STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES Land Division Honolulu, Hawaii 96813

December 14, 2018

Board of Land and Natural Resources State of Hawaii Honolulu, Hawaii

Hawaii and Kauai

Holdover of Revocable Permits for Water Use on the Islands of Hawaii and Kauai. See Exhibit 3 for list of Revocable Permits.

LEGAL AUTHORITY:

Section 171-58, Hawaii Revised Statutes (HRS), as amended.

HRS CHAPTER 343 – ENVIRONMENTAL ASSESSMENT:

In accordance with the Exemption List for the Department of Land and Natural Resources, approved by the Environmental Council on June 5, 2015, the subject action is exempt from the preparation of an environmental assessment pursuant to Exemption Class 1, "Operations, repairs, or maintenance of existing structures, facilities, equipment, or topographical features, involving negligible or no expansion or change of use beyond that previously existing.", Item 51, "Permits, licenses, registrations and rights-of-entry issued by the Department that are routine in nature, involving negligible impacts beyond that previously existing." See Exhibit 1 attached.

BACKGROUND:

At its meeting on December 11, 2015, Item D-14, as amended, the Board of Land and Natural Resources directed Land Division staff to submit revocable permit renewals by county over four meetings, with an explanation of why a revocable permit is the appropriate disposition and how the rent was set. At its meeting on June 24, 2016, Item D-7, the Board further approved the recommendations of the Department of Land and Natural Resources Revocable Permit Task Force, as amended, requesting all divisions to notate any non-compliance issues and pending litigation in each renewal request. In compliance with these directives, staff has presented the revocable permits for land uses by county over four separate meetings in 2016. However, staff omitted revocable permits for water use from the renewal requests because of the complex issues they present. At its meeting on November 10, 2016, under agenda item D-3, the Board approved the one year holdover of nine water revocable permits on the islands of Hawaii and Kauai pursuant to Section 171-58, HRS, as amended by Act 126 Session Laws of Hawaii 2016

(Act 126).

At its meeting on December 8, 2017 under agenda item D-4, the Board approved as amended the continued holdover of the revocable permits until December 31, 2018. Additional conditions imposed by the Board were the following:

With respect to all revocable permits covered by this action with the exception of RP S-7340:

- A. Department staff shall explore working with permittees statewide to clarify lease requirements in HRS section 171-58 in regards to compliance with Chapter 343, HRS and the development of a watershed management plan, specifically whether certain leases may be exempted from an EA/EIS and whether existing watershed management plans are sufficient to meet the requirement of the statute.
- B. With regard to Kau (Waiohinu), Department staff shall work with DHHL and the County of Hawaii Department of Water to explore releasing and separating the part of the water spring source that is the county water system, and determine whether there is any part over which DLNR may issue water leases to DHHL beneficiaries.

With respect to Revocable Permit S-7340:

- A. Applicant Kauai Island Utility Cooperative (KIUC) shall provide to the Board within one year a proposal that involves the restoration of stream flows to the North Fork Wailua River (which could be satisfied by the adoption of interim instream flow standards).
- B. Department staff work with landowners on what is expected for the watershed management plan.
- C. KIUC shall consult with DHHL to honor DHHL's reservation rights under the law.

REMARKS:

On July 1, 2016, Act 126 became law, amending Section 171-58, HRS. The amended section provides in part:

Where an application has been made for a lease under this section to continue a previously authorized disposition of water rights, a holdover may be authorized annually until the pending application for the disposition of water rights is finally resolved or for a total of three consecutive one-year holdovers, whichever occurs sooner; provided that the total period of the holdover for any applicant shall not exceed three

years; provided further that the holdover is consistent with the public trust doctrine

A copy of the full text of Act 126 is attached as Exhibit 2.

By letter dated July 20, 2016, Land Division notified its current water permit holders on the islands of Hawaii and Kauai of the enactment of Act 126, and asked them to submit applications for water leases if they intended to seek a holdover of their water permits. In response, DLNR received eight applications for water leases from seven of its current water permittees. Additionally, Kauai Island Utility Cooperative (KIUC) has a pending application (received July 20, 2001) for an existing hydroelectric power project in Lihue, Kauai. KIUC is relying on its prior application for this use.

The list of revocable permits for water use on the islands of Hawaii and Kauai that staff recommends be held over for 2019 is attached as Exhibit 3. Included in the exhibit are the revocable permit numbers, permittee names, locations with tax map keys, State Land Use District of the land where the water source is situated, commencement date of the permit, land area, and comments. Copies of the maps from the revocable permits to be renewed are attached as Exhibit 4. Staff reviews the nine water permits by island below, followed by a discussion of the public trust doctrine as it relates to the permits.

Hawaii

Of the nine water permits that are the subject of this submittal, five are located in Kau, Hawaii. Hawaiian Agricultural and Hutchinson Sugar Company, both subsidiaries of C. Brewer & Co., Ltd., developed a system of tunnels, flumes and ditches in Kau in the 1900s, using the water primarily for fluming sugarcane and for wash water in the mills. Beginning in the late 1990s, some of the tunnels and transportation systems were converted to provide water to farmsteads and diversified crop endeavors. Diversified agriculture, livestock pasturage, orchard and field crops have expanded within the Kau District since that time.

At its meeting of January 11, 2008, under agenda Item D-8, the Board approved the withdrawal of the irrigation water system from the Kau Forest Reserve (KFR) and the set-aside of the system, along with other irrigation systems located outside of the KFR, to the Agribusiness Development Corporation (ADC). The staff submittal identified approximately 30 tunnel sources and systems to be set-aside to ADC. The approved Board action required ADC to survey the tunnels and water systems so the State Surveyor could prepare the official CSF maps to be included with the set-aside.

ADC provided the survey maps and descriptions to Land Division in 2015. As Land Division continued to process the approved disposition, it consulted with the Division of Forestry and Wildlife (DOFAW) on the survey maps and the status of the withdrawal from the KFR. DOFAW advised Land Division that DOFAW was opposed to the withdrawal of the water system from the KFR, but would be agreeable to an easement in favor of ADC over the portions of the irrigation system located in the KFR.

To address DOFAW's concerns, staff prepared a draft Board submittal to rescind the Board's prior action of January 11, 2008, Item D-8, and authorize instead the grant of a perpetual non-exclusive easement to ADC for the irrigation systems located in and outside of the KFR. The draft Board submittal would also have transferred the existing water permits and irrigation infrastructure to ADC. When the draft submittal was circulated for agency review in June 2016, however, it was opposed by the Department of Hawaiian Home Lands (DHHL) and Office of Hawaiian Affairs (OHA). DHHL argued that the proposed action was an improper circumvention of Section 171-58, HRS, and ignored DHHL's need for water in Kau. OHA expressed concern about ADC's ability to properly manage the revocable permits and fulfill the public trust obligations inherent in water use.

After the Board approved the holdover for 2018, DLNR and DHHL staff met with representatives of permittees Kuahiwi Contractors, Inc. (RP S-7426), Kapapala Ranch (RP S-7054), and Edmund C. Olson, Trustee of the Edmund C. Olson Trust No. 2 (RP S-7432) in Kau on January 8, 2018. Issues discussed at the meeting were the history of the tunnel system and the water leasing process, including requirements such as compliance with Chapter 343, Hawaii Revised Statutes. Pursuant to the Board's approval, staff and applicants discussed the possibility of obtaining an exemption from an environmental assessment (EA) or Environmental Impact Statement (EIS). Staff instructed the applicants that if appropriate, they should formally request and justify an exemption, which would be subject to review and ultimate approval by the Board. Whether an exemption is appropriate would be dependent upon the applicants' proposed use for the water under the lease, so the applicants were advised to finalize their water use requests. The remaining permittee, Wood Valley Water & Farm Coop (RP S-7234 and RP S-7267) was not in attendance at the meeting, but did reach to out to staff. Staff and permittee then held a phone call to discuss the water leasing requirements. In regards to DHHL obtaining water for its tenants, as DHHL has reservation rights, having DLNR execute water leases with individual DHHL lessees may not be an appropriate or effective solution. Staff will continue to work with DHHL and assist in a solution for this issue to the extent appropriate.

A sixth water permit, Revocable Permit No. S-7463, is issued to Hawaii Electric Light Co., Inc. (HELCO) for hydroelectric power generation purposes on the Wailuku River in South Hilo, Hawaii. The permit requires all water used under the permit to be returned to the Wailuku River at convenient points. The hydroelectric facility and various water dispositions to allow it to operate have been in place for many decades. On August 15, 2017, Department staff attended a beneficiary consultation held by DHHL in regards to their water reservation. HELCO and DHHL have since agreed to an appropriate water reservation. Additionally the Board approved the acceptance of HELCO's Final Environmental Assessment and the issuance of a Finding of No Significant Impact at its meeting on September 28, 2018. The final EA was then published in the OEQC Environmental Notice on October 23, 2018.

Kauai

There are three water permits currently active on Kauai. RP S-7088 to Jeffrey S. Lindner allows for the use of water from State land in Kawaihau, Kauai, specifically from Moloaa Well No. 1. A portion of this water goes to the County of Kauai, a portion goes to the Moloaa Irrigation Cooperative (MIC), and a portion is used by Mr. Lindner on his private property. Staff understands that MIC provides water for both irrigation and domestic use. At the end of 2015, the Department of Health Safe Drinking Water Branch (SDWB) notified Mr. Lindner that SDWB was designating the system as a public water system which requires that that water be chlorinated prior to reaching the first customer, MIC. This has increased the cost of operation to Mr. Lindner, who has applied for a water lease explaining that a long-term disposition is necessary to allow him to recover his costs. Additionally, MIC has also applied for a water lease from the same well. However, it appears that MIC does not have access over the adjacent public lands to access and deliver the water.

