure.

Looking at water and wastewater service, they are the predominant costs associated with development and some of the needs for multi-family, residential, or commercial developments. Part of the modeling process was to put in historic trends and project them forward, which shows where new houses would be if things stayed the same. You begin to understand, on the wastewater side, how limited the infrastructure is.

There are a few emerging issues they wanted to address in the plan, and they are everything from climate change to food security, and renewable energy. They are all things people are facing as they look towards being more self-reliant. The sustainability focus looks at all of the issues and how we can be more self-sufficient, how to allow for more social and economic mobility for our residents, and make sure that we have social and community well-being. This sustainability is throughout the plan. It was important to think of natural resources such as streams and watersheds and use them appropriately. You cannot have a conversation about land use without talking about infrastructure. In part of the presentation, Hilo was featured, showing water and wastewater service lines. For

land use, these are places they would consider additional densities or mixed use, commercial developments. They recognized a lot of synergies about water and that it really needs to be one conversation. It is something that other municipalities are looking to create a One Water approach where there is an understanding of how drinking water is related to wastewater, recycled water, etc. They are all connected when looking at conservation of the water resources. There are separate entities, organizational-wise, but it just means bringing them to the table more often to have those integrated conversations.

Mr. De Luz asked if gray water falls under wastewater, within the context of water management.

Ms. Morrison replied that gray water is actually regulated through the County's building code.

Mr. De Luz stated that connectivity is one of the challenges with this County and because of its ruralness and basically being stuck in the middle of nowhere, there is difficulty with resiliency versus sustainability. With the advent of more natural disasters, to rely more heavily on municipality hook-up puts us at a severe resiliency issue. If you could imagine a hurricane, causing pumps to go out with regard to wastewater, you would have a health and safety issue. This Plan does not address that. He believed that as a primarily rural community, the issues are substantially more difficult to resolve.

Ms. Morrison stated that on the resiliency side, and about the municipal system, the Plan does point to people having their own systems, especially in the rural areas. There is a unique opportunity, especially on the east side of the island, where there is a lot of rainfall to support water catchment systems. On the wastewater side, there are still a lot of people on individual wastewater systems but they are restricted to what kind of uses can happen. Example, a lot of smaller towns cannot support commercial development because of the requirements to put in their own system or it would be too costly. In some cases, they do not have the land area to accommodate the type of treatment system that is required. Planning has been meeting with the Department of Environmental Management in trying to understand how to do innovative systems that are not as costly and still provide for resiliency. Even the system in Hilo is old and needs repairs on a regular basis and they face issues with sea level rise.

Mr. De Luz stated that it came to his mind because he saw a notice that Duane Kurisu and his Son bought the Nā'ālehu Shopping Center, and one of the major issues will be wastewater for the improvement of that area. That particular area has its own set of issues as well.

Ms. Morrison commented that water is pretty easy, especially if people want to do their own system, but the wastewater equation is a little harder. They have been working with communities to get feedback and have developed some posters to make it easier to understand. The Plan is also available on their website. What they hear so far is that people do not really understand who regulates what when it comes to water. When they talk about water, it is everything. Increasing gray water is a huge thing being heard from the communities. Agricultural (Ag) water is another conversation. The communities want the Department of Water Supply to provide Ag water, and that is a challenge. For Ag needs, water is an important conversation and sometimes hard to separate out. Questions about the use of herbicides and pesticides around water sources came up. There is a need to understand how to monitor daily water usage and how residents can self-monitor. There have been questions about water designation through the Commission on Water Resource Management and their update to their plan. There has been a lot of interest in understanding how the sustainable yield numbers are developed and what they mean for our communities' water sources. There has been a lot of talk about catchment water, and they are trying to promote it so people can be self-sustainable. One of the challenges with that, and it has come up a few times from the community members, is the health and safety of that drinking water. It needs to be treated and monitored and there is not a whole lot of

capacity right now in the communities to do that. There were even some questions from people who rent and are on catchment systems and how they can be supported to ensure they have clean drinking water. Maybe there is some public outreach the County can do to direct some resources out into that area. Other public comments revolved around fixing the pumps that do not work in Kona and also whether the Department of Water Supply can run lines to Tax Map Keys rather than stopping at the highway. That was a very specific question. There is always an education component when this draft plan goes out to the communities. People have priorities in their minds and do not always know what the right agency is to address them. Planning is working with the different agencies and partners to try and help solve some of the needs.

