JODI S. YAMAMOTO 6757
WIL K. YAMAMOTO 7817

YAMAMOTO CALIBOSO
A Limited Liability Law Company
1099 Alakea Street, Suite 2100
Honolulu, Hawaii 96813
Phone No. (808) 540-4500
Facsimile No. (808) 540-4530
Emails: jyamamoto@ychawaii.com
wyamamoto@ychawaii.com

Attorneys for MMK MAUI, LP

COMMISSION ON WATER RESOURCE MANAGEMENT

STATE OF HAWAII

Surface Water Use Permit Applications, Integration of Appurtenant Rights and Amendments to the Interim Instream Flow Standards, Na Wai Eha Surface Water Management Areas of Waihee, Waiehu, Iao and Waikapu Streams, Maui	)	Case No. CHH-MA15-01 MMK MAUI, LP'S PROPOSED FINDINGS OF FACT, CONCLUSIONS OF LAW, AND DECISION & ORDER, CERTIFICATE OF SERVICE

MMK MAUI, LP'S PROPOSED FINDINGS OF FACT, CONCLUSIONS OF LAW, AND DECISION & ORDER

AND

CERTIFICATE OF SERVICE

MMK MAUI, LP'S PROPOSED FINDINGS OF FACT, CONCLUSIONS OF LAW, AND DECISION & ORDER

I. FINDINGS OF FACT

A. Background

1. MMK Maui, LP ("MMK") owns and operates two golf courses, The King Kamehameha Golf Club ("King Kamehameha Course") and the Kahili Golf Course (the "Kahili Course") (collectively, the "Golf Courses"), located in Waikapu, Wailuku, Maui. *See* Direct Written Witness Statement, aka Written Direct Testimony, of B. Russell Dooge, filed February 5, 2016 ("Dooge WDT").

2. MMK is an ***existing user*** of water from Na Wai Eha, which is comprised of the Waihee, Waiehu, Iao, and Waikapu streams, all of which are located in Wailuku, Maui. *See* Direct Written Witness Statement, aka Written Direct Testimony, of Ikaika Bechert, filed February 5, 2016 ("Bechert WDT").

3. The Golf Courses, which encompass approximately 350 acres of land and employ approximately 130 employees, provide the Maui community with a venue for open space, recreational support, and unparalleled scenic beauty. *See* Direct Written Witness Statement, aka Written Direct Testimony, of Scott C. Carroll, filed February 5, 2016 ("Carroll WDT").

4. On April 22, 2009, MMK Maui, LP ("MMK") submitted an Application for Surface Water Use Permit for ***Existing Use*** in the Na Wai Eha, Maui, Surface Water Management Areas ("SWUP Application"). *See* MMK Application for Surface Water Use Permit for Existing Use, dated April 22, 2009, filed with the Commission on Water Resource Management, State of Hawaii ("Water Commission").

5. In the 2009 SWUP Application, MMK sought 1.29 million gallons per day ("GPD"). *Id.*

6. Based on updated figures from water meter readings spanning from June 2006 through December 2015, as well as further considerations regarding the weekly, monthly, and yearly variability of water usage over a 9.5 year period and the actual need to adequately and efficiently water the Golf Courses, MMK currently seeks ***1.25 million GPD*** to continue to operate the Golf Courses. Tr. 7/22/16 (Dooge) at 19:11-19; Tr. 7/22/16 (Bechert) at 49:3 to 11.

7. The Direct Written Witness Statements, aka Written Direct Testimony, of MMK's three witnesses, B. Russell Dooge, Ikaika Bechert, and Scott Carroll, were filed with the Water Commission on February 5, 2016.

8. MMK's Exhibits, 2186-MMK-1 through 2186-MMK-11, were filed with the Water Commission on February 5, 2016.

9. MMK's three witnesses, B. Russell Dooge, Ikaika Bechert, and Scott Carroll, each testified at the contested case hearing on July 22, 2016. Tr. 7/22/16 (Dooge) at 5:15 to 41:5; Tr. 7/22/16 (Bechert) at 41:6 to 65:8; Tr. 7/22/16 (Carroll) at 65:9 to 84:16.

B. Existing Use of Water by MMK

10. The property on which the Golf Courses are situated was originally owned by Wailuku Agribusiness Company and sold in 1988 to Waikapu Mauka Partners for the development of the Golf Courses. Dooge WDT 2/5/16, ¶ 6; Bechert WDT 2/5/16 ¶ 10.

11. With the acquisition of the golf course Property from Wailuku Agribusiness Company (one of MMK's predecessors-in-interest), the golf course developers obtained

a water delivery agreement pursuant to which the Golf Courses obtained a maximum delivery of 4 million gallons of water per day from Wailuku Agribusiness Company. Carroll WDT 2/5/16 ¶ 6. Pursuant to the water delivery agreement, as amended ("Water Delivery Agreement"), MMK's predecessor-in-interest prepaid approximately $4,000,000 for the perpetual delivery of up to 2,700,000 gallons of water per day to the Property. *Id.*

12. Wailuku Water Company, LLC ("WWC"), a successor-in-interest to Wailuku Agribusiness Company, continues to deliver water to the Golf Courses pending resolution of the current contested case hearing (CCH-MA15-01). Carroll WDT 2/5/16 ¶ 7.

13. The Golf Courses initially were developed as the Sandalwood Golf Course and the Waikapu Valley Country Club. Both the Sandalwood Golf Course and the Waikapu Valley Country Club commenced operations in December 1991. Dooge WDT 2/5/16, ¶ 7; Bechert WDT 2/5/16 ¶ 11.

14. The Golf Courses and their club houses were initially constructed at a cost exceeding $80,000,000. The Golf Courses were not part of any residential development, but were intended to provide open space and recreational support to the Maui community. Dooge WDT 2/5/16, ¶ 8; Bechert WDT 2/5/16 ¶ 12.

15. The subject property was sold in 2004 to the current owners, MMK. At the time of the sale, the Golf Courses were in serious need of rehabilitation, with the golf course at the Wailuku Valley Country Club having been inoperable for a number of years. Dooge WDT 2/5/16, ¶ 9; Bechert WDT 2/5/16 ¶ 13.

16. MMK expended in excess of $10,000,000 in order to improve the fairways, the greens, the sand traps, and the irrigation systems of the Golf Courses. In excess of $4,000,000 was expended to reconstruct the irrigation systems. The improved irrigation systems help to ensure the efficient utilization of the water source serving the Golf Courses. Dooge WDT 2/5/16, ¶ 10; Bechert WDT 2/5/16 ¶ 14.

17. After MMK purchased and renovated the property between 2004 to 2006, all 36 holes were open for play as of May 2006. Dooge WDT 2/5/16, ¶ 11; Bechert WDT 2/5/16 ¶ 15.

18. The Golf Courses have been irrigated with water delivered from the Iao and Waihee Streams to the Waihee Ditch. The water from the Waihee Ditch flows into a drop ditch and is then pumped into Kahili Course Reservoir 4. From Kahili Course Reservoir 4, the stored water is then pumped into a distribution system consisting of hundreds of individually controlled sprinkler heads to irrigate the Kahili Course and, through a transfer pump, water is pumped from Kahili Course Reservoir 4 into King Kamehameha Course Reservoir 18. From King Kamehameha Course Reservoir 18, the stored water is pumped through its distribution system consisting of hundreds of individually controlled sprinkler heads to irrigate the King Kamehameha Course. Dooge WDT 2/5/16, ¶ 12; Bechert WDT 2/5/16 ¶ 16. The irrigation system is shown on Exhibit No. 2186-MMK-2.

19. From approximately 2006 to 2009, water usage was monitored and controlled by way of a weather station system that measured evapotranspiration rates on a daily basis and, in addition to manual adjustments, signaled to the control system and sprinkler heads throughout the Golf Courses when water was to be replaced.

Bechert WDT 2/5/16 ¶ 17; Exhibit No. 2186-MMK-8, Rain Bird Weather Station (Specifications). The use of the weather station system was to help ensure that the Golf Courses were not over-irrigated and water was not wasted, and its use was in addition to the manual adjustments and control of water usage by the irrigation staff. *Id.* From approximately 2009 to 2012, the irrigation staff continued to monitor the data from the weather station system, but the communication to the control system and sprinkler heads had been turned off to allow for increased adjustments and control by the irrigation staff. *Id.*

20. From 2012, the weather station system was intentionally disabled, however, the irrigation staff continued to refer to the historical data collected from 2006 to 2012 to establish a baseline or reference point, and manually adjusted the duration of water usage, as it was important for the irrigation staff to manually monitor and make adjustments on a daily basis to ensure that not too much or too little water is used at the Golf Courses. Bechert WDT 2/5/16 ¶ 18; Exhibit No. 2186-MMK-3, *Turf Management for Golf Courses*, by James B. Beard (excerpt), at p. 383 ("*When to irrigate is one of the most difficult decisions in all of golf course turfgrass culture. Often the decision must be made daily for various turfs and locations on the golf course. Golf course irrigation problems are unique because the variables are numerous and many are beyond any reasonable degree of control.*") and at p. 432 ("*A fully automatic irrigation system that does not require periodic programming and maintenance does not exist.*"). Too little water will result in killing the grass (and would require even more water to remediate), while too much water will result in substandard, soggy, wet, and/or too soft turf grass for golf course use. Bechert WDT 2/5/16 ¶ 18; Tr. 7/22/16 (Bechert) at 50:16-23; Exhibit

No. 2186-MMK-3, p. 407 ("*The net result, if the system is properly designed and operated, ... is increased efficiency of water use, more uniform irrigation within each type of turfgrass area, and avoidance of overwatering with its associated soil compaction, disease, and playing problems.*").

21. Another type of equipment that the Golf Courses invested in following the renovations to enable efficient water use was the installation of Rain Bird Golf Rotors (aka, sprinkler heads). These sprinkler heads allow for full and part-circle performance, have a valve-in-head assembly in an all-in-one design which improves maintenance and control, and allows for control of each individual sprinkler head (including the duration and volume of water released). Bechert WDT 2/5/16 ¶ 19; Tr. 7/22/16 (Bechert) at 47:5-8; Exhibit No. 2186-MMK-7, *Rain Bird Golf Rotors Brochure (700 and 751 Series full and part-circle performance sprinkler heads) and Rain Bird 700 and 751 Series Rotors Test Site Report*; Exhibit No. 2186-MMK-3, p. 407 ("*The sprinkler is a key component of the irrigation system because its function is the distribution of water over the turf area. How uniformly the water is distributed determines the effectiveness and efficiency of the system. The rotary sprinkler head is the type used most commonly on golf course turfs. It produces a slowly rotating, fine stream of water that is distributed relatively uniformly over a large circular to semicircular area. ... Most rotary sprinkler heads used on golf courses are of the pop-up type, with many of a valve-in-head design.*"). A total of more than 5000 of these sprinkler heads are in use at the Golf Courses and enable the efficient use of water through individualized sprinkler head control. Bechert WDT 2/5/16 ¶ 19; Tr. 7/22/16 (Bechert) at 45:15 to 46:5.