When the Board approved the permit to Mr. Lindner in 1996, the permit was supposed to be a temporary measure to allow the County of Kauai Department of Water (KDOW) time to conduct a feasibility study to determine the appropriateness of creating a new water system based on the Moloaa well. KDOW did not complete the feasibility study. At its meeting of September 24, 1999, Item D-4, the Board amended this condition and stated that in the event no government entity indicates an intention to operate a water system, a public auction sale of the water license was to be conducted by October 30, 2000. No auction has been conducted to date, in part because the water source is landlocked by Mr. Lindner's private lands. Recently, KDOW expressed some interest in acquiring this water source. However, because the well is landlocked, KDOW would need to negotiate the purchase of or otherwise acquire the water transmission facilities and an easement to maintain it on Mr. Lindner's land, which complicates the creation of a public water system here.

Mr. Lindner reached out to both DLNR and DHHL to proceed with the lease application. Staff from both agencies had discussions with Mr. Lindner regarding the water lease process including DHHL's reservation. A site visit by DLNR and DHHL staff is planned for early next year to help determine DHHL's and Mr. Lindner's needs for the reservation and water lease respectively.

Revocable Permit No. S-7310 was issued in 2002 to the East Kauai Water Users' Cooperative (EKWUC) for irrigation purposes over a system that had previously been used for sugarcane plantations. The permit restricts the use of irrigation water to those agricultural lands presently served by the system, or that had been served in the past. On August 26, 2016, EKWUC submitted an application for a water lease.

Senate Bill 2846 was heard during the 2018 legislative session. The measure proposed to permit the transfer operational authority of portions of the East Kauai irrigation system operated and maintained by EKWUC to the Department of Agriculture. Additionally, the bill proposed to allow an additional two years for EKWUC to obtain a water lease. The bill was assigned to a conference committee, but the committee was unable to resolve the

outstanding issues. It is our understanding that the bill will be introduced again for the 2019 legislative session. Depending on the outcome, the scope of the lease may be revised to exclude the physical irrigation infrastructure.

Revocable Permit No. S-7340 was issued in 2003 to Kauai Island Utility Cooperative (KIUC) for water from the Blue Hole Diversion to operate two hydroelectric plants. KIUC requested a water lease from the Board at its meeting of December 10, 2004, Item D-26, but the Board took no action on the request. OHA requested a contested case hearing. OHA and KIUC entered into a memorandum of agreement dated November 9, 2006 whereby OHA agreed to withdraw its request for a contested case if KIUC committed to performing specified studies in connection with the use of surface water. OHA and KIUC have agreed on the scope of the studies and OHA has withdrawn its request, although KIUC continues to work on a cultural impact assessment for the project. KIUC is still intending to obtain a water lease, but is relying on its lease application submitted on July 20, 2001.

Since the 2017 holdover approval, members of the public have written to the Department expressing their concerns with this permit. The comments appear to focus on an alleged failure by KIUC to comply with various regulatory requirements to obtain a lease of water rights, the initial approval of the permit being based on a non-consumptive use which was incorrect, such consumptive use of the water being inconsistent with the public trust, and the diversion of water by KIUC resulting in a negative impact on the downstream environment. The commenters requested that the Board reconsider its approval of the permit in light of their comments.

Staff seeks to clarify that in the prior approval of the holdover, it was noted in the submittal that the use of the water under the permit was consumptive, and the Board deemed the holdover appropriate under such circumstances. Additionally the purpose of the holdover is to allow the applicant to fulfill the regulatory requirements to obtain a water lease, such as compliance with Chapter 343, HRS. Any rights under the permit are short term and will terminate at the sunset of the holdover period unless the applicant fulfills its requirements and obtains a water lease. Also any request for a water lease will be considered by the Board in an open, sun-shined meeting. Additionally, KIUC has taken actions in fulfilling the additional requirements imposed by the Board pursuant to the holdover approval for 2018. A progress report submitted by KIUC is attached as Exhibit 6.

Regarding the downstream impacts of the water use, the Commission on Water Resource Management (CWRM) is currently in the process of developing Interim Instream Flow Standards (IIFS). Once the IIFS is approved, any water diversion pursuant to either the current revocable permit or potential long term lease will be subject to the IIFS. At its meeting on August 21, 2018, CWRM considered an amended IIFS. However, prior to approval, KIUC, along with other parties, requested a contested case. At its meeting on October 16, 2018, CWRM intended to take action on contested case petitions on the matter filed by KIUC, Earthjustice, James Torio, DHHL and Grove Farm Company, Inc. Ultimately, CWRM deferred the item in order to provide the parties the opportunity to

resolve the matter.

In order to balance KIUC's desire to continue its hydro power operation, along with addressing with the community's concerns, staff recommends that the Board impose a limit on the amount of water allowed to be diverted under the revocable permit. Based on the proposed amended IIFS developed by CWRM staff, the available amounts that could be diverted at median stream flow would be 8.0 million gallons a day (mgd) from the Wai'ale'ale stream and 1.6 mgd from the Waikoko stream¹. At times of higher stream flow more water could be diverted provided that a sufficient amount of water, as determined by the proposed amended IIFS, remains in the streams. Although the amended IIFS has not been implemented, adopting it as a basis for limiting the amount of water diverted will assist in restoring stream flow, in furtherance of the Board's priority per its previous approval. This is intended as a temporary measure while the parties resolve the contested case petitions and an amended IIFS can be ultimately approved by CWRM.

As far as whether the use of water under the permit is consistent with the public trust, staff notes that the permit limits the use of the water for the purpose of generating hydroelectric power with KIUC's two hydroelectric plants, and that KIUC is a Hawaii non-profit cooperative electric company. This issue discussed further in the following section. Additionally, the proposed limit on the amount of water diverted would address the public trust purposes as noted below.

Public Trust Doctrine

Title to water resources is held in trust by the State for the benefit of its people. Pursuant to *In re Water Use Permits*, 94 Hawaii 97, 9 P.3d 409 (2000), and *In re Wai ola O Moloka i, Inc.*, 103 Hawai 401, 83 P.3d 664 (2004) the Hawaii Supreme Court has identified four public trust purposes with respect to water:

- Maintenance of waters in their natural state;
- Domestic water use of the general public, particularly drinking water;
- The exercise of Native Hawaiian and traditional and customary rights, including appurtenant rights; and
- Reservations for Hawaiian home lands.

Of these four purposes, domestic water use is implicated in three of the current revocable permits: RP Nos. S-7088 to Mr. Lindner, and S-7234 and S-7267, both to Wood Valley Water and Farm Cooperative. The six remaining RPs are for agricultural use or hydroelectric power generation. With respect to the agricultural use of water, the Hawaii Constitution provides:

¹ Staff notes that the permit does not impose a specific volume limit on the amount of water KIUC can divert, except that it cannot exceed the average annual amount diverted for the period from years 1992 to 2002.

The State shall conserve and protect agricultural lands, promote diversified agriculture, increase agricultural self-sufficiency and assure the availability of agriculturally suitable lands.

Hawaii Constitution, Article XI, Section 3.

The public lands shall be used for the development of farm and home ownership on as widespread a basis as possible, in accordance with procedures and limitations prescribed by law.

Hawaii Constitution, Article XI, Section 10.

In staff's view, making irrigation water available to farmers and ranchers supports the long term viability and security of local agricultural operations and is critical to the State's compliance with the constitutional mandates of Article XI. It also allows for the local production of food, supporting the goal of food sustainability and food security for Hawaii. It may also translate into lower prices for consumers when produce does not have to be shipped to Hawaii from outside of the state. Any tension between identified public trust uses of water and the constitutional mandates above will be resolved in the process of issuing water leases, because section 171-58, HRS, requires the joint development of a water reservation to support current and future DHHL homestead needs.

The hydroelectric use of water allows utility companies to provide clean energy to domestic and commercial users. This method of energy production also supports Hawaii's Clean Energy Initiative, which sets goals for the state to achieve 100 percent clean energy by 2045 coming from locally generated renewable sources. Further, those hydroelectric projects that return water to the same stream or other body of water from which it was drawn are considered non-consumptive. Although hydroelectric projects are not an identified public trust use of State waters, the public trust concerns will be addressed in the processing of the water lease applications under Section 171-58, HRS.

In discussions with staff, DHHL has commented that pursuant to HRS 171-58(c)(1), any holdover be "consistent with the public trust doctrine", and furthermore that all revocable permits shall be subject to any existing or future reservations of water for DHHL. Staff concurs with DHHL's comments and recommends the Board approve the holdover of all revocable permits subject to DHHL's water reservations.