Ms. Morrison concluded that there will more opportunities for review of this Plan. They are scheduling topic workshops and community meetings for the remainder of September and October. The topic workshops go more into detail than some of the regular events where people with particular knowledge and expertise can get deeper into what the policy implications are in the draft and how they can be refined. Comment period ends October 31, after which they will begin working on revisions, which will take it through the holiday season. Hopefully, by the beginning of 2020, the final draft can be released.

Mr. Elarionoff asked how the population projection was done and what the percentage of accuracy was.

Ms. Morrison replied that SMS Research is the consultant who helped with the population projections. They based it on the State Department of Business and Economic Development and Tourism (DBEDT) who constantly run the State's population projections. It is a factor of what the previous population trends have been and they project that forward. There is some room for error. If a slow-down is experienced, it would take longer to reach that population growth. In the end, it really does not matter about reaching 296,000 in 25 years but to be mindful that at some point, that population will be reached and there is a need to be planning for it.

Mr. Elarionoff noted that on the map which was shown, Hawaiian Ocean View and Puna are the two places that population is going to explode, and they are both volcanic areas.

Ms. Morrison replied that was correct. That map shows the trends but has nothing to do with land-use policies at this point.

Mr. Elarionoff asked if the Planning Department does anything to prevent people from trying to go back to Puna.

Ms. Morrison replied when they began this process in 2015, the task was to understand the implications of population growth and where people tend to go and tailor land-use policies around that fact. There are policies about encouraging development away from hazard areas and various land-use policies that try and bring people back into the urban core.

Mr. Elarionoff stated that from what he reads in the newspapers about Puna, it does not seem like there is any effort to deter people from going back. It seems like it more of encouraging people to go back in that area.

Ms. Morrison stated that as far as the recent recovery process, that is going through its own planning process and they have done some analysis about vulnerable communities and the impacts of those lava hazard zones specifically. That will help educate them about this General Plan also. What Mr. Elarionoff spoke about is not reflective of what is in the draft. As of now, the 2005 plan is being used

and people can continue to use designations in that plan. It takes time to get a new plan adopted in order to start seeing results. Hopefully the strategies will start guiding people out of these areas and into more urban places where services and infrastructure can be provided.

Mr. Elarionoff asked about what has been going on with Mauna Kea and if the Planning Department has any concerns about it in their planning or if they have you contacted Hawaiians to get their input on cultural development.

Ms. Morrison replied that the Plan has an entire section, in two different parts, about cultural practices and about historic preservation. They are not proposing any different planning designations for Mauna Kea, but are proposing it be designated as a Wahi Pana. Community consulting would happen through that process. Waipi'o Valley and several places on the island are also very special and unique areas and deserve to have other types of planning done for them.

Mr. Elarionoff also mentioned the beaches which are not currently developed on. Once development starts around the beaches, there might be some resistance to it.

Ms. Morrison replied that they have been in contact with the Department of Hawaiian Home Lands about their communities and priorities and when it comes to the beaches. Hawai'i is fortunate to have those public resources, and how to keep access to them is addressed in this plan. A plan use designation called recreation encompasses the whole island around the shoreline to acknowledge that particular use needs to be maintained. Recognizing the Hawaiian culture and learning from their land-use practices, such as the ahupuaa system, is important. There is a lot to be learned. It is not perfect yet, but there is still room to learn and grow.

Mr. Kern asked about Kona and the urban cores and driving growth to the urban core areas. In Hilo, there is water, therefore, it is one of the lesser concerns.

Ms. Morrison showed a map in the GIS program that includes layers from the Department of Water Supply, showing the urban service area that was described, and the areas that have both water and wastewater service.