22. The Golf Courses also invested in an advanced Central Control System (Rain Bird Cirrus model) that allows the irrigator staff full control and monitoring of the sprinkler heads remotely. This system allows for on/off, duration, and volume of water control which can be programmed, monitored, and adjusted in order to minimize the need for unnecessary watering and daily/hourly access and control of the watering for the efficient use of water. Bechert WDT 2/5/16 ¶ 20; Tr. 7/22/16 (Bechert) at 47:9-13; Exhibit No. 2186-MMK-6, *Rain Bird Golf Central Control Systems Description (including Cirrus Central Control System Technical Specifications)*; *see also* Exhibit No. 2186-MMK-3, p. 406-407 ("*A vital component in automatic irrigation systems is the master controller, which actuates the remote valves. ... The golf course superintendent programs each station timing to the specific duration of irrigation desired for the turf area controlled by that station. ... The automatic control system has the advantage of placing the golf course superintendent in direct control of the irrigation practices employed throughout the golf course.*"). This equipment was vital to control the amount of water distributed on an hourly and/or daily basis for the most efficient use of water. Bechert WDT 2/5/16 ¶ 20.

23. The daily assessment of the soil moisture levels at key indicator sites throughout the golf course was an important practice that was followed at the Golf Course in order to utilize water efficiently. Bechert WDT 2/5/16 ¶ 21; Exhibit No. 2186-MMK-3, p. 432 ("*A responsible superintendent will make a daily assessment of the soil moisture levels at key indicator sites throughout the golf course.*") The irrigation staff performed daily visual assessments of the turf and soil, including the use of a soil probe to measure moisture conditions. *Id.*; Tr. 7/22/16 (Bechert) at 45:11-14 and 46:6-16;

Exhibit No. 2186-MMK-3, p. 433 ("*The ultimate decision as to when irrigation is needed requires visual assessments of the water status of both the turf and the soil. ... A soil probe is the best tool for this assessment, assuming the person is familiar with the appearance of soils under various moisture conditions.*").

24. The irrigation staff, utilizing the Central Control System, also irrigated the Golf Courses predominantly during the evenings and early mornings in order to make the most efficient use of the water (during cooler temperature and less dry periods). Bechert WDT 2/5/16 ¶ 22; Exhibit No. 2186-MMK-3, p. 434 ("*The preferred time of day for maintenance irrigation of most golf course turfs, from an agronomic standpoint, is the late nocturnal period and early morning.*").

25. In addition to the various techniques established at the Golf Courses for the efficient use of water (and minimizing any wasted water), the daily needs for quantity of water to irrigate the Golf Courses was communicated by the Golf Courses to WWC, who controlled and released on a weekly (or so) basis only the amount of pumped water from the Waihee Ditch based on the immediate needs of the Golf Courses to ensure that only the necessary amount of water was provided to the Golf Courses. Bechert WDT 2/5/16 ¶ 23; Tr. 7/22/16 (Bechert) at 48:14 to 49:2. WWC took meter readings weekly (or so) and regulated the pumps that allowed water into the Reservoirs at the Golf Courses. *Id.* As a result, there were checks and balances to ensure that the Golf Courses received and used only the amount of water it needed on a weekly basis. *Id.*

26. The Golf Courses also took steps to mitigate its water use. For example, both courses utilized Bermuda turf grass, commonly known as a drought-resistant

species of grass. Bechert WDT 2/5/16 ¶ 24. The Golf Courses also utilized landscaping that is similarly drought-tolerant while still appearing tropical in nature. *Id.* Notwithstanding such drought-resistant qualities, however, a reasonable amount of water was still required in order to properly maintain the Bermuda grass and landscaping, as would be the case for other drought-resistant grass or landscaping. *Id.* In addition, the Kahili Course Reservoir 4 and the King Kamehameha Course Reservoir 18 were both rubber-lined to minimize water leakage and designed to capture, hold, and store water (including rainwater) so that appropriate amounts of water could be drawn for irrigation based on need. *Id.*; Tr. 7/22/16 (Bechert) at 48:1-13. These were examples of how the Golf Courses took affirmative steps to mitigate its water needs to the extent practicable.

27. Following the completion of renovations to the Golf Courses in mid-2006, from June 2006 through December 2015, the amount of water necessary to irrigate the Golf Courses, given the weather, including variations in rainfall, humidity, wind, and temperature, ranged from a low of 0.129 (March 2014) to a high of 2.485 (April 2007) million GPD, and an ***average of approximately 1.037 million GPD for the entire 9.5 year period (June 2006 to December 2015)***. Bechert WDT 2/5/16 ¶ 25; Exhibit No. 2186-MMK-4, MMK water use chart from June 2006 through December 2015 (the "MMK Water Usage Chart").

28. The water demands of the Golf Courses (two golf courses consisting of 36 holes and common areas) fluctuated greatly from season to season, and month to month. Bechert WDT 2/5/16 ¶ 26; Tr. 7/22/16 (Bechert) at 53:7-20; Exhibit No. 2186-MMK-4.

29. Water needs at the Golf Courses fluctuated greatly depending on seasonal variations in climate. Bechert WDT 2/5/16 ¶ 27. Typically, water needs decreased during the winter months and increased during the summer months. For example, in January and February of 2011 the courses used 21.9 and 18.7 million gallons of water, respectively, whereas from June through September of 2011 the courses used 41.1 (June), 38.4 (July), 39.9 (August), and 41.4 (September) million gallons of water, respectively. *Id.*; Exhibit No. 2186-MMK-4.

30. When looking at water use per full calendar year, water use ranged from a high of 490,394,936 gallons a year (or 1.4 million GPD) in 2007 to a low of 241,688,400 gallons a year (or 0.66 million GPD) in 2014. Exhibit No. 2186-MMK-4.

31. MMK explained that water usage in years 2014 and 2015 decreased to 0.66 and 0.70 million GPD, respectively, without any significant changes to water-saving measures or mitigation efforts, and that the reason for the further decrease in 2014 and 2015 were unusual weather patterns that caused more frequent and consistent rain throughout a majority of months during years 2014 and 2015. Bechert WDT 2/5/16 ¶ 30; Tr. 7/22/16 (Bechert) at 62:25 to 63:4. Frequent and consistent rain (e.g., weekly) removes the need to regularly water the Golf Courses and allows the irrigation staff to shut off the water sprinklers for longer durations. *Id.*; Tr 7/22/16 (Bechert) at 61:23 to 62:19. Conversely, huge rainfall followed by several weeks of no rain may result in the same quantity of rainfall, but there is still a need to irrigate within a week after the rainfall, so the need for irrigation is still greater where the rainfall is less frequent and not as consistent (even though total rainfall is the same). *Id.*

32. MMK's witness testified that based on approximately two decades of first-hand experience maintaining and irrigating the Golf Courses, he did not believe the water usage during 2014 and 2015 is indicative of future usage, as the usage in those two particular years are unusually low due to frequent and consistent rainfall. Bechert WDT 2/5/16 ¶ 31; Tr. 7/22/16 (Bechert) at 62:25 to 63:4; Exhibit No. 2186-MMK-3, p. 413 ("*In some locations, irrigation is used only to supplement natural rainfall....*").

33. MMK stated that it believes the ***average use over the last 9.5 years from June 2006 to December 2015 of approximately 1.037 million GPD*** is more indicative of the average usage it may see over the next 10 years. Bechert WDT 2/5/16 ¶ 31. However, the 1.037 million GPD is just the average usage, and an amount of water based on such average does not necessarily meet the needs of the Golf Courses for drier months (with less frequent rainfall). *Id*; Exhibit No. 2186-MMK-3, p.384 ("*The total golf course water needed for a year must be estimated before assessing the potential water sources. ... In regions where the annual rainfall is highly variable,* ***the estimate should be based on one of the drier years rather than an average over the years.***"). According to the MMK Water Usage Chart, 2007 was one of the driest years as ***2007 saw one of the highest yearly average usage of 1.34 million GPD***. Exhibit No. 2186-MMK-4.

34. As indicated in the MMK Water Usage Chart, water usage has in the past fluctuated significantly from month to month, with the driest months per year requiring 1.70 (2006), 2.485 (2007), 1.70 (2008), 1.47 (2009), 1.43 (2010), 1.38 (2011), 1.32 (2012), 1.59 (2013), 1.14 (2014), and 1.05 (2015) million GPD for the last 10 years, with an ***average of 1.53 million GPD***. Exhibit No. 2186-MMK-4. MMK stated that its

preference would be to have 1.53 million GPD in order to have enough water to meet the average of the driest months for the last 10 years as such amount of water may be necessary to carry the Golf Courses through very dry months. Tr. 7/22/16 (Bechert) at 49:18 to 50:15. However, in an effort to compromise and reduce the amount of water MMK uses, MMK believes a reduced amount of ***1.25 million GPD*** (which is approximately the-midpoint between the actual historical 9.5 year usage of 1.037 million GPD and the driest month average over the same period of 1.53 million GPD) is reasonable and probably enough water to irrigate the Golf Courses sufficiently. Bechert WDT 2/5/16 ¶ 31; Tr. 7/22/16 (Bechert) at 54:2 to 55:5.

35. According to the MMK Water Usage Chart, for the ***12-month moving average from April 2008 to March 2009*** (i.e., the 12-month period immediately preceding the filing of MMK's SWUP Application on April 22, 2009 with the Water Commission), the yearly average usage was ***1.20 million GPD***, representing an existing use of water amount of 1.20 million GPD just prior to the filing of the SWUP Application. Exhibit No. 2186-MMK-4.

36. OHA also introduced into evidence a copy of WWC's Water Deliveries Report January 2008 to June 2016, Exhibit No. OHA-49, which OHA obtained pursuant to a subpoena. The yearly average usage shown in WWC's Water Deliveries Report closely matched (and most often slightly exceeded) the yearly average usage shown in the MMK Water Usage Chart, Exhibit No. 2186-MMK-4. For example, for the year 2008, the yearly average was 1.33 million GPD in WWC's numbers and the yearly average was 1.27 million GPD in MMK's numbers.