Charging for Water

Staff has previously recommended keeping the current rents for holdover revocable permits in place. However, pursuant discussions between DLNR and DHHL staff, DHHL raised concerns that revocable permit rents have been static with no adjustment and has advocated that, at a minimum, rents be adjusted for inflation. Acknowledging the difficulty in appraising a holdover revocable permit, staff concurs with DHHL's recommendation as an interim measure, and that the Board approve adjusting the rents

accordingly. As noted in the table below, the permit rents have been adjusted by CPI for each year since any prior rent adjustment, to the approximate value as of August 2018. The recommended adjusted rents are as follows:

RP No.	Permittee	Previous Rent	Recommended Rent
S-7054	Kapapala Ranch	\$40.00 per month or	\$41.53 per month or \$8.20
		\$5.00 per million	per million gallons
		gallons (whichever is	(whichever is greater)
		greater)	
S-7088	Jeffrey S. Lindner	\$201.17 per month	\$320.43 per month
S-7234	Wood Valley Water	\$40.00 per month or	\$41.53 per month or \$7.30
	& Farm Co-op	\$5.00 per million	per million gallons
		gallons (whichever is	(whichever is greater)
		greater)	
S-7267	Wood Valley Water	\$13.00 per month ² or	\$41.53 per month or \$6.71
	& Farm Co-op	\$5.00 per million	per million gallons
		gallons (whichever is	(whichever is greater)
		greater)	
S-7310	East Kauai Water	\$40.00 per month or	\$41.53 per month or \$7.01
	Users Co-op	\$5.00 per million	per million gallons
		gallons (whichever is	(whichever is greater)
		greater)	
S-7340	Kauai Island Utility	\$3,110.00 per month	\$4,315.76 per month
	Cooperative		
S-7426	Kuahiwi	\$77.00 per month	\$96.35 per month
	Contractors, Inc.		
S-7432	Edmund C. Olson,	\$40.00 per month or	\$41.53 per month or \$6.14
	Trustee of the	\$5.00 per million	per million gallons
	Edmund C. Olson	gallons (whichever is	(whichever is greater)
	Trust No. 2	greater)	
S-7463	Hawaii Electric	\$1,641.00 per month	\$1,887.82 per month
	Light Co., Inc.		

Per the Board's directive as part of its holdover approval for 2018, staff from Land Division, the Division of Forestry and Wildlife, CWRM and the Attorney General, have been developing a cost sharing contribution as an alternative to the requirement for a lessee to develop and implement a watershed management plan. The formula for determining the appropriate cost share amount will be based on factors such as the amount of water used, amount of available water from the subject watershed, and estimated management costs. Staff intends to bring the cost formula and justification to the Board for review and approval in early 2019.

2 As part of its 2017 holdover approval, the Board raised base rents for selected revocable permits to a minimum of \$40.00 per month. RP S-7267 was inadvertently excluded from the permits identified for a base rent increase. The Board is requested to retroactively adjust the base rent for RP S-7267 to the same as the other permits paying the minimum base rent as of January 1, 2017.

The parties holding the nine water permits covered by this submittal have all submitted applications for water leases as indicated in Exhibit 3. A review of the files shows the permittees are compliant with the permit terms including payment of rent, posting of liability insurance, and reporting on water usage where required. Attached as Exhibit 5 are summaries of the water usage reports. Staff believes that a one-year holdover of these permits is appropriate under Section 171-58, HRS and Act 126. Agency comments were not solicited from agencies other than CWRM for this action since the permits are limited term holdovers, and as all permit holders subject to this approval have applied for water leases there will be numerous opportunities for government agencies and general public to provide input.

RECOMMENDATION: That the Board:

- 1. Find that the holdover of the revocable permits listed in Exhibit 3 is consistent with the public trust doctrine; and
- 2. Subject to the terms and conditions noted in this submittal, approve the holdover of the revocable permits listed in Exhibit 3 on a month-to-month basis for another one-year period through December 31, 2019, except for permits that are in arrears of rental payment for more than 60 days and/or have been approved for forfeiture by a separate Board action. Permits in arrears of rental for 60 days or more and/or approved by the Board for forfeiture shall not be renewed.

Respectfully Submitted,

Ian Hirokawa

Special Projects Coordinator

\APPROVED FOR SUBMITTAL:

Suzanne D. Case. Chairpersor

EXEMPTION NOTIFICATION

Regarding the preparation of an environmental assessment pursuant to Chapter 343, HRS and Chapter 11-200, HAR

Project Title:

Holdover of Revocable Permits for Water Use on the Islands of

Hawaii and Kauai.

Project / Reference No.:

Not applicable

Project Location:

Various locations on the Islands of Hawaii and Kauai

Project Description:

Holdover existing revocable permits for a term of one year.

Chap. 343 Trigger(s):

Use of State Land and Water

Exemption Class No.: In accordance with the Exemption List for the Department of Land and Natural Resources, approved by the Environmental Council on June 5, 2015, the subject request for issuance for right-of-entry is exempt from the preparation of an environmental assessment pursuant to Exemption Class 1, "Operations, repairs, or maintenance of existing structures, facilities, equipment, or topographical features, involving negligible or no expansion or change of use beyond that previously existing", Item 51, "Permits, licenses, registrations and rights-of-entry issued by the Department that are routine in nature, involving negligible impacts beyond that previously existing."

The holdover of existing revocable permits on State lands involves the continuation of existing uses on the lands. No change in use is authorized by the holdover.

Cumulative Impact of Planned Successive Actions in Same Place Significant? No, the requested locations have been used for same uses since the permits were granted.

Action May Have Significant Impact on Particularly Sensitive Environment? To the extent environmental studies have been conducted for long term dispositions of water, no of significant impacts have been discovered.

Analysis:

The request pertains to renewing the revocable permits for water on Hawaii and Kauai. Staff believes that the request would involve negligible or no expansion or change in use of the subject location beyond that previously existing.

Consulted Parties

Commission on Water Resource Management

Recommendation:

That the Board find this project will probably have minimal or no significant effect on the environment and is presumed to be exempt

from the preparation of an environmental assessment.

ORIGINAL

on HOUSE OF REPRESENTATIVES TWENTY-EIGHTH LEGISLATURE, 2016 STATE OF HAWAII ACT 126
H.B. NO. H.D. 2
S.D. 2
C.D. 1

A BILL FOR AN ACT

RELATING TO WATER RIGHTS.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF HAWAII:

1	SECTION 1. Section 171-58, Hawaii Revised Statutes, is
2	amended by amending subsection (c) to read as follows:
3	"(c) Disposition of water rights may be made by lease at
4	public auction as provided in this chapter or by permit for
5	temporary use on a month-to-month basis under those conditions
6	which will best serve the interests of the State and subject to
7	a maximum term of one year and other restrictions under the law;
8	provided that [any]:
9	(1) Where an application has been made for a lease under
10	this section to continue a previously authorized
11	disposition of water rights, a holdover may be
12	authorized annually until the pending application for
13	the disposition of water rights is finally resolved or
14	for a total of three consecutive one-year holdovers,
15	whichever occurs sooner; provided that the total
16	period of the holdover for any applicant shall not
17	exceed three years; provided further that the holdover
18	is consistent with the public trust doctrine;

H.B. NO. 2501 H.D. 2 S.D. 2 C.D. 1

1	(2)	Any disposition by lease shall be subject to
2		disapproval by the legislature by two-thirds vote of
3		either the senate or the house of representatives or
4		by majority vote of both in any regular or special
5		session next following the date of disposition;
6		[provided further that after] and
7	(3)	After a certain land or water use has been authorized
8		by the board subsequent to public hearings and
9		conservation district use application and
10		environmental impact statement approvals, water used
11		in nonpolluting ways, for nonconsumptive purposes
12		because it is returned to the same stream or other
13		body of water from which it was drawn, and essentially
14		not affecting the volume and quality of water or biota
15		in the stream or other body of water, may also be
16		leased by the board with the prior approval of the
17		governor and the prior authorization of the
18		legislature by concurrent resolution."
19	SECT	ION 2. The department of land and natural resources
20	shall pre	pare and submit annual reports to the legislature no
21	later than	n twenty days before the convening of each of the

H.B. NO. 2501 H.D. 2 S.D. 2

1	regular	sessions	of	2017,	2018,	2019,	and	2020.	·The	reports
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- 2 shall include:
- 3 (1) The status of applications to continue previously-
- 4 authorized dispositions of water rights;
- 5 (2) Actions taken on the applications during the fiscal
- 6 period of July 1, 2016, to November 30, 2016, fiscal
- 7 year 2016-2017, fiscal year 2017-2018, and fiscal year
- 8 2018-2019, respectively; and
- 9 (3) Any relevant recommendations for legislative action or
- 10 appropriation.
- 11 SECTION 3. Statutory material to be repealed is bracketed
- 12 and stricken. New statutory material is underscored.
- 13 SECTION 4. This Act shall take effect upon its approval,
- 14 and shall apply to applications for a lease to continue a
- 15 previously authorized disposition of water rights that are
- 16 pending before the board of land and natural resources on the
- 17 effective date of this Act or filed with the board of land and
- 18 natural resources on or after the effective date of this Act,
- 19 but prior to June 30, 2019; provided that:
- 20 (1) This Act shall be repealed on June 30, 2019, and
- 21 section 171-58(c), Hawaii Revised Statutes, shall be

Page 4

H.B. NO.

1		reenacted in the form in which it read on the day
2		prior to the effective date of this Act; and
3	(2)	Any holdovers first applied for under this Act prior
4		to June 30, 2019, may be reauthorized, as provided in
5 ·	•	section 1 of this Act. beyond June 30, 2019.