Mr. Kern asked if, on the LUPAG map (land use pattern allocation guide), they are basically changing the densities to focus within those areas for the most part.

Ms. Morrison replied that was correct.

Mr. Kern asked if they have discussed, with the Department of Water Supply, the possibility of increasing the water levels to support that high-density growth in Kona. The further out you go, example, Ka'iminani, you have TOD (transit-oriented development) nodes out there, you do not have a lot of water systems out there. It could be improved. He asked if they are taking into account the ability for other larger developments, such as Kohanaiki, who can afford to put in a water system in those areas.

Ms. Morrison replied that Planning has been working together with the Department of Water Supply (DWS), learning about the Water Use and Development Plan (WUDP) and how it was calculated using the General Plan's designations. They wanted to be really clear about what their designations mean for when it does come to the WUDP, so that they are speaking the same language.

Mr. Inaba stated that during the General Plan process, the DWS was also updating its WUDP for the Keauhou aquifer. As part of that, they took a look at those development areas and part of the

development strategies that would have to be looked for in terms of future infrastructure. A lot of it is covered in the WUDP. When it comes down to individual projects and how they fit into this, it would have to be engineered with more detail.

Mr. Kern asked if the DWS plans to keep up with the projected population growth and the need for increased density.

Mr. Inaba replied that it is in the Plan.

The Manager-Chief Engineer added that it is a balancing act. DWS is not here to spend its customers' money on infrastructure and have others benefit from it. The message is passed along in areas where water is more of a concern and through the long-term planning process, try and establish guidelines whereby if you are going to have drinkable-quality water, it should be used for consumption. If you want to create green, lush areas for your development, you will be encouraged to find alternate sources of water. It can be reused water, gray water, appropriate landscaping for the area, etc. The DWS' mission is not to dictate how that is done, but to provide an adequate and continuous supply of safe-drinking water, but also be a part of this long-term planning process. If it makes sense to put in a 12-inch pipe when only an 8-inch pipe is needed, that can be done; however, putting in too large an infrastructure without actual use leads to water becoming stagnant.

Mr. De Luz commented that this is one area where the public needs to understand the DWS' mission, which is providing safe drinking water, and the mandates upon the Department in order to do so. Following up on what Mr. Kern said, Kona generally has more particular issues in regard to infrastructure. It is more expensive. Now that there are fewer large landowners, he wondered about the actual easements that may be needed to accomplish this plan. He asked if they are being looked at now so that Planning can somehow incorporate a reserve for future utility or easements. Once these landowners sell their lands, it may be more difficult to negotiate for easements with the new landowner. The Kona urban core is more challenging.

The Manager-Chief Engineer replied that the one thing Kona does have is the density. As far as the long-term planning, DWS' waterlines primarily follow the roadways. If a mid-level road is planned for, or one farther south or north than what is existing, DWS would probably try to coordinate with that. The hydraulics are such that you want to maintain tank levels at constant elevations through out the system.

Mr. Inaba added that it does not always happen together because even along those major roads, if DWS were to put in a line, there may be nothing there for years. From the planning side, if half of a highway goes in and the second half comes when the developments come online, it has to be looped or you end up with a line sitting there that will be a bigger headache later on. You would not know if the gaskets are going to be okay. It might be a situation where the pipeline is leaking, as happened in Kohanaiki. Chairperson Boswell recalled that.

Mr. Yee stated that for the most part, what the Manager-Chief Engineer said was correct. The only part he would diverge from a little was with affordable housing. Affordable housing has a myriad of issues over why we cannot seem to get enough of it. He spent a career in affordable housing before coming to the Planning Department. At some point the County has to get their act together around helping to strategically put in the infrastructure because if it keeps relying on developers to do it, there will not be enough of it. At some point, the County has to be able to prioritize CIP projects and other things to be able to bring infrastructure in to get more strategic affordable housing where we want to have it. At that point, the County can work together with Department of Water Supply (DWS). They are not close to having that conversation in specific, but it is the only part he would diverge a bit to

kind of push DWS to figure out ways to get infrastructure in the areas where the County wants to see growth in the future.

