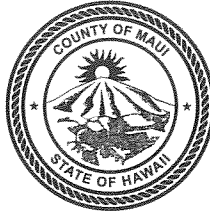


ALAN M. ARAKAWA  
Mayor



KA'ALA BUENCONSEJO  
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**DEPARTMENT OF PARKS AND RECREATION**

700 Hali'a Nakoia Street Unit 2, Wailuku, Hawaii 96793

April 13, 2017

Ms. Lynn A.S. Araki-Regan  
Budget Director, County of Maui  
200 South High Street  
Wailuku, Hawaii 96793

Honorable Alan M. Arakawa  
Mayor, County of Maui  
200 South High Street  
Wailuku, Hawaii 96793

For Transmittal to:  
Honorable Riki Hokama  
Chair, Budget and Finance Committee  
Maui County Council  
200 South High Street  
Wailuku, Hawaii 96793

Dear Chair Hokama:

**SUBJECT: REQUESTS / QUESTIONS FROM THE APRIL 6, 2017 MEETING  
(PR-6)(BF-1)**

The following is our Department's response to requests/questions from the April 6, 2017 meeting:

1. *For the various County park facilities, what does it cost per game for electricity when the game is played at night? (MW)*

Based on \$0.28 per kilowatt hour, here is a breakdown on some of our parks and the cost for a game at night.

War Memorial Tennis Courts	\$13.00
Keopuolani Softball Field	\$19.00
Papohaku Softball Field	\$32.00
War Memorial Baseball Stadium	\$90.00
War Memorial Football Stadium	\$133.00

**APPROVED FOR TRANSMITTAL**

  
\_\_\_\_\_  
Mayor

4/17/17  
\_\_\_\_\_  
Date

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COUNTY CLERK

2. *When were rates and fees for the PALS program last increased? (AA)*

The last increase for the PALS program rates was on August 1, 2006.

3. *Obtain information from Wailua Municipal Golf Course regarding the integration of seashore paspalum on their greens and the implementation strategy they used. Include data which shows the cost savings realized in terms of lowered maintenance, utility, and other costs. (RH)*

Wailua Municipal Golf Course integrated seashore paspalum on their greens and tees over a period of the last five (5) years. Using their current labor force, they incorporated paspalum plugs into the greens over this period without interruption to play. Concentrating primarily on the weak areas of Bermuda grass, they encouraged the paspalum growth to take over existing putting surfaces. This tactic proved to be more challenging in areas where the Bermuda grass was healthy and strong. With the coastal location and the use of effluent irrigation water, their irrigation/soil sodium and salt levels are much higher than most. This aided and allowed for a much faster transition to paspalum as it impeded healthy Bermuda grass growth. In addition to the extra help the irrigation water provided, they did not have the goose grass weed pressures that we have on our greens at Waiehu. During the five (5) year transition, Wailua's greens were very spotty with patches of different grasses trying to compete against each other. Now that the greens have fully transitioned and the paspalum has completely taken over, their greens are extremely impressive and consistent year round.

Wailua estimated an operation expense cost savings of 30% by being able to reduce fertilizer and herbicides since the conversion to paspalum grass. With the use of a computerized irrigation system installed in 2002 and the use of 100% effluent water for an eight (8) month period, an additional cost saving was also realized. As their main electrical costs were derived from running the well pump before the conversion, it currently only runs about four (4) months out of the year. The effluent water use eight (8) months out of the year guarantees additional wanted and unwanted fertilizer nutrients' providing the course with a fertilizer savings.

By converting to paspalum grass, reaching out to the media, sports writers and creating an advertising campaign to promote their golf course, Wailua Municipal Golf Course has been awarded one of the top ten (10) places to play in Hawaii. Wailua was able to increase revenue by visitors, locals and hold more notable golf tournaments. All of these factors have created additional positive exposure putting a very large spotlight on their current premium playing conditions with paspalum grass.

As referenced in PR-7, response #2, please see Attachment 1 which describes the Department's plan to implement improvements at the Waiehu Municipal Golf Course by integrating seashore paspalum on the greens and information gathered by examining practices at other golf courses throughout the State.