APPROVED this 27 day of

, 2016 JUN

Arish y Ize GOVERNOR OF THE STATE OF HAWAII

Doc No.	Permittee Name	Location	State Land	Lease From	Leased	Comments
			Use District		Area	
					(acres)	
RP S-7054	KAPAPALA RANCH	Kau, Hawaii; (3)	Conservation	10/13/1995	23,408.46	This revocable permit overlies General Lease
		9-8-1:13,9,10; 9-				No. S-5374 to Kapapala Ranch, which results in
		7-1:1				the large acreage being stated in the "Lsed Area
1	2					(acres)" column. The RP does not identify a
						separate land area for the RP by itself.
						Permittee applied for a water lease on 8/29/16
						for watering livestock and wildlife (consumptive
						usel
RP S-7088	LINDER, JEFFREY S.	Kawaihau, Kauai;	Conservation	10/1/1996	125	Permittee applied for a water lease on 9/1/16
		(4) 4-9-001:001				for county water supply and irrigation purposes
				- / / /		(consumptive use).
RP S-7234	WOOD VALLEY WATER	Kau, Hawaii; (3)	Conservation	8/1/2000	0.006	Permittee applied for a water lease on 8/24/16
	& FARM COOP	9-7-001:001				for public drinking water, irrigation and
						livestock watering purposes (consumptive use).
						The water source is not currently developed.
RP S-7267	WOOD VALLEY WATER	Kau, Hawaii; (3)	Conservation	4/1/2004	0	Permittee applied for a water lease on 8/24/16
	& FARM COOPERATIVE	9-7-001:001				for public drinking water, irrigation and
			(4)			watering livestock purposes (consumptive use).
RP S-7310	EAST KAUAI WATER	Kawaihau, Kauai;	Conservation	4/1/2002	6,700.00	Permittee applied for a water lease on 8/26/16
=	USERS COOP.	(4) 4-1, 2, 4, 6, 7,				for irrigation and other purposes (consumptive
	2	8				use).
RP S-7340	KAUAI ISLAND UTILITY	Lihue, Kauai; (4)	Conservation	1/1/2003	0	Permittee applied for a water lease on 7/20/01
	COOPERATIVE	3-9-001:001				for hydroelectric power generation purposes.
						Use considered consumptive because water is
						not returned to the stream from which it was
						drawn.
RP S-7426	KUAHIWI	Kau, Hawaii; (3)	Conservation	11/1/2006	0	Permittee applied for a water lease on 8/3/16
	CONTRACTORS, INC.	9-7-1:1,15				for livestock watering purposes (consumptive
						use).



Water Revocable Permits on Hawaii and Kauai as of September 2016

RP S-7432	EDMUND C. OLSON,	Kau, Hawaii; (3)	Conservation	3/1/2007	1.82	Permittee applied for a water lease on 8/9/16
	TRUSTEE OF THE	9-6-6; 9-6-7; 9-6-				for irrigation and livestock watering purposes
	EDMUND C. OLSON	8; 9-7-1				(consumptive use).
	TRUST No. 2					
RP S-7463	HAWAII ELECTRIC LIGHT	South Hilo,	Conservation	12/1/2010	0	On 8/24/16, permittee submitted an application
ž	CO., INC.	Hawaii; (3) 2-6-				for a water lease and other necessary
		009				dispositions for hydroelectric power generation
	ž.			7		purposes (non-consumptive).

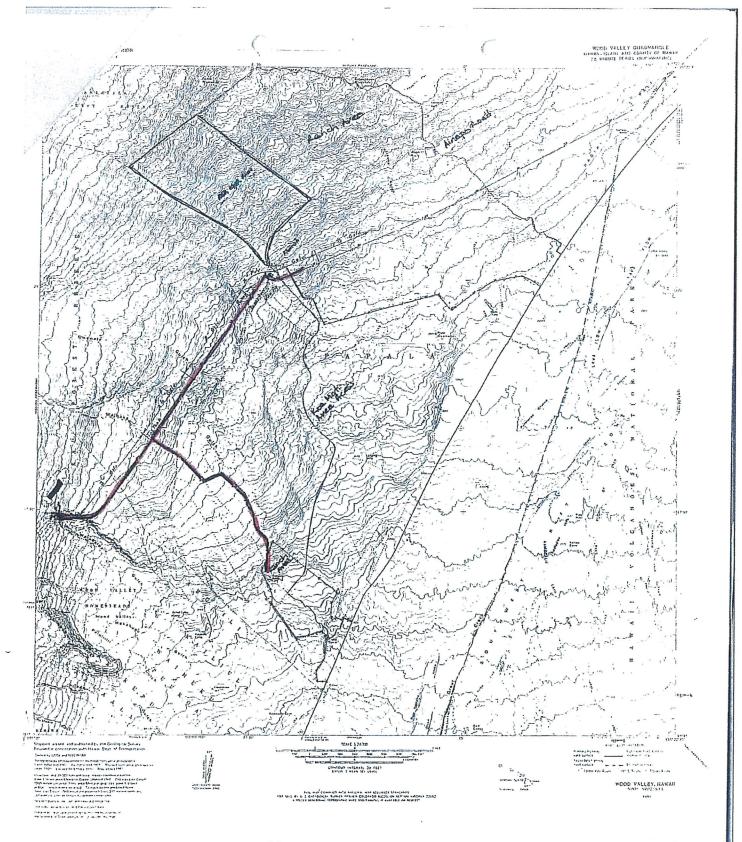
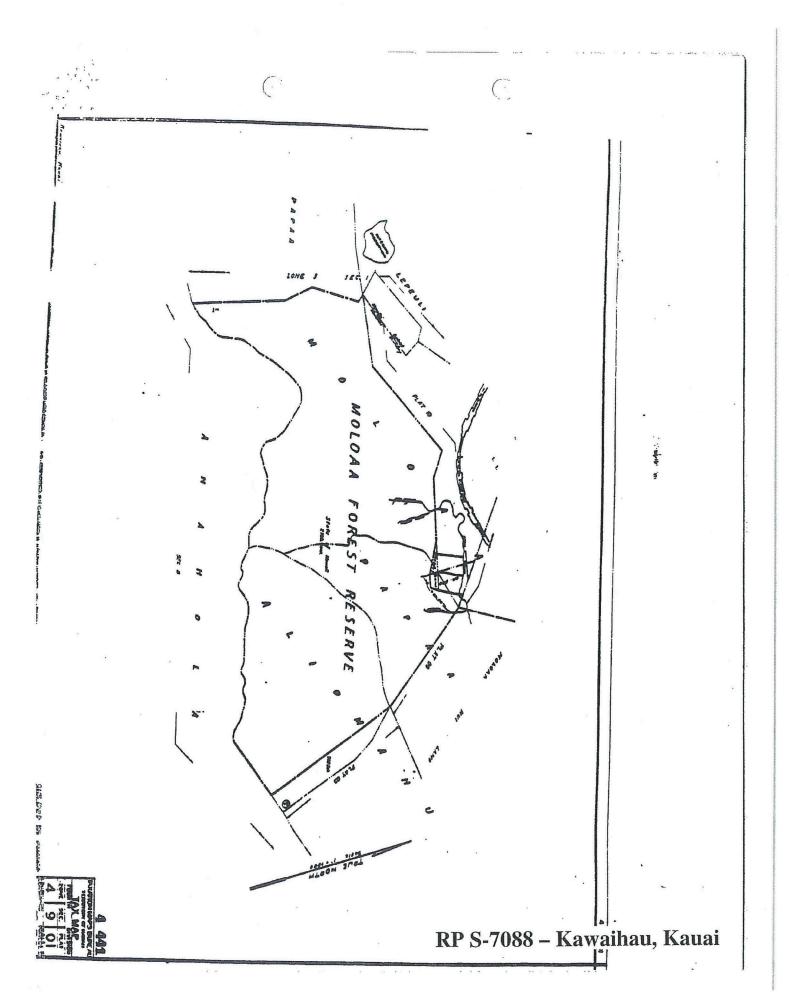
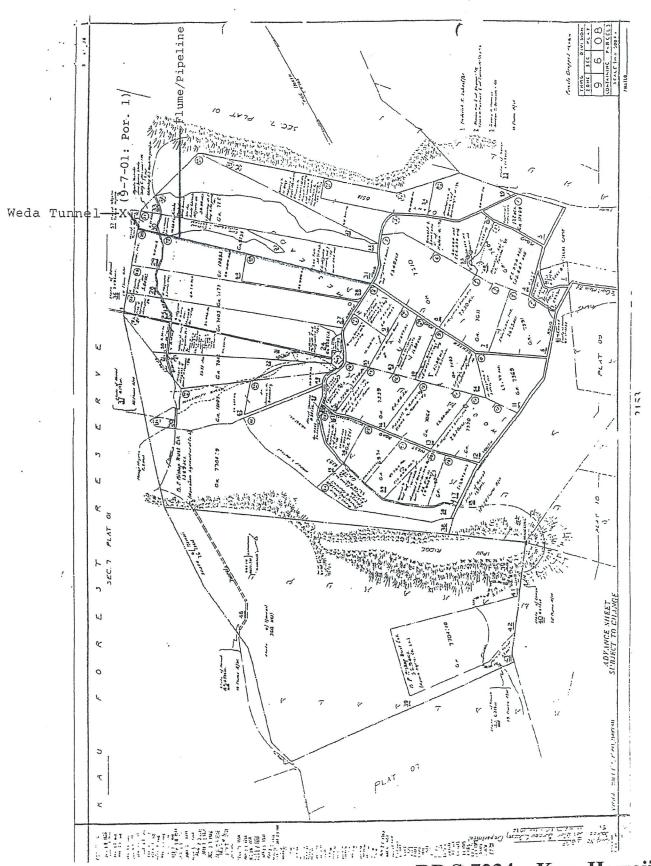