37. Similarly, when comparing the ***12-month moving average from April 2008 to March 2009*** (i.e., the 12-month period immediately preceding the filing of MMK's SWUP Application on April 22, 2009 with the Water Commission), the yearly average delivery was ***1.20 million GPD in WWC's Water Deliveries Report*** and the yearly average usage was ***1.20 million GPD in MMK's Water Usage Chart***. Exhibit No. OHA-49; Exhibit No. 2186-MMK-4. The water amounts from two different sources closely match and support the existing use of water amount for the immediate 12-month period just prior to the filing of the SWUP Application.

38. Also note that the ***12-month moving average from May 2007 to April 2008*** (i.e., the 12-month period immediately preceding the April 30, 2008 effective date of the designation of Na Wai Eha as a surface water management area), the yearly average usage was ***1.29 million GPD***, representing an existing use of water amount of 1.29 million GPD just prior to the effective date of the designation of Na Wai Eha as a surface water management area. Exhibit No. 2186-MMK-4.

39. MMK noted that even if it requested more water than what it actually needed for the Golf Courses, MMK would not be advantaged. Bechert WDT 2/5/16 ¶ 32. Due to the nature of golf course irrigation in which too little water is harmful and too much water is not desired (due to suboptimal and soggy/wet golfing conditions), MMK would not benefit from using more water than what it needed. *Id.*; Tr. 7/22/16 (Bechert) at 50:16 to 51:1. MMK stated that Proper irrigation of the Golf Courses requires an adequate amount of water at the time water is needed on a daily/weekly/monthly basis. *Id.*; Exhibit No. 2186-MMK-3, p. 435 ("*The golf course superintendent should attempt to apply an amount of water equivalent to that removed from the soil since the last*

irrigation to field capacity ... Over-irrigation must be avoided. If continued on a long-term basis, it causes serious declines in the soil oxygen level, root growth, and overall turfgrass quality and it increases the potential for disease development and soil compaction. In addition, over-irrigation is wasteful, since much water may be lost through surface runoff and gravitational percolation. ... An important dimension in irrigation is the rate of water application per unit of time. It should be adjusted to the maximal rate at which water enters the soil, termed the infiltration rate."), and at p. 383 ("*Too frequently a lush, green golf course is expected at all times. However, such a turf is not the most healthy or playable, with the result frequently being soggy, wet conditions. Proper irrigation practices are essential for good playing conditions in terms of a firm, fast surface as well as uniform, dense turf.*")

40. MMK stated that without the necessary and adequate amount of irrigation water, the Golf Courses will not be able to adequately maintain the turf grass, and the Golf Courses will consequently be forced to shut down and their employees terminated. Bechert WDT 2/5/16 ¶ 34; Tr. 7/22/16 (Carroll) at 70:7 to 14.

41. Because golf courses are customarily comprised of 18 holes, it is not a viable option to irrigate fewer than 18 holes and operate, for example, a 12-hole golf course. Bechert WDT 2/5/16 ¶ 35.

C. No Reasonable Alternatives for MMK

42. MMK representative Scott Carroll researched and considered alternate sources of water to irrigate the Golf Courses, including the availability of well-water and reclaimed water. Carroll WDT 2/5/16 ¶ 9; Tr. 7/22/16 (Carroll) at 66:17 to 67:5.

43. In January 2016, Mr. Carroll met with Mike Atherton who is the owner of the Maui Tropical Plantation located near the Golf Courses. Carroll WDT 2/5/16 ¶ 10. Mr. Carroll testified that he understands that Mr. Atherton has drilled 5 wells on his property that tap into the Waikapu aquifer, with 3 wells for potable water and 2 wells for non-potable water. *Id.*; Tr. 7/22/16 (Carroll) at 67:6-15. Based on a discussion with Mr. Atherton, Mr. Carroll does not believe there is enough well water to sustain the Golf Courses and related operations/business. *Id.*; Tr. 7/22/16 (Carroll) at 67:6 to 68:1. Mr. Carroll's understanding is that Mr. Atherton was not sure how much water was going to be available, how much he would need for his own purposes, when the water would be available for use, or what the quality of the water would be. Tr. 7/22/16 (Carroll) at 73:7 to 74:2. Mr. Atherton informed Mr. Carroll that he was in the process of conducting tests to help to clarify these issues.

44. Mr. Carroll testified that based upon his discussion with Mr. Atherton, he does not believe that well water is a reasonable alternative to the Na Wai Eha stream water because the availability of the water, the timing of the availability of the water, the amount of water, and the quality of the water are all currently unknown. Carroll WDT 2/5/16 ¶ 11. Mr. Carroll stated that well water may someday become available in the distant future, it is not a reasonable alternative today. *Id.*; Tr. 7/22/16 (Carroll) at 73:7-21.

45. In January 2016, Mr. Carroll also contacted Jeffrey Pearson, Deputy Director of the Commission on Water Resource Management, to inquire whether it could be a reasonable alternative for MMK to drill its own well to obtain ground water to support the Golf Courses. Carroll WDT 2/5/16 ¶ 12.; Tr. 7/22/16 (Carroll) at 67:6-12.

According to Mr. Carroll, Mr. Pearson noted that the possibility of drilling a new well in Waikapu did not look promising. *Id.* Mr. Pearson also mentioned that Alexander & Baldwin and Mr. Atherton were looking to drill wells and dedicate them to the County of Maui, and that the sustainable yield of the Waikapu aquifer – 3 MGD – would be consumed entirely by the Alexander & Baldwin and Atherton wells. *Id.* Mr. Pearson therefore concluded that there does not appear to be enough water for MMK. *Id.* Mr. Pearson also mentioned that he believed that MMK could not use potable water for golf courses. *Id.*

46. In January 2016, Mr. Carroll also contacted Derek Takahashi, the Recycled Water Coordinator and Project Manager, Wastewater Reclamation Division of the County of Maui, regarding the possibility of obtaining reclaimed water to irrigate the Golf Courses. Tr. 7/22/16 (Carroll) at 68:17 to 69:11; Exhibit No. 2186-MMK-11, copy of the email correspondence between Mr. Carroll and Mr. Takahashi, dated January 12 and 13, 2016. According to Mr. Carroll, Mr. Takahashi informed him that the only water source that the County Wastewater Reclamation Division has jurisdiction over is the recycled water that is produced at their wastewater reclamation facilities. Carroll WDT 2/5/16 ¶ 13; Tr. 7/22/16 (Carroll) at 68:17 to 69:4. Mr. Takahashi said that, unfortunately, the closest wastewater reclamation facility is located in Kahului near Kanaha Beach Park, and that the County of Maui does not have any recycled water distribution systems for Central Maui where the Golf Courses are located. *Id.*; *Id.*; Tr. 7/22/16 (Carroll) at 68:17 to 69:11. Mr. Carroll understands that there is currently no distribution system from the more distant Kihei Wastewater Facility to Central Maui. *Id.*; Tr. 7/22/16 (Carroll) at 69:12-15. Mr. Takahashi informed Mr. Carroll that the County of

Maui is not able to provide the Golf Courses with recycled water due to the lack of existing infrastructure in Central Maui. Mr. Carroll stated that the capital cost to construct a distribution line and obtain necessary easements is exorbitant and cost prohibitive, and concluded that reclaimed wastewater is not a reasonable alternative for the irrigation of the Golf Courses. Carroll WDT 2/5/16 ¶ 14; Tr. 7/22/16 (Carroll) at 71:16-24, at 79:20 to 80:7.

47. Mr. Carroll testified that he is not aware of any desalination plants available on Maui and there are no existing storm water reclamation facilities. *Id.*

D. MMK's operation of its Golf Courses are a commercial use of water that serves the public.

48. Approximately 130 employees operate and maintain the Golf Courses, which provide opportunities for golf, club membership, banquets, weddings, food and beverage, tours, and meetings for the Maui community. Carroll WDT 2/5/16 ¶ 15; Tr. 7/22/16 (Carroll) at 69:16 to 70:2. The King Kamehameha Golf Club is a private club with approximately 365 members and is one of only two private 18-hole golf courses on Maui. *Id.* The Kahili Golf Course is an 18-hole course that is open to the public, and in the last three years, the Kahili Golf Course has averaged about 38,000 rounds of golf. *Id.* Additionally, the Kahili Golf Course hosts a number of Maui and state-wide golf tournaments throughout the year. *Id*; Tr. 7/22/16 (Carroll) at 81:9-18.

49. MMK has supported charitable events for the benefit of Maui residents and visitors. Carroll WDT 2/5/16 ¶ 16; Tr. 7/22/16 (Carroll) at 69:21 to 70:2. For 2015, annual wages and benefits for local employees totaled over $4,000,000 and the 2015 annual employer payroll tax exceeded $370,000. *Id.* In 2015, over $334,000 was contributed to the State of Hawaii via general excise tax payments and close to

$150,000 to the County of Maui via property taxes. *Id.* Since 2004, over $16,500,000 has been invested in capital improvements to keep the Golf Courses and related facilities in good condition. *Id.*

50. With the two Golf Courses combined, MMK offers over 350 acres of wide open space. Carroll WDT 2/5/16 ¶ 17. The Golf Courses serve the Maui community in providing employment to the community, recreation and enjoyment to its patrons, wide open spaces, views to the public, and economic opportunity through construction and growth. *Id.* Last year, members and guests played approximately 60,000 rounds of golf and hosted numerous weddings, banquets, and tours. *Id.* The Golf Courses' members and associates support numerous charitable events, including junior golf on Maui and the E Malama Golf Tournament, and provide a place for our community members to enjoy scenic views in a relaxing atmosphere, and there is a sacred Hawaiian alter on site at the Property. *Id.*

51. Without sufficient water to maintain the turf at the Golf Courses, Mr. Carroll testified that the Golf Courses would be forced to shut down and their employees laid off/terminated. Carroll WDT 2/5/16 ¶ 18; Tr. 7/22/16 (Carroll) at 70:7-14. The banquets and events portion the business would have a very difficult time surviving as stand-alone operations without the Golf Courses, and it would be overly burdensome to continue to operate under such circumstances and put MMK at significant financial risk. *Id.* This could potentially affect approximately 130 Maui jobs and 365 members, and it would negatively impact the economy of Maui for the reasons noted above. *Id.*

52. In light of the announcement by Alexander & Baldwin in January 2016 that it is transitioning out of farming sugar which may result in future layoffs, MMK believes it

1 is important to try to maintain sustainable Maui jobs to the extent possible. Carroll WDT
2 2/5/16 ¶ 19.