4. *Research information from communication providers (for example, Sandwich Isles Communications) on increased internet and cellular service capabilities at the Waiehu Golf Course to implement on-line booking of tee reservations and processing of credit card payments. (SC/AA)*

Research was done by the County ITS Department on our current internet connection via a microwave signal transmitted from the Pukalani location. This signal was determined to be an unstable connection, and several black outs or lack of communication have been experienced in the last two (2) years sometimes lasting a few days. The vendors at the golf course have also witnessed the same problem from their phone service providers during heavy rains and high wind conditions.

The County ITS Department has provided us with an alternative solution for communications. We received a formal quote for a hardwired internet connect from Hawaiian Telcom, waiving the installation fees and providing us with a dedicated 10mbps internet service. This service will cost approximately \$4,500 annually. We have reached out to Sandwich Isles Communications and they are currently doing research regarding our request. We will transmit this to you once received.

Should you have any questions, please do not hesitate to give me a call at Ext. 7385.

Sincerely,



KA'ALA BUENCONSEJO  
Director of Parks and Recreation

Attachment

KB:lms

c: Brianne Savage, Deputy Director  
Kaeo Ah Sau, Chief of Recreation  
Karla Peters, Maintenance Superintendent  
Todd Allen, Golf Course Superintendent

PR-7 BF-1  
Waiehu Municipal Golf Course  
Sea Shore Paspalum Conversion

Benefits

- Paspalum uses 66% less nitrogen than Bermuda grass and should be treated with 2-5lbs/ 1000 sq. ft. of nitrate nitrogen per growing season
- Improved drought tolerance, less water to retain turf quality with excellent color retention
- Rapidly spreads by stolons and rhizomes to form fine textured playing surfaces with a deep root system
- Very Salt Tolerant and grows best in salt-affected areas along coastal regions
- Shiny, exceptional dark green color even in low light condition
- Pre-emergent and herbicides can be effectively applied also to treat weeds in paspalum
- Rock salt and water solution has been used to treat selective weeds in paspalum turf with little to no damage done to the paspalum
- Tolerates a wide range of mowing heights with reel mowers giving you the best cutting consistency
- Upright growth habit, dense turf canopy: excellent turf quality, tends to suppress weeds
- Moderately disease resistance
- Persists in waterlogged soils for extended periods of time
- More insect resistant to Chinch Bugs than Bermuda, Chinch Bugs newest turf grass problem in Hawaii

Option #1 - Best Case Scenario for Greens Conversion

Greens should be sprigged and seeded in the early/ mid-summer for best results to withstand the amount of foot traffic Waiehu golf course receives each year. This would ensure the financial investment made by the county is done to the best quality possible with our current labor force. While the front nine is closed additional work could be completed on the front without hindrances from golfing activities. Since only the back nine will be open during this grow-in process, we would be able to dedicate most of our labor force to the front nine after the back nine is setup for play each day.

Prior to closure of the front 9 greens and the putting green, all those greens, collars and approaches would be sprayed with herbicides and small doses of fertilizer to allow complete uptake of the chemicals. When the existing Bermuda grass turns off color, excessive verticutting and aerification would be done to remove as much plant and older organic material as possible. At the point where the greens become unplayable we would switch to just having nine holes open for play. Gaps

in the tee sheet system would then be created to allow time for golfers to finish playing the back nine, in order for them to play the same 9 holes again.

Core aeration, fertilizing and topdressing would be done in order to prep the greens for sprigs and seeds. Once all 10 greens, collars and approaches were ready for sprigs and seed would be spread the sprigs by hand and plants would be sliced into the greens profile. Topdressing and rolling would be done to cover plant material and seeds, ensuring soil contact for proper rooting.

A watering program will be setup and tested in the field with the irrigation computer prior to any grass planting. Once each green is completed the water will be turned on right away to keep the stolons and seeds wet for 3 weeks while the new vegetation takes root. New grass will be on a schedule of fertilizing every week to push the plants growth to maximize viability and the time of establishment back to proper greens.

With good weather and moisture content in the beginning stages of this process we should be able to transition back to these greens for play in 12 to 16 weeks. Once front nine is completed, the back nine greens with funding will go through the same process.