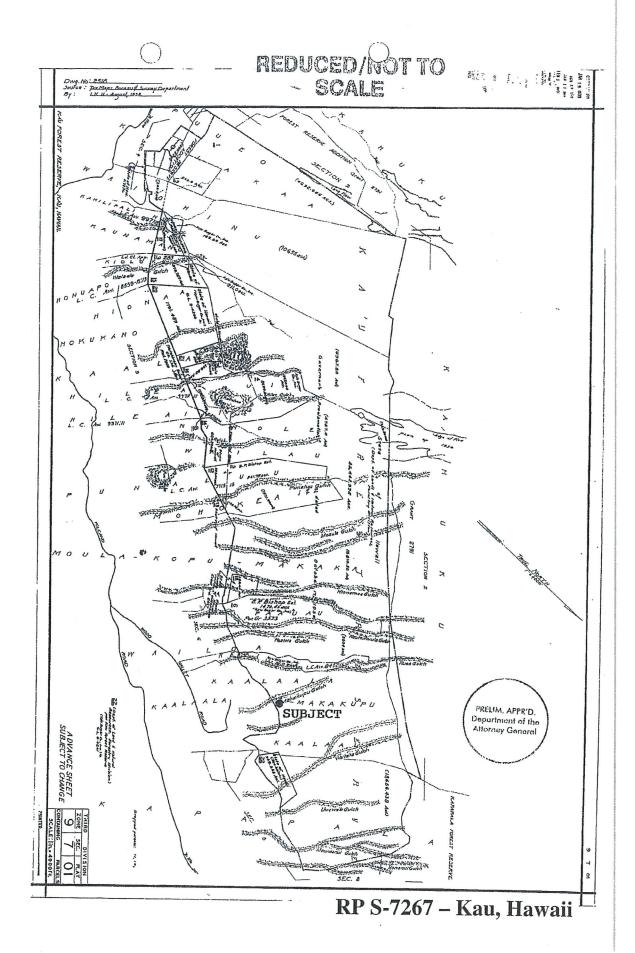
EXHIBIT 4

RP S-7054 – Kau, Hawaii

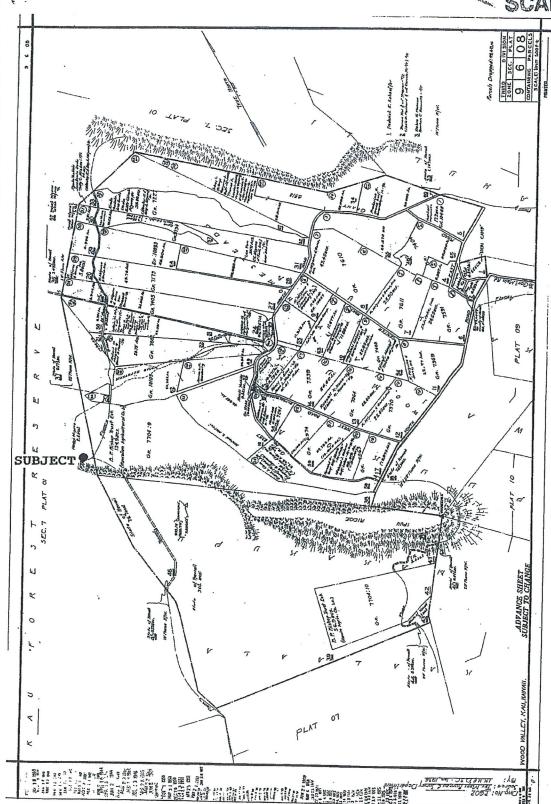




RP S-7234 – Kau, Hawaii

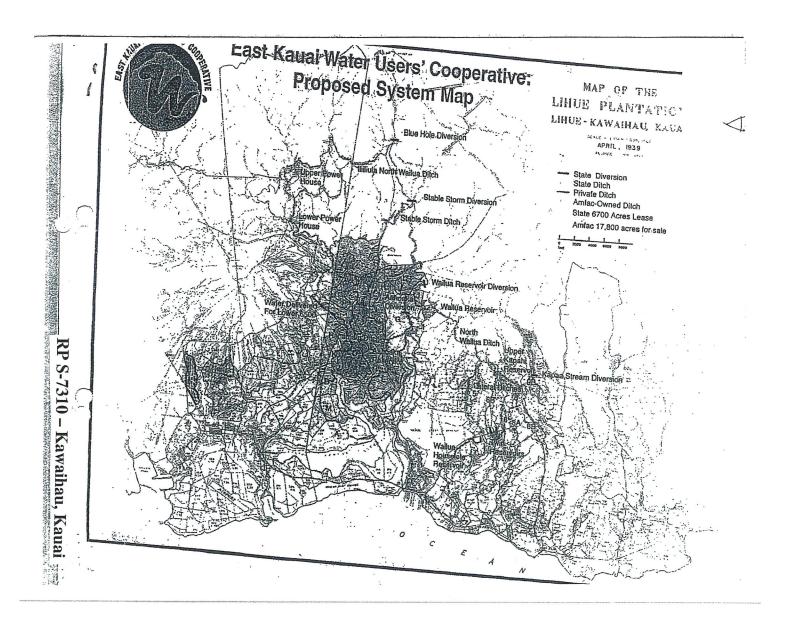


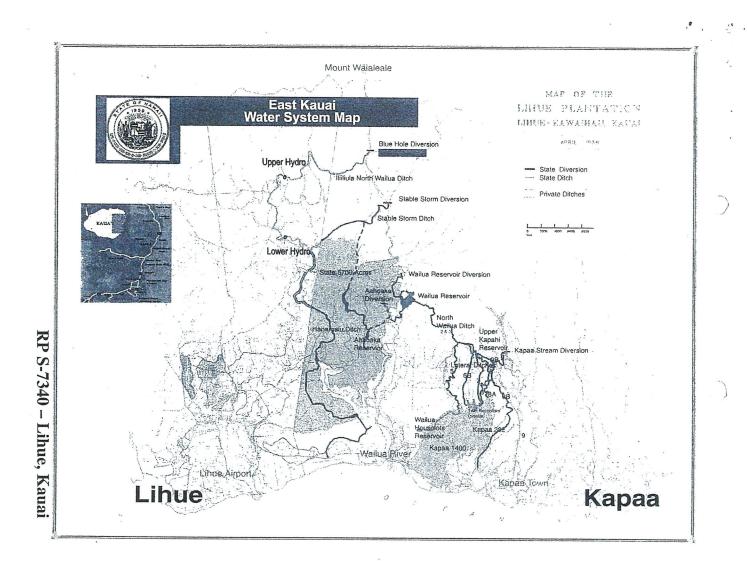
REPICED/NOT TO SCALE

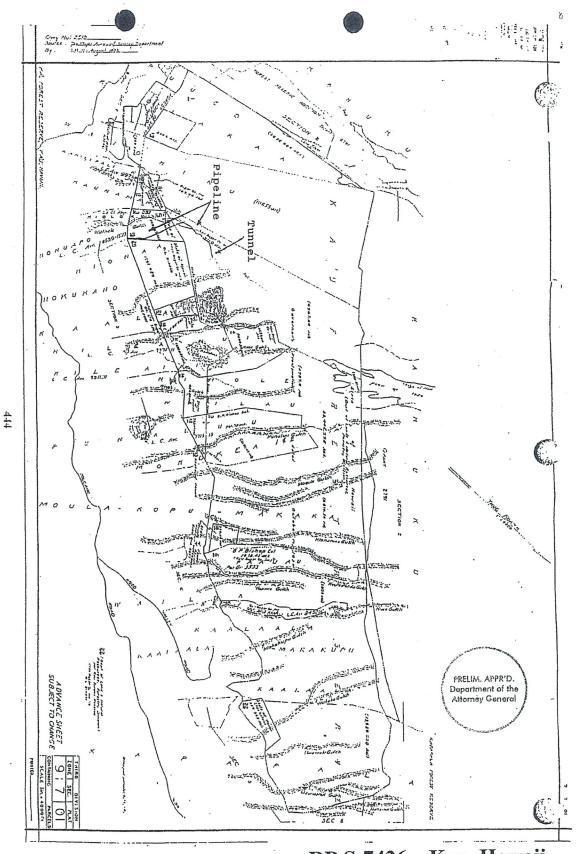


PRELIM. APPR'D. Department of the Altomey General

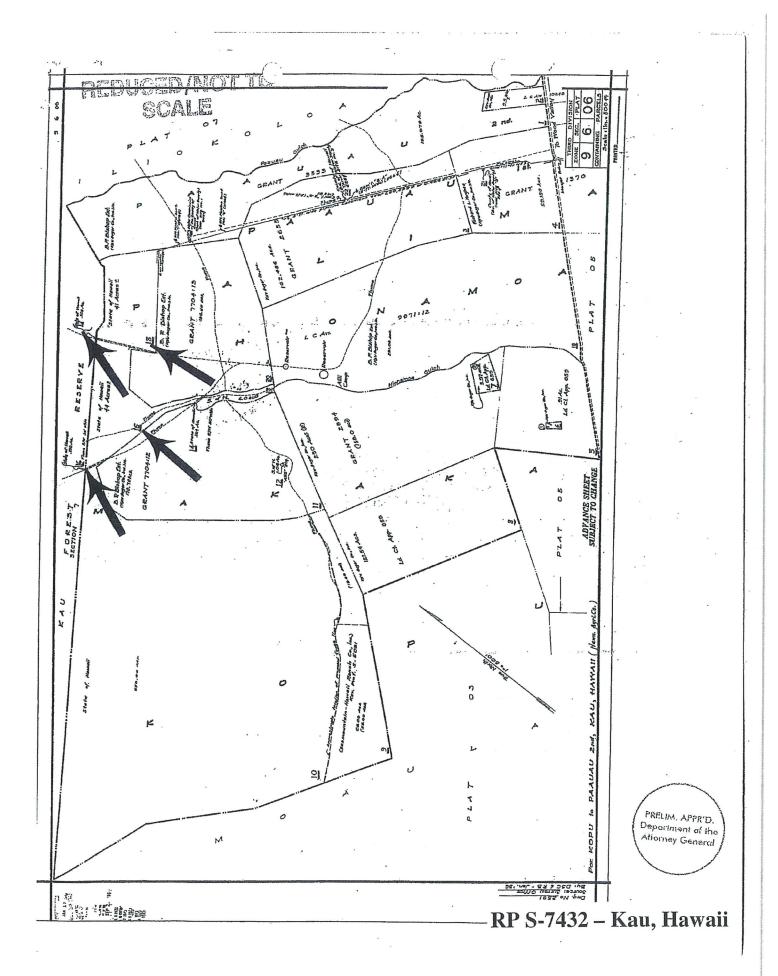
RP S-7267 - Kau, Hawaii

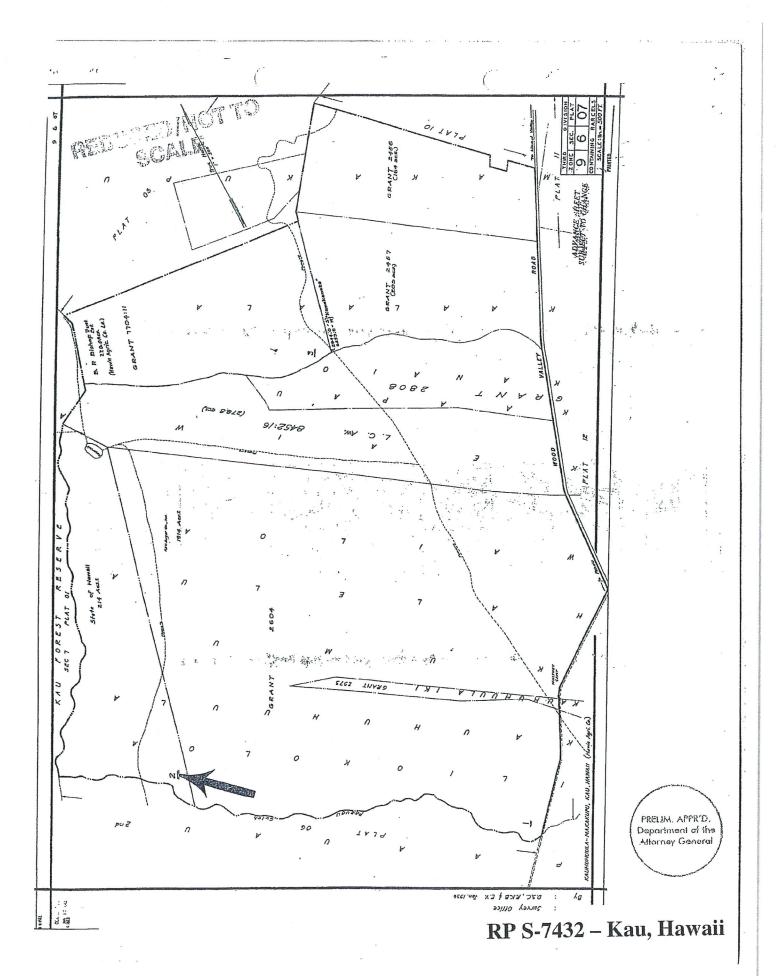


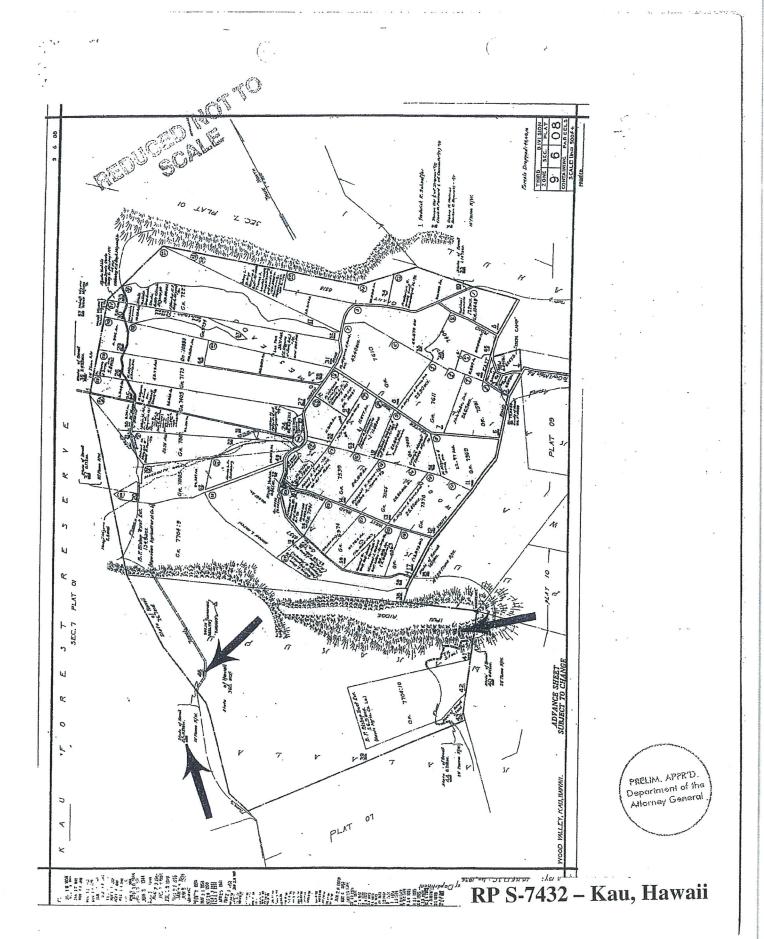




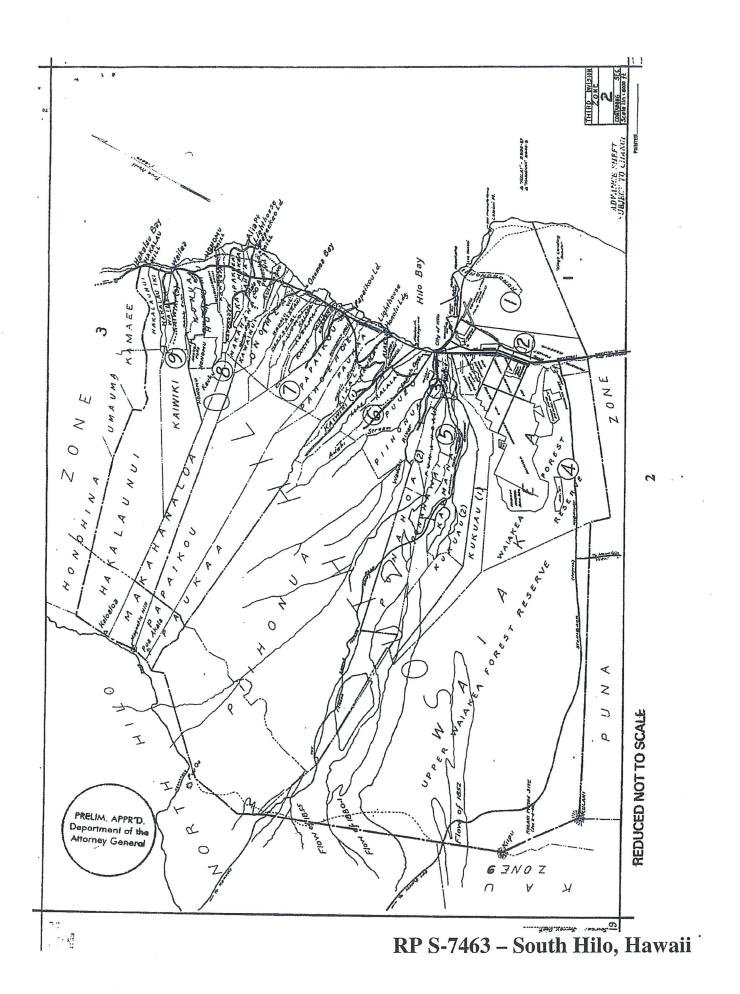
RP S-7426 – Kau, Hawaii











WATER PERMITS HAWAII AND KAUAI – SUMMARY OF WATER USAGE REPORTS

RP No.	Permittee	Source	Period of Use	Gallons Used	Gallons/Month	Gallons/Year
S-7054	Kapapala Ranch	Makakupu	1/1/18-6/30/18	4,858,100	809,683	2018 = 4,858,100
		Tunnel, Kau,	7/1/17-12/31/17	5,185,400	864,233	2017 = 9,753,800
	9	Hawaii	1/1/17-6/30/17	4,568,400	761,400	2017 7,755,000
			7/1/16-12/31/16	5,733,700	955,617	2016 = 10,847,500
			1/1/16-6/30/16	5,113,800	852,300	2010 10,017,500
			7/1/15-12/31/15	4,578,200	763,033	2015 = 10,311,100
	, .		1/1/15-6/30/15	5,732,900	955,483	2013 10,311,100
ENCONOMINE ENCONOMINE ENGLISHMEN			7/1/14-12/31/14	6,061,900	1,010,317	2014 = 10,681,800
			1/1/14-6/30/14	4,619,900	769,983	2011 10,001,000
-			7/1/13-12/31/13	4,414,500	735,750	2013 = 9,051,200
77			1/1/13-6/30/13	4,636,700	772,783	2012 7,001,200
9			7/1/12-12/31/12	5,019,400	836,567	2012 = 9,959,600
779		(#)	1/1/12-6/30/12	4,940,200	823,367	
			7/1/11-12/31/11	4,769,800	794,967	2011 = 9,975,400
			1/1/11-6/30/11	5,205,600	867,600	
			1/1/10-12/31/10	7,469,500	622,458	2010 = 7,469,500
			1/1/09-12/31/09	10,800,200	900,017	2009 = 10,800,200
			1/1/08-12/31/08	12,026,800	1,002,233	2008 = 12,026,800
S-7088	Lindner, Jeffrey	Moloaa Well No.	No requirement in			
	S.	1, Kawaihau,	permit to report water			
		Kauai	usage.			
S-7234	Wood Valley	Weda Tunnel,	N/A – source not	None	None	None
	Water and Farm	Kau, Hawaii	developed			
	Cooperative	100	_			
S-7267	Wood Valley	Noguchi Tunnel,	7/6/18-10/3/18	14,717,900	4,905,967	2018 = 39,785,300
	Water and Farm	Kau, Hawaii	4/6/18-7/5/18	13,226,400	4,408,800	
	Cooperative		1/20/18-4/05/18	11,841,000	3,947,000	