The Manager-Chief Engineer stated that DWS does this where it can. For example, the DWS has general water availability guidelines for each of its systems, based on what the excess capacity is in a system and the best guess on what potential developments could happen. An example would be two units per existing lot of record, seven units per existing lot of record, up to maybe 50. If a legitimate affordable housing development comes in, DWS might say although the normal water availability for the area is only two units, because it is a legitimate affordable housing project, they may provide 25 if the system can handle it. That is where this kind of dialogue continues to happen. Some instances would be Village 9, and there is one in Kohala and one in Pepe'ekeo. They would do the same with Hawaiian Homes because they have the public trust backing for water to Hawaiian Homes. If there is excess capacity, it will be granted to them before a private, for-profit development or some commercial entity. DWS tries to do its part, and it is a balancing act. A system cannot be overbuilt to where there is so much excess capacity, water has to be dumped because the aesthetics are not fine. At the same time, it will try to provide excess capacity as long as it is for the overall benefit of the community. In cases like that, DWS makes sure it is not adversely impacting the rest of the system.

Mr. Balog asked about places like Hawaiian Ocean View that do not have much of a system but there is a community need, even though majority are on catchment. Based on the community need, would DWS develop a system for the infrastructure that is already there?

The Manager-Chief Engineer replied that a rough assessment was done on Hawaiian Ocean View and there is no way a normal infrastructure could be put in a development like that. Part of the challenge, as Ms. Morrison mentioned, is the density of this island and what has already been zoned. To him, catchment is a perfectly viable option. DWS is not saying everybody on this island has to be a DWS customer. That would not be realistic. Unfortunately, we cannot go back and fix the mistakes of the past because part of DWS' mission is not only to provide safe drinking water, but be in a financially responsible manner. For areas like Hawaiian Paradise Park and Hawaiian Ocean View, whoever made the decision to allow those subdivisions to happen without the appropriate infrastructure, what is done is done. At the same time, we cannot come in and try to bail them out at this point because that is not fiscally possible without affecting the existing customers to an extent where the water bill is going to be crazy if we had to put in infrastructure for those types of subdivisions. It would mean hundreds of millions of dollars.

Mr. Elarionoff mentioned that when Hawaiian Ocean View Estates (HOVE) first opened up, they were selling land for \$999.00 for three acres.

The Manager-Chief Engineer stated that there was no groundwater to begin with. Where the landscape is green, you have water. If it is not green, water is going to be more of a challenge.

Mr. Inaba gave an example, Google Earth, where if you zoom out and look at the HOVE area where there is no green, that is where the well was put in, but there is basically no groundwater. The recharge is small. Now the new study that the State had paid for to find another source is located basically in the Manuka natural reserve area and if you go on Google Earth, you see green in that area. If you do not see green, there is no good chance you are going to find groundwater.

Mr. Balog stated that the best thing just explained was that it is not financially responsible for the Department to tackle something like that. His other question was about the discussion on density. It was mentioned that this island has about three residents per acre as a whole. He asked what would be a good happy medium density from a Planning perspective.

Ms. Morrison replied that they had a study done by Smart Growth America and they are all about keeping urban and utilizing that infrastructure. Their recommendation is for the urban areas to have an average of ten people per acre. You would certainly not want ten people per acre everywhere, but at least that density can be focused on for urban centers. The study was based on the size of this island and its population. It would be very different if you were talking about downtown Honolulu and what their people per acre is so it is tailored to Hawai'i Island. The average is three people per household, which would come to about three houses per acre on average. If you are going to have higher density places that are apartment buildings and commercial areas that do not include residential, it is kind of hard to imagine across the whole urban scale.

Mr. Kern asked if they are factoring in the uniqueness of this island in their study. There is basically about 4% of the island being urban.

Ms. Morrison replied that was correct. They tried to push them on what a good number would be for rural areas, but they could not really answer that question. It is probably something we will have to continue to look at by what makes sense for our communities and being able to provide housing, jobs, and services. It becomes harder the further out people get.