II. CONCLUSIONS OF LAW

A. Applicable Law

1. In this matter, "[t]here are three basic categories of applications for Surface Water Use Permit Applications: 1) applicants for appurtenant rights whose provisional recognitions are confirmed by the Commission in the contested case hearing; 2) applicants claiming existing uses; and 3) applicants applying for new uses. *See* Minute Order #1, in Case No. CCH-MA 15-01, dated June 25, 2015, at 1. Generally speaking, each of the three categories of uses, including their respective priorities, are governed by the Constitution of the State of Hawaii ("Hawaii Constitution"), the State Water Code, and judicial precedent. While many applicants fit into more than one of the three categories, MMK SWUP Application is only for ***existing use***.

2. The Hearings Officer confirmed that "the amount of water that the Commission awards must by law be in quantities that are ***'reasonable and beneficial,'*** including only amounts that are ***'necessary for economic and efficient utilization."*** *Id.,* at 4. Moreover, "necessary" also means having to show that there are no "practical alternatives" to using stream waters. *Id.* Indeed, the Hearings Officer later re-confirmed that "[a]pplications for existing and new uses must be supported by evidence that meets the Water Code's requirement that the amounts requested are ***'necessary for economic and efficient utilization***, for a purpose, and in a manner which is ***both reasonable and consistent with the state and county land use plans*** and the public interest.' ... [and] applicants must also provide evidence that ***'reasonable alternatives'***

are not available'" *See* Minute Order #2, in Case No. CCH-MA 15-01, dated October 6, 2015, at 2.

3. The Hearings Officer made it clear to the parties on the opening day of the Contested Case Hearing that those parties who have submitted an application based on appurtenant rights or existing use, but have not supported such application with any evidence or testimony, cannot get a favorable ruling regarding such application. Tr. 7/11/16 at 5:4 to 6:13.

4. The Hawaii Constitution provides that:

> For the benefit of present and future generations, ***the State*** and its political subdivisions ***shall conserve and protect*** Hawaii's natural beauty and all natural resources, including land, ***water***, air, minerals and energy sources, and shall promote the development and utilization of these resources in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State. ***All public natural resources are held in trust by the State for the benefit of the people***.

See Hawaii Constitution, Article XI, Section 1 (emphases added).

It further states that:

> The State has an obligation to protect, control and regulate the use of Hawaii's water resources for the benefit of its people. ***The legislature shall provide for a water resources agency which, as provided by law, shall set overall water conservation, quality and use policies; define beneficial and reasonable uses; protect ground and surface water resources, watersheds and natural stream environments; establish criteria for water use priorities while assuring appurtenant rights and existing correlative and riparian uses and establish procedures for regulating all uses of Hawaii's water resources***.

See Hawaii Constitution, Article XI, Section 7 (emphases added).

5. Consistent with this directive, the legislature established the Water Code, Hawaii Revised Statutes ("HRS") Chapter 174C, which provides that the waters of the State of Hawaii are "held for the benefit of the citizens of the State" and that "the people

of the State are beneficiaries and have a right to have the waters protected for their use." *See* Haw. Rev. Stat. § 174C-2(a).

6. The State Water Code provides that,

> [it] shall be liberally interpreted to obtain maximum beneficial use of the waters of the State for purposes such as domestic uses, aquaculture uses, irrigation and other agricultural uses, power development, and ***commercial*** and industrial uses. However, adequate provision shall be made for the protection of traditional and customary Hawaiian rights, the protection and procreation of fish and wildlife, the maintenance of proper ecological balance and scenic beauty, and the preservation and enhancement of waters of the State for municipal uses, ***public recreation***, public water supply, agriculture, and navigation. ***Such objectives are declared to be in the public interest***.

HRS § 174C-2(c) (emphases added).

7. HRS § 174C-3 of the State Water Code provides:

> ***"Reasonable-beneficial use"*** means the use of water in such quantity as is ***necessary for economic and efficient utilization***, for a purpose, and in a manner which is both ***reasonable and consistent with the state and county land use plans*** and the ***public interest***" (emphasis added).

8. Water Commission is tasked with the general administration of the Water Code. *See* Haw. Rev. Stat. § 174C-5. Among other duties, the Water Commission is responsible for designating water management areas, including surface water management areas ("SWMA") and ground water management areas ("GWMA"), for regulation under the Water Code where the Water Commission finds that the water resources of a particular area are being threatened by existing or proposed withdrawals of water. *See* Haw. Rev. Stat. § 174C-5(2). Once an area is designated as a SWMA, for example, any person who is making, or who proposes to make, a withdrawal, diversion, impoundment, or consumptive use of surface water in the designated area must apply for a water use permit from the Water Commission, with certain limited exceptions. *See* Haw. Rev. Stat. § 174C-48(a). As discussed below, in water

management areas, the permitting provisions of the Water Code prevail and any determination of rights must proceed according to the relevant Water Code provisions, rather than the common law.

9. The Hawaii Supreme Court has stated that the Water Commission could permit ***existing*** and proposed diversions of water ***if applicant could demonstrate that such diversions were reasonable-beneficial***, notwithstanding the potential increase in chloride concentration at well site of Department of Hawaiian Homelands located in close proximity to that of applicant. *See In re Contested Case Hearing on Water Use Permit...*, 116 Hawaii 481, 499, 174 P.3d 320, 338 (2007).

10. In demonstrating a "reasonable-beneficial use," the applicant for a water use permit, at a very minimum, ***must prove their own actual water needs*** and ***demonstrate the absence of*** practicable mitigating measures, including the use of ***alternative water sources***. *See In re Waiola O Molokai, Inc.*, 103 Hawaii 401, 438, 83 P.3d 664, 701 (2004).

If applications are made to continue existing uses which are competing and the uses are all reasonable and beneficial, the Water Commission must hold a hearing to determine the quantity of water that may be consumed and the conditions to be imposed on each existing use. *See* HRS § 174C-50(h). Ultimately, the Water Commission must weigh competing public and private water uses on a case-by-case basis. *See In Re Waiahole Ditch Case*, 94 Haw. at 142, 9 P.3d at 454.

1. <u>Appurtenant Rights and Existing Uses Have Priority Over *New* Uses</u>

11. When evaluating water use permit applications, the Water Code gives existing legal uses of water priority over new uses. For example, the Water Code

provides that "the applicant shall establish that the proposed use of water ... will not interfere with any existing legal use of water". *See* Haw. Rev. Stat. § 174C-49(a)(3).

12. The Hawaii Supreme Court has confirmed the priority of existing legal uses over new uses, stating that "the Code gives 'existing' legal uses priority over 'new' uses in the permitting process." *See In Re Waiahole Ditch Case*, 94 Haw. at 165, n. 67, 9 P.3d at 477-78, n. 67, *citing* Haw. Rev. Stat. § 174C-49(a)(3) (requiring applicant for a new use to establish that the use 'will not interfere with any existing legal use of water'); *see also Ko'olau Agricultural Co., Ltd.*, 83 Haw. 484, 492, 927 P.2d 1367, 1375 (existing uses are given preferences under the State Water Code).

13. To qualify as an existing legal use versus a new or proposed use, the use must be in effect as of the effective date of the designation of the particular area as a water management area. *See* Haw. Rev. Stat. § 174C-50(a) ("All existing uses of water in a designated water management area ... may be continued after the effective date of designation only with a permit issued in accordance with sections 174C-51, 174C-52, and 174C-53(b)"). In this matter, the effective date of the designation of Na Wai Eha as a surface water management area was April 30, 2008. *See* Public Notice by the Water Commission, dated April 10, 2008, stating that "Applications for water use permits to continue existing uses of surface water must be made within a period of one year from the effective date of designation...."

2. No Priority Has Been Established Between and Among *Appurtenant Rights* and *Existing Uses*

14. All public natural resources, including water, are held in trust for the benefit of the people of Hawaii. Hawaii courts have recognized four distinct public trust purposes regarding the use of fresh water, specifically: (1) the maintenance of waters

in their natural state; (2) domestic water uses; (3) the exercise of Native Hawaiian and traditional and customary rights (*see Waiahole I*, 94 Haw. at 136-38, 9 P.3d at 448-50); and (4) reservations of water use for the Department of Hawaiian Home Lands. (*See In the Matter of the Contested Case Hearing on Water Use, Well Construction, and Pump Installation Permit Applications, Filed by Waiola O Molokai and Molokai Ranch, Ltd.* (CWRM No. CCH-MO96-1), 103 Haw. 401, 430-31, 83 P.3d 664, 693-94 (2004)).

15. It is widely understood that the public trust "assigns no priorities or presumptions in the balancing of public trust purposes." *See In the Matter of the Contested Case Hearing on Water Use, Well Construction, and Pump Installation Permit Applications, Filed by Waiola O Molokai and Molokai Ranch, Ltd.* (CWRM No. CCH-MO96-1), 103 Haw. 401, 430-31, 83 P.3d 664, 693-94 (2004).

16. Such balancing, however, must be "reasonable" and the Commission "must still ensure that all trust purposes are protected to the extent feasible." *See Waiahole I*, 94 Haw. at 143, 9 P.3d at 455, fn. 43 (citing, e.g., *State v. Public Serv. Comm'n*, 81 N.W.2d ***, 73-74 ("noting that no one public use would be destroyed or greatly impaired....")).

17. In addition, the Hawaii Supreme Court in *Waiahole I* recognized the need to also protect a broader range of water uses beyond public trust uses when it stated:

> We have indicated a preference for accommodating both instream and offstream uses where feasible. In times of greater scarcity, however, the state will confront difficult choices that may not lend themselves to formulaic solutions. ***Given the diverse and not necessarily complementary range of water uses, even among public trust uses alone, we consider it neither feasible nor prudent to designate absolute priorities between broad categories of uses under the water resources trust***. Contrary to the Commission's conclusion that the trust establishes resource protection as a "categorical imperative and the precondition to all subsequent considerations," ***we hold that the***

> ***Commission inevitably must weigh competing public and private water uses on a case-by-case basis, according to any appropriate standards provided by law.***

See Waiahole I, 94 Haw. at 142, 9 P.3d at 454 (citations omitted) (emphases added). In other words, there are no set priorities as between public trust and non-public trust categories of uses. Rather, the Water Commission "must weigh competing public and private water uses on a ***case-by-case basis***" based upon the facts and circumstances of each case.