			10/6/17-1/19/18	10,886,400	3,628,800	2017 = 34,490,100
			7/5/17-10/5/17	9,353,800	3,117,933	
		S	4/5/17-7/5/17	7,797,100	2,599,033	
			1/5/17-4/1/17	6,452,800	2,150,933	
			10/1/16-1/4/17	4,728,800	1,576,267	2016 = 10,277,034
			7/1/16-10/1/16	3,770,500	1,256,833	
			10/2/15-7/1/16	2,660,600	296,289	2016 = 1,777,734

			10/10/14-10/1/15	6,150,000	512,500	2015 = 6,150,000
		j	11/25/13-10/9/14	5,888,655	560,824	2014 = 6,729,891
			12/30/12-11/24/13	792,350	66,029	2013 = 792,350
			11/19/11-12/29/12	7,137,695	594,808	2012 = 7,137,695
			9/22/10-11/18/11	6,897,500	492,679	2011 = 5,912,148
			10/8/09-9/21/10	6,823,150	593,317	2010 = 7,119,804
			6/5/09-10/7/09	5,146,600	1,286,650	2009 = 8,540,652
			12/13/08-6/6/09	4,092,395	711,721	
	,		5/13/08-12/12/08	4,722,555	674,651	2008 = 8,095,809
S-7310	East Kauai Water	Kawaihau, Kauai	1/1/18-6/30/18	175,370,000	29,228,333	2018 = 175,370,000
-	Users'		5/1/17-12/31/17	253,950,000	31,743,750	2017 = 253,950,000
	Cooperative		9/1/16-10/31/16	81,310,000*	40,655,000*	2016 = 81,310,000*
S-7340	Kauai Island	Lihue, Kauai	See Exhibit 5-A	,		
	Utility		attached.	+		
•	Cooperative					
S-7426	Kuahiwi	Mountain House	1/1/18-9/30/18	29,506,900	3,278,544	2018 = 29,506,900
	Contractors, Inc.	Tunnel, Kau,	1/1/17-12/31/17	30,379,800	2,531,650	2017 = 30,379,800
		Hawaii	1/1/16-12/31/16	33,749,000	2,789,917	2016 = 33,749,000
			1/1/15-12/31/15	43,515,500	3,626,292	2015 = 43,515,500
			1/1/14-12/31/14	44,338,000	3,694,833	2014 = 44,338,000
			1/1/13-12/31/13	38,331,000	3,194,250	2013 = 38,331,000
			1/1/12-12/31/12	24,533,000	2,044,417	2012 = 24,533,000
			1/1/11-9/30/11	9,586,680	1,065,187	2011 = 12,782,244
			7/14/10-11/10	8,431,300		
S-7432	Edmund C.	Noguchi & other	9/15/18	740,955	740,955	2018 = 5,476,669
	Olson, Trustee	ancillary tunnels,	8/5/18	740,650	740,650	
		Kau, Hawaii	7/10/18	740,320	740,320	
			6/15/18	739,760	739,760	
			5/9/18	712,430	712,430	
			4/5/18	640,565	640,565	
			3/5/18	605,623	605,623	
			1/2/18-2/1/18	556,366	556,366	
			12/5/17-1/1/18	536,939	536,939	2017 = 3,234,905
			11/10/17-12/4/17	571,512	571,512	
			8/29/17-11/9/17**	505,201	505,201	
			5/25/17-6/30/17	442,688	442,688	
			3/1/17-5/31/17***	1,178,565	392,855	,