Mr. Yee gave a bigger picture and comment. He is married to a Hilo born and raised woman. They have a 4½ year old Son, and the whole reason to move back here was to raise him here as a part Hawaiian in this environment. Therefore, everything he does is calibrated to what is best for his Son and his generation and those to come. The thinking has to be long-term. After 2½ years of being Planning Director, the task is daunting to create an environment for our kids. The amount of costs that could come via hazards and natural disasters, sea level rise, homelessness, and human services, are such daunting costs that we have not been able to address. It makes him worry that as an adult, would his Son want to choose to live here. He and his wife are lucky enough to have the privilege to move off island if they had to, but he is very sensitive to most families who will not have the opportunity to just pack up and go somewhere else. He likes to see financial responsibility being talked about because it is what is in this mess in a lot of areas. He has been pushing with Council and politicians to start thinking further out because if not, we are leveraging our kids to pay for all the mistakes we make today by not thinking about the future. The tasks are daunting. If you only take one, it is not so bad; but when you layer on all the others, it is going to be a tough place for our kids to grow in and choose to live here in the future.

Chairperson Boswell appreciated the presentation. It makes him believe that we should strive for a lesser density, a more realistic goal, and stay with what we have and try to make better out of it instead of trying to grow too much.

Mr. Kern asked if this study is taking in a metric of how many zoned lots are out there where water infrastructure would be needed. For example, there are thousands of acres in Hawaiian Ocean View Estates not even developed that are zoned Ag1. In order to do any type of development there, you have to get a water variance. The maximum you can get from that is five additional lots. You can take a 1,000-acre parcel that is zoned Ag1, and that is 1,000 buildable lots based on this graphic. The maximum you can get there without millions of dollars of infrastructure is five lots. To him, that number is hard to quantify and he thinks there needs to be something to adjust it down to what is realistic. You have Hawaiian Paradise Park and Hawaiian Ocean View that are buildable lots, but what about all the other land mass that is being accounted for within this number? When talking about trying to get a lot in Hilo, there are not many good lots, and they are really expensive. The same thing goes for Kailua-Kona. When you actually go to areas that people want to live in, outside

of the people that want to live in a more rural area, such as Hawaiian Paradise Park, there are not a lot. But there are a lot of outlying massive acre parcels that are zoned Ag1.

Ms. Morrison stated that was an extreme number. There are other numbers associated with how many lots are on water. There are further breakdowns that can be looked at. More importantly, this is using a GIS model and so you can tell it to run whatever you want it to and it will give you a calculation. There is still room for them to continue to refine and do other analysis as part of their final revisions.

Mr. Kern stated that he thought it was important, especially from the optics--what is going to happen is we are going to have people running around. There is enough land here to last until the next hundred years, but that is not really the case. There are a lot of myths about these numbers. After the Council districts changed, people were saying the actual land district had changed. People in the profession can understand and get that; but when it comes from a public standpoint, those numbers are extremely misleading, especially when you say you do not want to buy a lot in Hilo. He just went through the process of trying to find a lot in Kona, and it is really challenging.

Ms. Morrison stated that is the reason this island has been growing the way it has because there is no availability and it is expensive. When you look at average incomes, people cannot afford it. If you are lucky, you end up in Hawaiian Paradise Park or further out.

Mr. Kern stated that for a lot of local people, Hawaiian Paradise Park is a blessing because you can compare that lot for \$40,000.00 to a \$200,000.00 one in Hilo. He knew of a lot of people who would probably not have a house if it were not for that affordability. It is really about balance, in his opinion.

Mr. De Luz spoke about the unintended consequences of Ag zoning and what has happened in Hāmākua. It is not affordable for local people to buy in Hāmākua now because of that very issue. During the last General Plan, the water variances were tightened up. He felt there is a need to look at the consequence of what happened in the past and whether it limited and artificially created a higher demand versus lower supply. Will Ag with higher density water variances on an Ag1 scenario be something that needs to be looked at for affordability? What we have now is because developers got really good at being able to get what they needed based on the zoning that was available, and it was abused, which is why the water variance came into play as far as being more limited. Back then, the density was popping up in areas that could not support it. Maybe a footnote to this current Plan could be to understand these are the consequences if society or policy-makers decide otherwise. Perhaps the new modeling can extrapolate some of that information.