18. Accordingly, non-public trust uses such as private commercial uses, for example, may receive a water use permit for reasonable and beneficial uses in the public interest. Private commercial uses are subject to a "higher level of scrutiny" and, in practical terms, this means that "the burden ultimately lies with those seeking or approving such uses to justify them in light of the purposes protected by the trust." *See Waiahole I*, 94 Haw. at 142, 9 P.3d at 454. However, assuming that this burden is met and the permit is justified pursuant to the applicable legal standards, the Water Commission is authorized to weigh competing public trust and private water uses and to grant water permits for private commercial uses.

19. The Hawaii Supreme Court held that "[i]n [water management areas], the permitting provisions of the Code prevail; water rights in non-designated areas are governed by the common law." *See Waiahole I*, 94 Haw. at 178; 9 P.3d at 490. Any determination of the rights of users in the instant surface water management area, therefore, "must proceed according to the relevant Code provisions, rather than common law." *See Waiahole I*, 94 Haw. at 178; 9 P.3d at 491. While the Water Code provides that "[a] permit for water use based on an ***existing appurtenant right*** shall

be issued upon application," the Water Code also "requires the Commission to issue permits for ***existing uses*** upon compliance with the proper procedures, ... provided that they are reasonable and beneficial." *See Waiahole I*, 94 Haw. at 178; 9 P.3d at 490-91 (citing HRS § 174C–50(b) (emphasis added). When existing uses are "competing," however, the Code grants the Commission discretion, after a hearing, "to determine the quantity of water that may be consumed and the conditions to be imposed on each existing use." *See Waiahole I*, 94 Haw. at 179; 9 P.3d at 491 (citing HRS § 174C–50(h)).

20. The permitting provisions of the Water Code (Part IV – Regulation of Water Use) provide the specific procedures for potential users to meet the burden of justifying the particular use. *See Waiahole I*, 94 Haw. at 160; 9 P.3d at 472. HRS § 174C-49(a) enumerates the conditions for water use permits under the Water Code. Two of the conditions require the applicant, and the Water Commission, in turn, to address the effect of the requested allocation on public instream values: "reasonable-beneficial use" and "consistent with the public interest." HRS § 174C-49(a)(2) and (4); *see also Waiahole I*, 94 Haw. at 160; 9 P.3d at 472. The two conditions overlap – the Water Code defines "reasonable-beneficial use" as "use of water in such quantity as is necessary for economic and efficient utilization, for a purpose, and in a manner which is both reasonable and ***consistent with*** the state and county land use plans and ***the public interest.***" HRS § 174C-3 (emphases added); *see Waiahole I* 94 Haw. at 160; 9 P.3d at 472.

21. Accordingly, even a non-public trust use such as an existing private commercial use, so long as it meets the "reasonable-beneficial use" and "consistent

with the public interest" conditions, has the right to obtain a water use permit for an existing use. There is nothing in the Hawaii Constitution or the Water Code that establishes the priority of a public trust use or appurtenant rights over a non-public trust use, such as an existing private commercial use; rather, the Water Commission is able to weigh such competing uses and provide the appropriate amount of water to each of them.

B. MMK's Existing Use is a Reasonable-Beneficial Use

1. Quanitity of Water is Necessary for Economic and Efficient Utilization

a. Efficient Water Use

22. MMK has taken significant efforts to ensure the efficient use of water at the Golf Courses.

23. Following MMK's purchase of the Golf Courses in 2004, MMK invested in excess of $10,000,000 to improve the fairways, the greens, the sand traps, and the irrigation systems of the Golf Courses. In excess of $4,000,000 was expended to reconstruct the irrigation systems alone. The improved irrigation systems helped to ensure the efficient utilization of the water source serving the Golf Courses.

24. MMK implemented a sophisticated irrigation system in order to ensure the efficient use of water at the Golf Courses. ***First***, MMK utilized two (2) irrigation reservoir ponds to hold and store water for use, as needed, so that appropriate amounts of water could be drawn for irrigation based on actual need. The irrigation ponds are rubber-lined to minimize water leakage and designed to capture, hold, and store water (including rainwater) so that appropriate amounts of water can be drawn for irrigation based on need. WWC delivers water from the Iao and Waihee Streams to the Waihee

Ditch. The water from the Waihee Ditch flows into a drop ditch and is then pumped into Kahili Course Reservoir 4. From Kahili Course Reservoir 4, the stored water is then pumped into a distribution system consisting of hundreds of individually controlled sprinkler heads to irrigate the Kahili Course and, through a transfer pump, water is pumped from Kahili Course Reservoir 4 into King Kamehameha Course Reservoir 18. From King Kamehameha Course Reservoir 18, the stored water is pumped through its distribution system consisting of hundreds of individually controlled sprinkler heads to irrigate the King Kamehameha Course. *See* Exhibit No. 2186-MMK-2.

25. ***Second***, water usage at the Golf Courses was carefully monitored and controlled by way of a computerized weather station system that measured evapotranspiration rates, wind speed, air temperature, and weather data to determine criteria for the appropriate amount of water needed. From approximately 2006 to 2009, water usage was monitored and controlled by way of a weather station system that measured evapotranspiration rates on a daily basis and, in addition to manual adjustments, signaled to the control system and sprinkler heads throughout the Golf Courses when water was to be replaced. *See* Exhibit No. 2186-MMK-8. The use of the weather station system was to help ensure that the Golf Courses were not over-irrigated and water was not wasted, and its use was in addition to the manual adjustments and control of water usage by the irrigation staff. From approximately 2009 to 2012, the irrigation staff continued to monitor the data from the weather station system, but the communication to the control system and sprinkler heads had been turned off to allow for increased adjustments and control by the irrigation staff.

26. From 2012, the weather station system was intentionally disabled, however, the irrigation staff continued to refer to the historical data collected from 2006 to 2012 to establish a baseline or reference point, and manually adjusted the duration of water usage. In addition to the various equipment and tools to manage water usage at the Golf Courses, the irrigation staff manually monitors and make adjustments on a daily basis to ensure that not too much or too little water is used at the Golf Courses. The need for manual monitoring and adjustments is supported by publications on turf management for golf courses. *See, e.g.*, Exhibit No. 2186-MMK-3. Too little water will result in killing the grass (and would require even more water to remediate), while too much water will result in substandard, soggy, wet, and/or too soft turf grass for golf course use. *See* Exhibit No. 2186-MMK-3. Thus, in addition to automated equipment, the amount of water and irrigation is manually adjusted by golf course personnel, if and when appropriate.

27. ***Third***, sophisticated sprinkler heads were individually controlled so that the water put down in each area of the Golf Courses is specifically tailored to the amount of water needed in that particular area. The Golf Courses invested in the installation of over 5000 Rain Bird Golf Rotors (aka, sprinkler heads) to enable efficient water use throughout the Golf Courses. These sprinkler heads allowed for full and part-circle performance, have a valve-in-head assembly in an all-in-one design which improves maintenance and control, and allowed for control of each individual sprinkler head (including the duration and volume of water released). *See* Exhibit No. 2186-MMK-7; s*ee also* Exhibit No. 2186-MMK-3. A total of more than 5000 of these sprinkler

heads were in use at the Golf Courses and enabled the efficient use of water through individualized sprinkler head control.

28. ***Fourth***, the Golf Courses also invested in an advanced Central Control System (Rain Bird Cirrus model) that allowed the irrigation staff full control and monitoring of the sprinkler heads remotely. This system allowed for on/off, duration, and volume of water control which can be programmed, monitored, and adjusted to order to minimize the need for unnecessary watering, and daily/hourly access and control of the watering for the efficient use of water. *See* Exhibit No. 2186-MMK-6; s*ee also* Exhibit No. 2186-MMK-3. This equipment is vital to control the amount of water distributed on an hourly and/or daily basis for the most efficient use of water.

29. ***Fifth***, various data regarding weather and course conditions were analyzed daily and the Golf Courses were only irrigated when needed or appropriate. The irrigation staff performed daily assessments of the soil moisture levels at key indicator sites throughout the golf course in order to utilize water efficiently. *See* Exhibit No. 2186-MMK-3. The irrigation staff performed daily visual assessments of the turf and soil, including the use of a soil probe to measure moisture conditions. *See* Exhibit No. 2186-MMK-3.

30. ***Sixth***, the irrigation staff, utilizing the Central Control System, irrigated the Golf Courses predominantly during the evenings and early mornings in order to make the most efficient use of the water (during cooler temperature and less dry periods). *See* Exhibit No. 2186-MMK-3.

31. ***Finally***, in addition to the various techniques established at the Golf Courses for the efficient use of water (and minimizing any wasted water), the daily

needs for quantity of water to irrigate the Golf Courses was communicated by the Golf Courses to WWC, who controlled and released on a weekly (or so) basis only the amount of pumped water from the Waihee Ditch based on the immediate needs of the Golf Courses, to ensure that only the necessary and needed water was provided to the Golf Courses. WWC took meter readings weekly (or so) and regulated the pumps that allow water into the Reservoirs at the Golf Courses. In this way, there were checks and balances to ensure the Golf Courses received and used only the amount of water it needed on a weekly basis.

32. Through its investments in an advanced and sophisticated irrigation system, and through proper staffing and management of irrigation, and through its arrangements with WWC, MMK has taken significant efforts to ensure the efficient use of water at the Golf Courses.

33. The Hearings Officer concludes that MMK sufficiently demonstrated efficient use of water at the Golf Courses in connection with its reasonable-beneficial use.

b. <u>Mitigation Efforts</u>

34. In addition to the water-saving measures implemented by way of MMK's investment and use of a sophisticated irrigation system as discussed above, the Golf Courses have also taken steps to mitigate its water use. For example, both courses utilized Bermuda turf grass, commonly known as a drought-resistant species of grass. The Golf Courses also utilize landscaping that is similarly drought-tolerant while still appearing tropical in nature. Notwithstanding such drought-resistant qualities, however, a reasonable amount of water is still required in order to properly maintain the Bermuda

grass and landscaping, as would be the case for other drought-resistant grass or landscaping.

35. In addition, the Kahili Course Reservoir 4 and the King Kamehameha Course Reservoir 18 were both rubber-lined to minimize water leakage and designed to capture, hold, and store water (including rainwater) so that appropriate amounts of water can be drawn for irrigation based on need. These are a few examples of how the Golf Courses have taken affirmative steps to mitigate its water needs to the extent practicable.