#### Option #2 - Temporary Greens Process

The above scenario will be replicated however the putting green will be closed for completion of needed grow-in. All holes on the front nine will be shortened in yardage to find a space within the fairways where a temporary green can be mowed out. This space will have to be far enough away that our irrigation will not get golfers wet. This also presents an additional problem for these par 3 holes #2, 8 and 16 because there is a very small or limited flat areas around these holes where a temporary green could be setup and maintained in the existing conditions.

The biggest downside of the temporary green process is the limited amount of additional work which could be completed on the front nine while the greens are growing in due to heavy play.

#### List of Additional work which could be accomplished in house during closure

1. Frazee mowing of all the fairways, dramatically reducing weed populations and improve condition of current Bermuda grass turf
2. Leveling and improving of all tee boxes on the course
3. Smoothing of the cart path exits and entry on to the turf grass at the tee and green locations
4. Creation and grow in of forward tees for Juniors, Seniors and new golfers as recommended by the USGA to make the course more playable and scoring friendly

5. Improvements to the bunkers edges and playability
6. Removal of overgrown areas surrounding the course and then beautification with native plants provided by County nursery

### Option #3 -Conversion to the Greens in Play

This process would be the most difficult, time consuming and longest process to complete with success. It will be a 5 year process to convert the greens over to paspalum slowly and bring about the longest period before a ROI is developed. An on-site nursery would need to be built with the same soil composite as the existing greens profile. Once completed the new sprigs would be grown-in on this site for harvesting in the future. One of our current greens mowers would have to be dedicated to just this site, as constant sharpening, topdressing and height adjustments would need to be made growing in this new grass. This would leave us with only 1 greens mower and 1 tee mower to maintain the course. Currently we rotate the greens mowers for equal hours and maintenance distribution.

The overall process for grow-in would be the same and once plants reach maturity they would be harvested and plugged into existing greens. Greens which have been planted will need extra water throughout the day to increase viability of the plant material. Additional stress would be applied to the current Bermuda grass base to encourage the paspalum to take over the weaker plants. This process can and has been done in the past a numerous golf courses.

PR-7 BF-1  
Waiehu Municipal Golf Course  
Opportunities for Improvements and Revenue Generation

The majority of golf courses throughout the State have implemented online tee booking programs, broadened the window in which tee times can be made, and made a concentrated effort on advertising their golf course clubhouse, golf pro shop and practice area amenities which are offered. Most courses contacted are also focusing efforts on increasing golf course conditioning and playability. By keeping up with trends in the industry and recommendations made by the United States Golf Course Association, golf courses are staying viable. There was a 2.6% increase in golfing nationwide YTD in 2017.

Several courses have implemented forward tee boxes to help increase the “fun factor” for new golfers, aid the junior and senior golfers in scoring ability, and speed up play to some degree. Other golf facilities are also promoting golfing/dining specials, Family golfing days, Women’s League play, Juniors summer and winter teaching programs and over all providing great service to their patrons. Many golf courses are holding small venue concerts, educational business outings, movie nights, creating wedding sites to promote additional revenue on property when not in use or used by golfers. Some of the courses researched are working with local tourism companies as a destination or a part of their program providing food, beverages and golfing packages.

Many courses which are showing a reduction in golfing play have initiated foot or Frisbee golf during designated afternoons or time frames to play daily. These sports generally cannot be played safely alongside each other. Therefore, they have either intertwined these sports by staggering tee times or put a block on a select times only allowing one sport to be played during that timeframe. While some courses in certain areas that have had a reduction in golf and are now showing revenue generation by providing these other sports, it remains to be seen if this would be a long-term solution or a great fit for all locations.

Many national and local golf courses are researching the use of XGolf or Topgolf golfing simulators and teaching aids. Having this setup at your facilities will create automatic revenue because you can play any course in the world, inside a facility. Currently they are charging by the hour while serving food and beverages to these golfers. Most of these locations, if not all, are receiving rave reviews and indirectly it’s actually getting more people than before participating in real golf outside. These types of setups are attracting more people who have never tried golf before in their lives because it’s fun!