Ms. Morrison stated that they are trying to address some of that, especially in Hāmākua, because it is all good Ag land. There are some distinctions in other districts about what to do with this area that is not suitable for Ag or urban. But in Hāmākua, it is all suitable for Ag; therefore these Ag subdivisions were happening. They have tried to be intentional about the use of rural as a land-use designation that allows for smaller, more affordable lot sizes and their buffer between good Ag lands and urban towns. What you will see is some of the towns have this kind of ring of rural around them and that is to try and satisfy a little bit more of the lot sizes so that the Ag is not changed into one-acre lots.

Mr. Yee mentioned getting a few appeals for vacation rentals. He received the first big one for challenging their department on its position on Ag land. The fear is that if the Board of Appeals goes against his decision, it could end up allowing full-time vacation rentals all throughout Ag lands. The farm dwelling would not mean anything and you would have a proliferation of them on Ag. They drew a line in the sand with the Bill and with the Ordinance and are going to hold this and make their

best appeal on that. He hoped people understand the gravity of the decision. If we lose this land to vacation rentals on Ag land, it is going to have a major impact. Right now, he has about 1,000 testimonies for non-conforming use areas for residential neighborhoods. Out of 1,000, there are about three positive ones and 997 that hate the vacation rental in the neighborhood. This dislike for them never came out in the hearings. He is only hearing it now through the testimony. If we allow things to happen on Ag land with the vacation rental, there will be an uproar, but it could be too late. These are the kinds of daunting things the island has on itself. He wished vacation rentals had been addressed ten years ago when they first started popping up, but they waited a bit too long and now they are trying to play catch-up.

Mr. Elarionoff asked when that decision would be coming out.

Mr. Yee replied that the appeal was just filed so it is going to be two to three months before going to hearing.

Mr. Kern stated that if you look at Hāmākua, you have the areas that have really tight density, such as the camp areas; but when you look at the bulk of Hāmākua, most of them are large parcels, most of them are not being farmed, and most of them are owned by people that are either well-to-do or are families that have held them for generations. But they are still not being farmed. The land has been there, and it is prime Ag land. What do you do to preserve it? There needs to be something in place there to move on. C. Brewer did what they did and sold off, and a lot of people came in and built their estates.

Ms. Morrison stated that on the economic development side, they are pushing Ag as part of that sustainability and self-reliance piece. It is about smaller farming that families can do together and they are pushing some of those strategies.

Mr. Kern stated that for local Ag to be sustainable and for our children to be able to stay here, it starts with economics. Economics is tied to land use and tied to government, and when things are not moving, things are not pushing through, and people are not working, they move away. If we want to support that, we have to be able to have living wages come up all the way around. This General Plan is going to be one of the most critical guiding documents. A lot of people do not realize for the next 15 or 20 years, you may want to do something, but everything needs to be set off the General Plan. A huge part of it needs to be looked at from an economic standpoint so the generations can stay here because it is really hard to do that. Personally, he did not think it has been looked at strong enough for a long time.

Ms. Morrison gave a final note that this draft is open for review on Planning's website, and Board Members can review and can call her with any questions. She encouraged families and friends to have a look at it as well because it is only going to be as good as the type of feedback they get. The more outreach the better.

The Manager-Chief Engineer stated that the link to the General Plan Update would be sent out to the Board Members.

Mr. De Luz complimented the Planning Department for making the Plan as accessible as they can to the public and for also doing the white paper, a sort of summation of a very complex issue. It highlights the points, and people can go into the Plan specifically to look in more detail. It was very helpful.

The Board thanked the Planning Director and Ms. Morrison for the presentation today.

Mr. De Luz asked if the Board could be provided with more information about what was discussed today and how it impacts water, to help the Board understand its mission, such as current water service and areas of opportunity to expand.

The Manager-Chief Engineer noted, for the minutes, that he would ask Mr. Inaba to prepare a summation of how our Department has been interacting with the Planning Department on this General Plan update, and information on the Water Use and Development Plan.