36. The Hearings Officer concludes that MMK sufficiently demonstrated mitigation efforts at the Golf Courses in connection with its reasonable-beneficial use.

2. Existing Use is Reasonable and Consistent with the State and County Plans

37. The State Land Use Designation for MMK's Property is agricultural. Depending on the grade and quality of soil, agricultural lands are generally reserved for agricultural uses, such as raising crops. However, golf courses and golf-related activities may also be included in an agricultural district, provided that the land is not in the highest productivity categories (Categories A or B) of the Land Study Bureau's detailed classification system. Based on the Land Use Board's detailed classification map, the Property is primarily grade "E", which is the next-to-lowest designation possible. Thus, MMK's existing use of the Property for golf course use is consistent with State Land Use Designations.

38. The Property is designated as C.P. Park in the Maui County Community Plan. The C.P. Park designation permits the use of the Property for golf course use. Therefore, the Golf Courses are consistent with the County Community Plan.

39. MMK's Golf Courses will continue to provide employment and revenue through tourism, a goal of the County-wide Policy Plan issued by the Maui County Planning Department. In addition, the Wailuku-Kahului Community Plan, promulgated by the Maui County Planning Department in 2002, identifies a general need to maintain and upgrade recreational facilities, such as golf courses, which indicates the value Maui County places on recreation as an important part of the growth and development of Maui. MMK's use is also consistent with the Draft Maui Island Plan prepared by the County of Maui Planning Department, which addresses the importance of recreational facilities as a draw for visitors to the island to promote economic growth. Accordingly, MMK's use of the Property in connection with the Golf Courses comports with the present and future plans for Maui County.

40. The Hearings Officer concludes that MMK sufficiently demonstrated that the existing use of water for the Golf Courses is reasonable and consistent with the State and County Plans.

3. Existing Use is Consistent with the Public Interest

41. MMK's existing use of water is consistent with the public interest as MMK's operation of its Golf Courses, which provide recreation and enjoyment to its many patrons and employ approximately 130 employees, qualifies as a "commercial use". The State Water Code specifically recognizes the ability to obtain the maximum beneficial use of State water for certain purposes, including "commercial" uses, and MMK's operation of its two Golf Courses qualifies as such a commercial use. *See* HRS § 174C-2(a).

42. MMK is a large employer on Maui. The Golf Courses are currently operated, maintained, and preserved by approximately 130 employees, of which the

vast majority are full-time employees. The Golf Courses provide opportunities for golf, club membership, banquets, weddings, food and beverage, tours, and meetings for the Maui community. The King Kamehameha Golf Club is a private club with approximately 365 members and is one of only two private 18-hole golf courses on Maui. The Kahili Golf Course is an 18-hole course that is open to the public, and in the last three years, the Kahili Golf Course has averaged about 38,000 rounds of golf. Additionally, the Kahili Golf Course hosts a number of Maui and state-wide golf tournaments throughout the year, and MMK has supported charitable events for the benefit of Maui residents and visitors.

43. For 2015, annual wages and benefits for local employees totaled over $4,000,000 and the 2015 annual employer payroll tax exceeded $370,000. In 2015, over $334,000 was contributed to the State of Hawaii via general excise tax payments and close to $150,000 to the County of Maui via property taxes. Since 2004, over $16,500,000 has been invested in capital improvements to keep the Golf Courses and related facilities in good condition.

44. The Golf Courses and their club houses were initially constructed at a cost exceeding $80 million. The Golf Courses were not part of any residential development, but were intended to provide open space and recreational support for the Maui Community. The current owners expended in excess of $10 million in order to improve the fairways, the greens, the bunkers, and the irrigation system of the Golf Courses to better serve the public. In excess of $4 million was expended to reconstruct the irrigation systems serving both Golf Courses. In addition to the improvements to the

Golf Courses, MMK expended approximately $4 million improving the clubhouses and approximately $3.7 million for equipment, fixtures and furniture.

45. The Golf Courses serve the Maui community and the public interest well in providing employment to the community, recreation, open space, and enjoyment to its patrons and the public, as well as economic opportunity for the community through construction and growth.

46. The Hearings Officer concludes that MMK sufficiently demonstrated that the existing use of water for the Golf Courses is consistent with the public interest.

C. MMK's Request for Water is Representative of its Actual Need

1. Exhibit No. 2186-MMK-4, MMK Water Usage Chart June 2006 to December 2016, Supports MMK's Existing Use

47. Following the completion of renovations to the Golf Courses in mid-2006, from June 2006 through December 2015, the amount of water necessary to irrigate the Golf Courses, given the weather, including variations in rainfall, humidity, wind, and temperature, ranged from a low of 0.129 (March 2014) to a high of 2.485 (April 2007) million GPD, and an average of approximately 1.037 million GPD for the entire 9.5 year period. *See* Exhibit No. 2186-MMK-4.

48. The water demands of the Golf Courses (two golf courses consisting of 36 holes and common areas) fluctuate greatly from season to season, and month to month. *See, e.g.,* Exhibit No. 2186-MMK-4; Exhibit No. OHA-49.

49. The water needs fluctuated greatly depending on seasonal variations in climate. Typically, water needs decrease during the winter (wet) months and increase during the summer (dry) months. For example, in the months of January and February of 2011 the Golf Courses used 21.9 and 18.7 million gallons of water, respectively,

whereas from June through September of 2011 the Golf Courses used 41.1 (June), 38.4 (July), 39.9 (August), and 41.4 (September) million gallons of water, respectively. *See* Exhibit No. 2186-MMK-4.

50. When looking at water use per full calendar year, water use ranged from a high of 490,394,936 gallons a year (or 1.4 million GPD) in 2007 to a low of 241,688,400 gallons a year (0.66 million GPD) in 2014. *See* Exhibit No. 2186-MMK-4.

51. MMK explained that Water usage in years 2014 and 2015 further decreased to 0.66 and 0.70 million GPD, respectively, without any significant changes to water-saving measures or mitigation efforts, and the same techniques to utilize and conserve water from 2009 – 2013 also held true for 2014 and 2015. It is reasonable to conclude that the further decrease in 2014 and 2015 were unusual weather patterns that caused more frequent and consistent rain throughout a majority of months during years 2014 and 2015. As demonstrated by MMK, frequent and consistent rain (e.g., weekly) removes the need to regularly water the Golf Courses and allows the irrigation staff to shut off the water sprinklers for longer durations. Conversely, huge rainfall followed by several weeks of no rain may result in the same quantity of rainfall, but there is still a need to irrigate within a week after the rainfall, so the need for irrigation is still greater where the rainfall is less frequent and not as consistent (even though total rainfall is the same).

52. MMK's testimony that the water usage during 2014 and 2015 is not indicative of future usage, as the usage in those two particular years are unusually low due to frequent and consistent rainfall, appears reasonable.

53. MMK also stated that it believes that the ***average over the last 9.5 years from June 2006 to December 2015 of approximately 1.037 million GPD*** is more indicative of the average usage we may see over the next 10 years. However, the 1.037 million GPD is just the average usage, and an amount of water based on such average does not necessarily meet the needs of the Golf Courses for drier months/years (with less frequent rainfall). *See* Exhibit No. 2186-MMK-3. As indicated in the MMK Water Usage Chart, water usage has in the past fluctuated significantly from month to month, with the driest months per year requiring 1.70 (2006), 2.485 (2007), 1.70 (2008), 1.47 (2009), 1.43 (2010), 1.38 (2011), 1.32 (2012), 1.59 (2013), 1.14 (2014), and 1.05 (2015) million GPD for the last 10 years, with an ***average of 1.53 million GPD***. MMK stated that its preference would be to have 1.53 million GPD in order to have enough water to meet the average of the driest months for the last 10 years as such amount of water may be necessary to carry the Golf Courses through very dry months. However, in an effort to compromise and reduce the amount of water MMK uses, MMK believes a reduced amount of ***1.25 million GPD*** (which is approximately the mid-point between the actual historical 9.5 year usage of 1.037 million GPD and the driest month average over the same period of 1.53 million GPD) is reasonable and probably enough water to irrigate the Golf Courses sufficiently.

54. According to the MMK Water Usage Chart, for the ***12-Month Moving Average from April 2008 to March 2009*** (i.e., the 12-month period immediately preceding the filing of MMK's SWUP Application on April 22, 2009 with the Water Commission), the yearly average usage was ***1.20 million GPD***, representing an

existing use of water amount of 1.20 million GPD just prior to the filing of the SWUP Application. Exhibit No. 2186-MMK-4.

55. OHA also introduced into evidence a copy of WWC's Water Deliveries Report January 2008 to June 2016, Exhibit No. OHA-49, which OHA obtained pursuant to a subpoena. The yearly average usage shown in WWC's Water Deliveries Report closely matched (and most often slightly exceeded) the yearly average usage shown in the MMK Water Usage Chart, Exhibit No. 2186-MMK-4. For example, for the year 2008, the yearly average was 1.33 million GPD in WWC's numbers and the yearly average was 1.27 million GPD in MMK's numbers.

56. Similarly, when comparing the ***12-Month Moving Average from April 2008 to March 2009*** (i.e., the 12-month period immediately preceding the filing of MMK's SWUP Application on April 22, 2009 with the Water Commission), the yearly average delivery was ***1.20 million GPD in WWC's Water Deliveries Report*** and the yearly average usage was ***1.20 million GPD in MMK's Water Usage Chart***. Exhibit No. OHA-49; Exhibit No. 2186-MMK-4. The water amounts from two different sources closely match and support the existing use of water amount for the immediate 12-month period just prior to the filing of the SWUP Application.

57. For the ***12-month moving average from May 2007 to April 2008*** (i.e., the 12-month period immediately preceding the April 30, 2008 effective date of the designation of Na Wai Eha as a surface water management area), the yearly average usage was ***1.29 million GPD***, representing an existing use of water amount of 1.29 million GPD just prior to the effective date of the designation of Na Wai Eha as a surface water management area. Exhibit No. 2186-MMK-4.

58. MMK noted that even if it requested more water than what it actually needed for the Golf Courses, MMK would not be advantaged due to the nature of golf course irrigation in which too little water is harmful and too much water is not desired (due to suboptimal and soggy/wet golfing conditions). MMK stated that Proper irrigation of the Golf Courses requires an adequate amount of water at the time water is needed on a daily/weekly/monthly basis. Exhibit No. 2186-MMK-3.