			1/1/16-7/31/16	2,723,620	389,089	2016 = 2,723,620

	=		1/1/15 12/21/15	1 252 617	262.904	2015 4 252 (47
			1/1/15-12/31/15	4,353,647	362,804	2015 = 4,353,647
			1/1/14-12/31/14	22,810,930	1,900911	2014 = 22,810,930
			1/1/13-12/31/13	30,241,050	2,520,088	2013 = 30,241,050
			8/1/12-9/30/12**	9,184,900	4,592,450	
			1/1/11-4/25/11**	19,875,000	4,416,666	
S-7463	Hawaii Electric	Wailuku River,	No requirement in			
	Light Co., Inc.	South Hilo,	permit to report water			
		Hawaii	usage.		~	

^{*}Estimated

^{**}Data incomplete due to meter malfunction.

***Data incomplete due to staff turnover.

EXHIBIT 5A: RP S-7340- SUMMARY OF WATER USAGE REPORTS 2016 TO PRESENT

RP No.	Permittee	Source	Period of Use	Gallons Used	Gallons/Month	Gallons/Year
S-7340	Kauai Island	North Wailua	July 2018	165,456,300	165,456,300	2018 = 2,109,831,810
	Utility	Ditch, below	June 2018	35,961,910	35,961,910	
	Cooperative	North Fork	May 2018	143,345,100	143,345,100	
		Wailua Stream	April 2018	274,094,100	274,094,100	
			March 2018	643,239,600	643,239,600	
			February 2018	471,315,900	471,315,900	
			January 2018	376,418,900	376,418,900	
		2	December 2017	0	0	2017 = 2,548,130,290
			November 2017	18,961,990	18,961,990	
			October 2017	N/A	N/A	
			September 2017	251,777,600	251,777,600	
			August 2017	162,408,500	162,408,500	
			July 2017	211,953,900	211,953,900	
)	June 2017	301,407,300	301,407,300	
			May 2017	498,971,600	498,971,600	
			April 2017	361,823,800	361,823,800	
			March 2017	160,989,300	160,989,300	
			February 2017	272,846,400	272,846,400	
			January 2017	306,989,900	306,989,900	
			December 2016	295,666,200	295,666,200	2016 = 4,803,314,200
			November 2016	384,537,700	384,537,700	
			October 2016	371,305,200	371,305,200	
			September 2016	476,927,700	476,927,700	
			August 2016	597,374,700	597,374,700	
			July 2016	487,864,100	487,864,100	
			June 2016	557,869,000	557,869,000	
			May 2016	498,971,600	498,971,600	
			April 2016	425,574,100	425,574,100	
			March 2016	257,822,800	257,822,800	
			February 2016	218,973,300	218,973,300	
			January 2016	230,427,800	230,427,800	

2-24 North Wailua Ditch below North Fork Wailua Stream; Kauai Island Utility Cooperative, KIUC