Chairperson Boswell asked if the Water Use and Development Plan could be sent to the Planning Director, if he does not already have it.

The Manager-Chief Engineer noted that some information that might be worth factoring into the General Plan would be what the Commission on Water Resource Management is doing with the Waimea aquifer by possibly lowering the sustainable yield number.

Mr. De Luz stated that was his reason for wanting to understand gray water management because in some of these areas, perhaps there is a need to look at gray water being a cross-utilization in households to differentiate between drinking water and other uses.

The Manager-Chief Engineer stated that there is a roadblock with other agencies as far as gray water use.

Mr. De Luz felt it is a discussion to keep ongoing.

The Manager-Chief Engineer commented that the main thing is to keep moving towards solutions.

This concluded the presentation of the General Plan.

B. MONTHLY PROGRESS REPORT:

Mr. Inaba highlighted some projects:

1. Wai'aha Well 2 Development

The project will now be called the Wai'aha Well B project for consistency in project names. The Environmental Assessment (EA) has been submitted to the State Office of Environmental Quality Control for insertion in their October 2019 bulletin. After the 30-day comment period, we should be getting that back in November, after which the final EA can probably be completed early in December and early next year, bid out the exploratory well. The Manager-Chief Engineer mentioned this is the one where the Department is trying to put a second well on the existing Wai'aha well site. In response to Chairperson Boswell's question of if it would take a test well to do that, he replied that was correct.

2. North Kona Mid Level Deep Well Development - Phase 1

The Department met with the landowners last week and it went well. A survey and construction right-of-entry was done for them to look at. They had a couple of comments on it to be sure that if the Department did not want the land, that everything is put back to their satisfaction. In response to Chairperson Boswell's question of whether that will be for a test well also, Mr. Inaba replied it is also a test well. It is on mid-level where they drill really deep, below sea level, to hit the fresh water.

3. Hala'ula Well Development, Phase 2

The pre-construction meeting was held. The contractor is still awaiting some of their permits and approvals. It is looking like they will be starting in November 2019.

C. REVIEW OF MONTHLY FINANCIAL STATEMENTS:

Mr. De Luz asked about consumption--if the amount of gallons is what distribution accounted for or whether it was the amount of gallons billed.

Mr. Sumada replied it is gallons billed.

Mr. De Luz spoke of water loss and how it relates to the total amount billed versus what the system produced. He was curious because the Department is on an initiative in water loss. Different systems will have different results, but he wondered if the loss was around 10% right now. He mentioned Ms. Hayducsko's previous presentation regarding water loss and some targeted areas where there may be more impact. In the future, perhaps because the Department has made an investment on water loss detection items, it is important for the customers to realize that the Department is always striving to be more efficient and managing its water loss helps drive down operational costs.

The Manager-Chief Engineer noted that the next time an Energy update is on the agenda, a component will be added related to water loss.

D. MANAGER-CHIEF ENGINEER'S REPORT:

The Manager-Chief Engineer to provide an update on the following:

1. North Kona Wells - the Deputy provided an update on the wells. Of the fourteen sources in the North Kona system, four are offline, and one was repaired. Hualālai Well Repair was completed September 3. Water quality samples were taken and Department of Health are processing those samples. The results are expected back early October. If they are okay, the efficiency test will be done on the pump and it will be put back in the system. For the four wells still offline are Palani, Wai'aha, Holualoa, and Makalei wells. For Palani Well, the pump and motor is supposed to be on site this week. That completion date is still set at October 22. For Wai'aha Well, it is still on litigative hold, so no comments right now. Holualoa Well notice to proceed was September 4, and that completion date is set at January 1, 2020. For Makalei Estates Well, the developer and their consultant are still targeting early next year for going out to construction bids for repair. In response to Chairperson Boswell's question on how long construction would take thereafter, guessing mid-2020, it was noted that it may be quicker for them from bid to actual start because they are a private entity. Mr. De Luz asked if DWS will be signing off on the specifications. Manager-Chief Engineer replied it would. Mr. Inaba noted that DWS has been working with their engineering on redesign of the pump and motor. Redesign of the system would include the pump and motor, controls (to fit within the existing building), and pump column. Casing will remain the same. Developer will incur the costs.