59. MMK stated that without the necessary and adequate amount of irrigation water, the Golf Courses will not be able to adequately maintain the turf grass, and the Golf Courses will consequently be forced to shut down and their employees terminated.

60. Because golf courses are customarily comprised of 18 holes, it is not a viable option to irrigate fewer than 18 holes and operate, for example, a 12-hole golf course.

61. The previous amount requested in MMK's 2009 SWUP Application was ***1.29 million GPD***, which was higher than the amount MMK is currently requesting, and was based on the average usage between May 2007 and April 2008 (a one year period). More recently, MMK has assessed a much larger 9.5 year period to not only arrive at an updated average usage amount, but to also recognize and consider the variability in usage from month to month and year to year throughout the 9.5 year period. MMK believes that based on its better understanding of the fluctuations in usage due to weather, and after further consideration of the need to account for adequate water to support drier months, MMK would prefer to have 1.53 million GPD to meet the driest month average (and be prepared for the worst case scenario), however MMK believes it can reasonably irrigate the Golf Courses and keep the grass green with

a reduced amount reflecting the mid-point between the actual historical 9.5 year usage of 1.037 million GPD and the driest month average over the same period of 1.53 million GPD, which is ***1.25 million GPD.***

62. OHA and the Community Groups have argued that MMK's method of determining its existing use and actual need "disregards the [Water] Commission's long-standing practice of using a 12-month moving average for permits to account for such variations in usage." *See* Hui O Na Wai Eha & Maui Tomorrow Foundation, Inc.'s Responsive Brief and Joinder, filed April 29, 2016, at 19; Tr. Bechert 7/22/16 at 57:1-14.

63. The Hawaii Supreme Court acknowledged that the 12-Month Moving Average allows for seasonal fluctuation in offstream demand and is generally used for all water use reporting requirements. *See In re Water Use Permit Applications*, 94 Hawaii 97,172, 9 P.3d 409, 485 (2000). However, the Court also considered the practical effect of the 12-Month Moving Average and refused to impose a blanket rationale for the use of a 12-Month Moving Average. *Id.*

64. Accordingly, MMK's methodology of determining its existing use by taking into account seasonal weather, monthly, and yearly variations, as well as the need to have enough water to survive the driest months, appears reasonable.

65. Even if the Hearings Officer were to employ the 12-Month Moving Average suggested by OHA and the Community Groups, the ***12-Month Moving Average from April 2008 to March 2009*** (i.e., the 12-month period immediately preceding the filing of MMK's SWUP Application on April 22, 2009 with the Water Commission) was ***1.20 million GPD*** according to both WWC's Water Deliveries Report and MMK's Water

Usage Chart. Exhibit No. OHA-49; Exhibit No. 2186-MMK-4. This is closely matches the 1.25 million MGD requested by MMK.

66. Similarly, if the Hearings Officer were to employ the ***12-month moving average from May 2007 to April 2008*** (i.e., the 12-month period immediately preceding the April 30, 2008 effective date of the designation of Na Wai Eha as a surface water management area), the yearly average usage was ***1.29 million GPD*** based on MMK's Water Usage Chart. Exhibit No. 2186-MMK-4. Unfortunately, WWC's Water Deliveries Report omits 2007 data, so the only available data for 2007 is MMK's Water Usage Chart. The 1.29 million GPD figure also closely matches the 1.25 MGD requested by MMK (and reflects the original amount requested in MMK's SWUP Application).

67. The Hearings Officer concludes that MMK's request for ***1.25 million GPD*** is ***reasonable*** and ***necessary***, and represents MMK's ***existing use*** and ***actual need*** for water to irrigate the Golf Courses.

2. Exhibit No. OHA-49, WWC Water Deliveries January 2008 to June 2016, Also Supports MMK's Existing Use

68. To the extent there may be some discrepancies between Wailuku Water Company, LLC's ("WWC") monthly water delivery numbers (concerning water deliveries to MMK) and MMK's Water Usage Chart monthly usage numbers contained in Exhibit No. 2186-MMK-4, MMK reasoned that such discrepancies are very small, especially when you consider and compare the respective yearly totals of Exhibit Nos. OHA-49 and 2186-MMK-4. *See* MMK Statement of Position, filed February 10, 2017. For most years, WWC's yearly totals for volume of water delivered slightly exceed MMK's water

usage volume, further supporting the amount of water MMK claims was an existing use. *Compare* Exhibit Nos. OHA-49 and 2186-MMK-4.

69. MMK submitted that such monthly discrepancies are due, in large part, to the timing of when such meters were read (e.g., the day of the month WWC measured the meter to determine the amount of water delivered versus the day of the month MMK measured the meter to determine the amount of water used, and possibly other factors). *See* MMK Statement of Position, filed February 10, 2017; Tr. Dooge 7/22/16 at 36:18 to 38:25. Regardless of when WWC or MMK took monthly measurements, however, the yearly totals for each respective year confirm that WWC and MMK's volume of water measurements closely match each other with a very small percentage of difference between the two. *Compare* Exhibit Nos. OHA-49 and 2186-MMK-4.

D. MMK Does Not Have Access to Reasonable Alternate Water Sources

70. Representatives of MMK and the Golf Courses have investigated, researched, and considered alternative sources of water, however, have not been able to secure a reasonable alternate water source to date. There are no known alternate ditch sources available in the vicinity of the Golf Courses other than WWC's system (which obtains water from the Na Wai Eha Surface Management Area), of which MMK is already a current purchaser and user. In addition, MMK is unaware of any desalinization plants or storm water reclamation facilities on the island of Maui.

71. Well-water and reclaimed water are not viable or reasonable alternate water sources. With respect to well-water, in January 2016, a representative of MMK met with Mike Atherton who is the owner of the Maui Tropical Plantation located near the Golf Courses to explore the possibility of using well-water, and believes based on his discussion with Mr. Atherton that he has drilled 5 wells on his property that tap into

the Waikapu aquifer, 3 of which are for potable water and 2 of which are for non-potable water, but that there is not enough well-water available to sustain the Golf Courses' needs. Moreover, it was unclear how much water was going to be available, nor how much Mr. Atherton would need for his own purposes, nor what the quality of the water would be. In addition, the likelihood of obtaining ground water from self-drilling a new well in Waikapu did not look promising due to limitations on the sustainable yield of the Waikapu aquifer (and others who have already received permits for such water) based on information received from the Deputy Director of the Water Commission. Thus, well-water is not presently a reasonable or viable alternative.

72. Regarding reclaimed water, a representative of MMK contacted the Recycled Water Coordinator and Project Manager of the Wastewater Reclamation Division of the County of Maui regarding the possibility of obtaining reclaimed water to irrigate the Golf Courses. According to the County of Maui Coordinator, there are no existing distribution lines to transport the needed water from either the Kahului Wastewater Treatment Plant or the Kihei Treatment Plant to the Golf Courses. Both treatment plants are located a straight line distance of approximately 8 to 10 miles from the Golf Courses and distribution lines would likely be longer in light of the actual route for the lines due to topography, natural elements, landmarks, and other similar factors. Establishing the necessary infrastructure to bring a distribution line from the treatment plants to the Golf Courses is cost-prohibitive and not reasonable. The ability to obtain rights of way and/or easements to construct the necessary infrastructure has apparently prevented the County of Maui from advancing such a project. Given that a private party does not have eminent domain capabilities like the County, it would not be feasible for

MMK to succeed with such a project alone. Accordingly, reclaimed wastewater is also not a reasonable alternative for the irrigation of the Golf Courses.

73. The Maui County Code discourages the use of potable groundwater for golf course use. Though the property upon which the Golf Courses are sited are part of the agricultural district and were constructed prior to 2009, and the Maui County Code expresses an intent to discourage the use of potable groundwater for golf course use. Moreover, regarding use of potable groundwater for golf course irrigation in the PK-4 golf course district, we are unaware of any such approval that has been granted on the island of Maui. Therefore, potable groundwater is not a viable alternative for MMK and the Golf Courses.

74. It appears that the water obtained from WWC's water delivery system is the ***only*** source of irrigation water for the nearly 350 acre property at this time, and the continued delivery of the water remains necessary and essential to the operation of the Golf Courses. With the acquisition of the golf course Property from Wailuku Agribusiness Company, the golf course developers obtained a water delivery agreement pursuant to which the Golf Courses had originally obtained a maximum delivery of 4 million gallons of water per day from Wailuku Agribusiness Company. Pursuant to the Water Delivery Agreement, as amended. MMK's predecessor-in-interest prepaid approximately $4,000,000 for the perpetual delivery of up to 2,700,000 gallons of water per day to the Property.

75. WWC, a successor-in-interest to Wailuku Agribusiness Company, continues to deliver water to the Property for the Golf Courses pending resolution of this contested case hearing (CCH-MA15-01).

76. The Hearings Officer concludes that MMK sufficiently demonstrated that it does not have access to reasonable alternate water sources for the Golf Courses.

E. Economic and Community Impact

77. Without adequate water to maintain the turf grass at the Golf Courses, MMK has stated that the Golf Courses would not be playable, operations would cease, and the Golf Courses would be forced to shut down and employees laid off and/or terminated. The banquets and events portion of our business would have a very difficult time surviving as stand-alone operations without the Golf Courses, and it would be overly burdensome to continue to operate under such circumstances and put MMK at significant financial risk. This could potentially affect approximately 130 Maui jobs and 365 members, and it would negatively impact the economy of Maui, the community, and the public interest.

78. In light of the recent announcement by Alexander & Baldwin in January 2016 that it is transitioning out of farming sugar which may result in future layoffs, it is important to try to maintain sustainable Maui jobs to the extent possible.

79. The Hearings Officer concludes that MMK sufficiently demonstrated that without adequate water to maintain the Golf Courses, the economy and community of Maui County would be negatively impacted/affected.

III. DECISION AND ORDER

1. The Hearings Officer hereby approves MMK's April 22, 2009 SWUP Application, in the amount of ***1.25 million GPD***.

DATED: Honolulu, Hawaii, February 17, 2017.

JODI S. YAMAMOTO
WIL K. YAMAMOTO

Attorneys for MMK MAUI, LP

COMMISSION ON WATER RESOURCE MANAGEMENT

STATE OF HAWAII

Surface Water use Permit Applications, Integration of Appurtenant Rights and Amendments to the Interim Instream Flow Standards, Na Wai Eha Surface Water Management Areas of Waihee, Waiehu, Iao and Waikapu Streams, Maui	Case No. CCH-MA15-01 CERTIFICATE OF SERVICE

CERTIFICATE OF SERVICE

Pursuant to Minute Order #9, issued on November 29, 2016, as amended by Minute Order #11, issued on February 10, 2017, the original and three (3) copies of the foregoing document will be hand-delivered to Kathy Yoda at the Commission on Water Resource Management on February 17, 2017, as well as an electronic copy by email. In addition, pursuant to Minute Order #4, issued on March 7, 2016, copies will be emailed to the following parties who requested service by email, as set forth below, and service on parties who have not agreed to electronic service is via the Commission website:

ELECTRONIC SERVICE

Noelani & Alan Almeida
Gordon Almeida
P.O. Box 1005
Wailuku, HI 96793
alana89@juno.com

Douglas Bell
1420 Honua Place
Waikapu, HI 96793
puna.papabell@gmail.com

Doyle Betsill
c/o Betsill Brothers
P.O. Box 1451
Wailuku, HI 96793
teresa@bbcmaui.com

Francisco Cerizo P.O. Box 492 Wailuku, HI 96793	cerizof@gmail.com
Heinz Jung and Cecilia Chang P.O. Box 1211 Wailuku, HI 96793	cici.chang@hawaiiantel.net
Jordanella (Jorrie) Ciotti 484 Kalua Road Wailuku, HI 96793	jorrieciotti@gmail.com
Fred Coffey 1271 Malaihi Road Wailuku, HI 96793	hawaii50peleke@yahoo.com
James Dodd P.O. Box 351 Wailuku, HI 96793	jimdodd47@gmail.com
Kathy De Hart P.O. Box 1574 Wailuku, HI 96793	kdehart17@gmail.com
John V. & Rose Marie H. Duey Hoolulahui LLC 575 A Iao Valley Road Wailuku, HI 96793 cc: Nani Santos	jduey@maui.net nanisantos808@gmail.com
Stanley Faustino c/o Kanealoha Lovato-Rodrigues 384 Waihee Valley Road Wailuku, HI 96793	kanealoha808@gmail.com
William Freitas c/o Kapuna Farms LLC 2644 Kahekili Highway Wailuku, HI 96793	kapunafarms@gmail.com
Diannah Goo c/o April Goo 2120 C Kahekili Highway Wailuku, HI 96793	ag2517@aol.com

Nicholas Harders on behalf of: Karl & Lee Ann Harders 1422 Nuna Place Wailuku, HI 96793 Theodore & Zelie Harders T&Z Harders FAM LTD PTNSHP Theodore and Zelie Harders Family Ltd. Partnership 1415 Kilohi Street Wailuku, HI 96793	waikapu@me.com
Greg Ibara 227 Kawaipuna Street Wailuku, HI 96793	gregibara56@gmail.com
Evelyn Kamasaki Cynthia Ann McCarthy Claire S. Kamasaki 1550 Nukuna Place Wailuku, HI 96793	cmcmaui@live.com
Charlene E. and Jacob H. Kana, Sr. P.O. Box 292 Wailuku, HI 96793	char1151@hawaii.rr.com
Kimberly Lozano P.O. Box 2082 Wailuku, HI 96793	pauahi808@aol.com
Renee Molina P.O. Box 1746 Wailuku, HI 96793	myoheo@yahoo.com
Douglas Myers 1299 Malaihi Road Wailuku, HI 96793	upperwaiehu@yahoo.com
Nelson Okamura Kihei Gardens & Landscaping Co. LLP P.O. Box 1058 Puunene, HI 96784	nokamura@kiheigardens.net
Lorrin Pang 166 River Road Wailuku, HI 96793	pangk005@hawaii.rr.com
Victor and Wallette Pellegrino c/o Hokuao Pellegrino 213 West Waiko Road Waikapu, HI 96793	hokuao.pellegrino@gmail.com

L. Ishikawa
Piko Ao, LLC
2839 Kalialani Circle
Pukalani, HI 96768

lorilei@hawaii.edu

Michael Rodrigues
2518 W. Main Street
Wailuku, HI 96793

mikerodmaui@yahoo.com

Waldemar & Darlene Rogers
1421 Nuna Place
Wailuku, HI 96793

rogersw001@hawaii.rr.com

Burt Sakata
107 Waihee Valley Road
Wailuku, HI 96793

waihee89@yahoo.com

Bryan Sarasin, Sr.
c/o Bryan Sarasin, Jr.
P.O. Box 218
Wailuku, HI 96793

mauifishfarm@hawaiiantel.net

Duke & Jean Sevilla & Christina Smith
702 Kaae Road
Wailuku, HI 96793

sevillad001@hawaii.rr.com

Jeff and Ramona Lei Smith
P.O. Box 592
Wailuku, HI 96793

ohianui.ohana@gmail.com

Murray and Carol Smith
P.O. Box 11255
Lahaina, HI 96761

murray@jps.net

Crystal Smythe
John Minamina Brown Trust
727 Wainee Street, Suite 104
Lahaina, HI 96761

cytl@maui.net

Clayton Suzuki
Linda Kadosaki
Reed Suzuki
Scott Suzuki
P.O. Box 2577
Wailuku, HI 96793

csuzuki@wailukuwater.com

John Varel
191 Waihee Valley Road
Wailuku, HI 96793

jvarel@fusionstorm.com

Michele and Leslie Vida, Jr.
135 Pilikana Place
Wailuku, HI 96793
mikievida@hotmail.com

Leslie Vida, Sr.
c/o Donna Vida
125 Pilikana Street
Wailuku, HI 96793
dmlavida@yahoo.com

Roger Yamaoka
Kevin Yamaoka
1295 Old Waikapu Road
Wailuku, HI 96793
rryamaoka@aol.com
kty@hawaii.rr.com

Caleb Rowe, Esq.
Kristin Tarnstrom, Esq.
County of Maui
Department of the Corporation Counsel
200 South High Street
Wailuku, HI 96793
(County of Maui, Dept. of Water Supply)
caleb.rowe@co.maui.hi.us
kristin.tarnstrom@co.maui.hi.us
susan.pacheco@co.maui.hi.us

Colin J. Lau, Esq.
465 S. King Street, Room 300
Honolulu, HI 96813
cc: Russell Kumabe
Holly McEldowney
(DLNR, Division of State Parks)
colin.j.lau@hawaii.gov
russell.p.kumabe@hawaii.gov
holly.mceldowney@hawaii.gov

Yvonne Izu, Esq.
Wayne E. Costa, Jr., Esq.
Kris N. Nakagawa, Esq.
Morihara Lau & Fong LLP
400 Davies Pacific Center
841 Bishop Street
Honolulu, HI 96813
cc: Garret Hew
(Hawaiian Commercial & Sugar Co.)
yizu@moriharagroup.com
wcosta@moriharagroup.com
knakagawa@moriharagroup.com
ghew@hcsugar.com

Tina Aiu, Esq.
Oahu Island Director
Hawaiian Islands Land Trust, HILT
P.O. Box 965
Wailuku, HI 96793
cc: Scott Fisher
Penny Levin
christina@hilt.org
scott@hilt.org
pennysfh@hawaii.rr.com

Isaac Moriwake, Esq. imoriwake@earthjustice.org
Summer Kupau-Odo skupau@earthjustice.org
Earthjustice jbrown@earthjustice.org
850 Richards Street, Suite 400 jparks@earthjustice.org
Honolulu, HI 96813
(Hui O Na Wai Eha and Maui Tomorrow Foundation)

Avery & Mary Chumbley abc@aloha.net
363 West Waiko Road
Wailuku, HI 96793
(Makani Olu Partners LLC)

Pamela Bunn, Esq. pbunn@ahfi.com
Alston, Hunt, Floyd & Ing
1001 Bishop Street, Suite 1800
Honolulu, HI 96813
(Office of Hawaiian Affairs)

Craig Nakamura, Esq. cnakamura@carlsmith.com
Catherine L.M. Hall, Esq. chall@carlsmith.com
Carlsmith Ball LLP
2200 Main Street, Suite 400
Wailuku, HI 96793
(Wahi Hoomalu Limited Partnership)

Peter A. Horovitz, Esq. pah@mhmaui.com
Kristine Tsukiyama, Esq. kkt@mhmaui.com
Merchant Horovitz LLLC
2145 Wells Street, Suite 303
Wailuku, HI 96793
(Waikapu Properties, LLC and MTP (Maui Tropical Plantation) Operating Company, LLC)
cc: Albert Boyce albertboyce@gmail.com

Brian Kang, Esq. bkang@wik.com
Emi L.M. Kaimuloa ekaimuloa@wik.com
Watanabe Ing, LLP
First Hawaiian Center
999 Bishop Street, 23rd Floor
Honolulu, HI 96813
(Wailuku Country Estates Irrigation Company (WCEIC))

Paul R. Mancini, Esq.
James W. Geiger, Esq.
Paul Mancini, Esq.
Mancini, Welch, & Geiger LLP
RSK Building
305 Wakea Avenue, Suite 200
Kahului, HI 96732
cc: Avery Chumbley
(Wailuku Water Company, LLC)

pmancini@mrwlaw.com
jgeiger@mrwlaw.com

Tim Mayer, Ph.D.
Supervisory Hydrologist
Water Resources Branch
US Fish and Wildlife Service
911 NE 11th Avenue
Portland, OR 97232-4181

tim_mayer@fws.gov

Cc: Frank Wilson

frank.wilson@sol.doi.gov

Earleen Tianio
Takitani, Agaran & Jorgensen, LLLP
24 North Church Street, Suite 409
Wailuku, HI 96793
(Ken Ota, Saedence Ota, Kurt Sloan,
Elizabeth Sloan, Anthony Takitani,
Audrey Takitani, Kitagawa Motors, Inc.,
SPV Trust, and Gerald W. Lau Hee)

earleen@tonytlaw.com

Lawrence H. Miike
Hearings Officer
1151 Punchbowl Street, Room 227
Honolulu, HI 96813

lhmiike@hawaii.rr.com

Linda L. W. Chow, Esq.
Deputy Attorney General
465 S. King Street, Room 300
Honolulu, HI 96813

linda.l.chow@hawaii.gov

DATED: Honolulu, Hawaii, February 17, 2017.

JODI S. YAMAMOTO
WIL K. YAMAMOTO

Attorneys for MMK MAUI, LP