Mr. De Luz asked if future private development for water wells will include the requirement from this Department to have alignment tests, etc., done to conform to what the Department has been doing with the wells that are currently under repair.

The Manager-Chief Engineer replied that was correct. With private developments, there will be a well development agreement prepared, which will include all of those details; and that agreement would come to the Board for review and approval. The intent is to incorporate all of the information that came out from the Permitted Interaction Group.

Chairperson Boswell asked if Brown and Caldwell would be doing a presentation next month.

Mr. Inaba replied that is the current plan. He would also make sure the Hualālai Well can get online and be analyzed as well.

E. **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 TO ENTER EXECUTIVE SESSION: Mr. Kern moved that the Board enter Executive Session; seconded by Mr. De Luz and carried by roll call vote (Ayes: 8 - Ms. Hugo and Messrs. Balog, De Luz, Elarionoff, Kern, Scicchitano, Sugai, and Chairperson Boswell; Nays: 0; Absent: 1 - Mr. Domingo).

(Executive Session began at 11:34 a.m. and ended at 12:06 p.m.)

F. **CHAIRPERSON'S REPORT:**

Chairperson Boswell opened it up to the rest of the Board Members if they had anything they wanted to bring to be addressed by the Department (send through the Secretary) or any comments or initiatives they feel should be done.

Mr. De Luz asked if a master calendar could be provided to give the Board a perspective for when the Manager-Chief Engineer's evaluation comes up. An example would be the audit report, which comes around a certain time of year, and other systematic things that occur, and show when they start and the expectation for completion. It may take a couple of meetings for the Board to digest this master calendar and any other materials needed for the evaluation. It should start next month, in October.

Chairperson Boswell mentioned that in the past, the Board would be provided with information to base its decisions on during the yearly evaluation.

The Manager-Chief Engineer replied that he would get a major milestones list to the Board, such as when the budget begins to be formulated, when it is brought to the Board, when the two readings are held, and the deadline to approve the budget. Other milestones such as large procurements and yearly material bids prior to fiscal year end could be included.

Mr. De Luz stated that it should be the Board's responsibility to manage that time if it is important enough to be there; and when those milestone dates are placed on there, it is important that the Board participate.

8) ANNOUNCEMENTS:

1. Next Regular Meeting:

The next meeting of the Water Board will be October 22, 2019, at the Department of Water Supply, Operations Center Conference Room; 889 Leilani Street, Hilo, Hawai'i.

2. Following Meeting:

The following meeting of the Water Board will be November 26, 2019, 10:00 a.m., in the West Hawai'i Civic Center, Community Meeting Hale, Building G; 74-5044 Ane Keohokalole Highway, Kailua-Kona, Hawai'i.

9) ADJOURNMENT

Anyone requiring an accommodation or auxiliary aid and/or services to participate in this meeting (i.e. sign language, interpreter, large print), please contact the Board Secretary, at 961-8050 as soon as possible, but no later than five days before the scheduled meeting.

Notice to Lobbyists: If you are a lobbyist, you must register with the Hawai'i County Clerk within five days of becoming a lobbyist. {Article 15, Section 2-91.3(b), Hawai'i County Code} A lobbyist means "any individual engaged for pay or other consideration who spends more than five hours in any month or \$275 in any six-month period for the purpose of attempting to influence legislative or administrative action by communicating or urging others to communicate with public officials." {Article 15, Section 2-91.3(a)(6), Hawai'i County Code} Registration forms and expenditure report documents are available at the Office of the County Clerk-Council, Hilo, Hawai'i.

10) ADJOURNMENT

ACTION: Mr. Kern moved to adjourn the meeting; seconded by Mr. De Luz and carried unanimously by voice vote. (Meeting adjourned at 12:10 p.m.)

Recording Secretary

(APPROVED BY WATER BOARD ON 10/22/19)