Davs

1196 1/1/2016 1/31/2016 31 230.428 230427800 7.433 11.499 1195 12/1/2015 12/31/2015 31 476.26 476259800 15.363 23.767 1133 11/1/2015 11/30/2015 30 461.6 461600000 15.387 23.803 1128 10/1/2015 19/30/2015 30 74.8 74800000 2.493 3.857 1130 8/1/2015 8/31/2015 31 292.1 292100000 9.423 14.577 1132 7/1/2015 7/31/2015 31 325 325000000 10.484 16.219 1127 6/1/2015 6/30/2015 30 254.7 254700000 8.49 13.134 1134 5/1/2015 5/31/2015 31 302.5 30250000 9.758 15.096 1131 4/1/2015 4/30/2015 30 396.7 396700000 13.23 20.456 1137 3/1/2015 31 31.2 32100000 10.	WUR ID	Start Date	End Date	Days Count	MG	Gallons	Mgd	CFS
1195 12/1/2015 12/31/2015 31 476.26 476259800 15.363 23.767 1133 11/1/2015 11/30/2015 30 461.6 46160000 15.387 23.803 1128 10/1/2015 10/31/2015 31 173.1 173100000 5.584 8.638 1136 9/1/2015 9/30/2015 30 74.8 74800000 2.493 3.857 1130 8/1/2015 8/31/2015 31 292.1 292100000 9.423 14.577 1132 7/1/2015 7/31/2015 31 325 325000000 9.7484 16.219 1127 6/1/2015 6/30/2015 30 254.7 254700000 8.49 13.34 1134 4/1/2015 4/30/2015 30 396.7 396700000 13.223 20.456 1137 3/1/2015 3/31/2015 31 321.9 32190000 10.384 16.064 1129 2/1/2015 2/28/2015 28 206 206000	1196	1/1/2016	1/31/2016		230.428	230427800	7.433	11.499
1133 11/1/2015 11/30/2015 30 461.6 461600000 15.387 23.803 1128 10/1/2015 10/31/2015 31 173.1 173100000 5.584 8.638 1136 9/1/2015 9/30/2015 30 74.8 74800000 2.493 3.857 1130 8/1/2015 8/31/2015 31 292.1 292100000 9.423 14.577 1132 7/1/2015 7/31/2015 31 325 32500000 10.484 16.219 1127 6/1/2015 6/30/2015 30 254.7 254700000 8.49 13.134 1134 5/1/2015 5/31/2015 31 302.5 302500000 9.758 15.096 1131 4/1/2015 4/30/2015 30 366.7 396700000 13.232 20.456 1137 3/1/2015 31 321.9 32190000 10.384 16.064 1129 2/1/2015 3/31/2015 31 114.7 11470000 3.7	1195	12/1/2015	12/31/2015					
1128 10/1/2015 10/31/2015 31 173.1 173100000 5.584 8.638 1136 9/1/2015 9/30/2015 30 74.8 74800000 2.493 3.857 1130 8/1/2015 8/31/2015 31 292.1 292100000 9.423 1.4577 1132 7/1/2015 7/31/2015 31 325 325000000 10.484 16.219 1127 6/1/2015 6/30/2015 30 254.7 254700000 8.49 13.134 1134 5/1/2015 5/31/2015 31 302.5 302500000 9.758 15.096 1131 4/1/2015 4/30/2015 30 396.7 396700000 13.223 20.456 1137 3/1/2015 31 321.9 321900000 10.384 16.064 1129 2/1/2015 2/28/2015 28 206 206000000 7.357 11.381 1135 1/1/2014 12/31/2014 31 273.012 273011600 8.807 </td <td>1133</td> <td>11/1/2015</td> <td>11/30/2015</td> <td>30</td> <td></td> <td></td> <td></td> <td></td>	1133	11/1/2015	11/30/2015	30				
1136 9/1/2015 9/30/2015 30 74.8 74800000 2.493 3.857 1130 8/1/2015 8/31/2015 31 292.1 292100000 9.423 14.577 1132 7/1/2015 7/31/2015 31 325 325000000 10.484 16.219 1127 6/1/2015 6/30/2015 30 254.7 254700000 8.49 13.134 1134 5/1/2015 5/31/2015 31 302.5 302500000 9.758 15.069 1131 4/1/2015 4/30/2015 30 396.7 396700000 13.223 20.456 1137 3/1/2015 3/31/2015 31 321.9 321900000 10.384 16.064 1129 2/1/2014 1/31/2015 31 114.7 11470000 3.7 5.724 1055 12/1/2014 12/31/2014 31 273.012 273011600 8.807 13.624 1054 11/1/2014 11/31/2014 31 259.022 25965	1128	10/1/2015	10/31/2015	31				
1130 8/1/2015 8/31/2015 31 292.1 292100000 9.423 14.577 1132 7/1/2015 7/31/2015 31 325 325000000 10.484 16.219 1127 6/1/2015 6/30/2015 30 254.7 254700000 8.49 13.134 1134 5/1/2015 5/31/2015 31 302.5 302500000 9.758 15.096 1131 4/1/2015 4/30/2015 30 396.7 396700000 13.223 20.456 1137 3/1/2015 3/31/2015 31 321.9 321900000 10.384 16.064 1129 2/1/2015 2/28/2015 28 206 206000000 7.357 11.381 1135 11/1/2014 1/31/2014 31 273.012 273011600 8.807 13.624 1055 12/1/2014 11/30/2014 30 248.843 2488.84300 8.295 12.833 1053 10/1/2014 10/31/2014 31 327.655	1136	9/1/2015	9/30/2015	30			*	
1132 7/1/2015 7/31/2015 31 325 325000000 10.484 16.219 1127 6/1/2015 6/30/2015 30 254.7 254700000 8.49 13.134 1134 5/1/2015 5/31/2015 31 302.5 302500000 9.758 15.096 1137 3/1/2015 4/30/2015 30 396.7 396700000 13.223 20.456 1137 3/1/2015 3/31/2015 31 321.9 321900000 10.384 16.064 1129 2/1/2015 2/28/2015 28 206 206000000 7.357 11.381 1135 1/1/2014 1/31/2014 31 273.012 273011600 8.807 13.624 1054 11/1/2014 11/30/2014 31 359.655 309651600 11.602 17.948 1052 9/1/2014 9/30/2014 30 211.954 211953500 7.065 10.93 1053 8/1/2014 8/31/2014 31 227.645 <t< td=""><td>1130</td><td>8/1/2015</td><td>8/31/2015</td><td>31</td><td>292.1</td><td></td><td></td><td></td></t<>	1130	8/1/2015	8/31/2015	31	292.1			
1127 6/1/2015 6/30/2015 30 254.7 254700000 8.49 13.134 1134 5/1/2015 5/31/2015 31 302.5 302500000 9.758 15.096 1131 4/1/2015 4/30/2015 30 396.7 396700000 13.223 20.456 1137 3/1/2015 3/31/2015 31 321.9 321900000 10.384 16.064 1129 2/1/2015 2/28/2015 28 206 206000000 7.357 11.381 1135 1/1/2014 1/31/2014 31 273.012 273011600 8.807 13.624 1055 12/1/2014 11/30/2014 30 248.843 248843300 8.295 12.832 1054 11/1/2014 11/30/2014 30 211.954 211953500 7.065 10.93 1053 10/1/2014 9/30/2014 30 211.954 211953500 7.065 10.93 1052 9/1/2014 9/30/2014 31 227.645	1132	7/1/2015	7/31/2015	31	325			
1134 5/1/2015 5/31/2015 31 302.5 302500000 9.758 15.096 1131 4/1/2015 4/30/2015 30 396.7 396700000 13.223 20.456 1137 3/1/2015 3/31/2015 31 321.9 321900000 10.384 16.064 1129 2/1/2015 2/28/2015 28 206 206000000 7.357 11.381 1135 1/1/2014 1/31/2014 31 273.012 273011600 8.807 13.624 1054 11/1/2014 11/30/2014 30 248.843 248843300 8.295 12.832 1053 10/1/2014 10/31/2014 31 359.652 359651600 11.602 17.948 1052 9/1/2014 9/30/2014 30 211.954 211953500 7.065 10.93 1051 8/1/2014 8/31/2014 31 227.645 227644700 7.343 11.36 1049 7/1/2014 7/31/2014 31 321.50	1127	6/1/2015	6/30/2015	30	254.7			
1131 4/1/2015 4/30/2015 30 396.7 396700000 13.223 20.456 1137 3/1/2015 3/31/2015 31 321.9 321900000 10.384 16.064 1129 2/1/2015 2/28/2015 28 206 206000000 7.357 11.381 1135 1/1/2014 1/31/2015 31 114.7 114700000 3.7 5.724 1055 12/1/2014 12/31/2014 31 273.012 273011600 8.007 13.624 1054 11/1/2014 11/30/2014 30 248.843 248843300 8.295 12.832 1053 10/1/2014 10/31/2014 30 248.843 248843300 8.295 12.832 1055 9/1/2014 1/30/2014 30 211.954 211953500 7.065 10.93 1052 9/1/2014 8/31/2014 31 227.645 227644700 7.343 11.36 1049 7/1/2014 7/31/2014 31 263.243 263243100 8.492 13.137 1050 6/1/2014 6/30/201	1134	5/1/2015	5/31/2015	31	302.5	302500000		
1137 3/1/2015 3/31/2015 31 321.9 321900000 10.384 16.064 1129 2/1/2015 2/28/2015 28 206 206000000 7.357 11.381 1135 1/1/2015 1/31/2015 31 114.7 114700000 3.7 5.724 1055 12/1/2014 12/31/2014 31 273.012 273011600 8.807 13.624 1054 11/1/2014 11/30/2014 30 248.843 248843300 8.295 12.832 1053 10/1/2014 10/31/2014 30 221.952 359651600 11.602 17.948 1052 9/1/2014 9/30/2014 30 211.954 211953500 7.065 10.93 1051 8/1/2014 8/31/2014 31 226.243 263243100 8.492 13.137 1050 6/1/2014 6/30/2014 30 338.7 338700000 11.29 17.466 1044 5/1/2014 5/31/2014 31 321.5	1131	4/1/2015	4/30/2015	30	396.7	396700000		
1129 2/1/2015 2/28/2015 28 206 206000000 7.357 11.381 1135 1/1/2015 1/31/2015 31 114.7 114700000 3.7 5.724 1055 12/1/2014 12/31/2014 31 273.012 273011600 8.807 13.624 1054 11/1/2014 11/30/2014 30 248.843 248843300 8.295 12.832 1053 10/1/2014 10/31/2014 31 359.652 359651600 11.602 17.948 1052 9/1/2014 9/30/2014 30 211.954 211953500 7.065 10.93 1051 8/1/2014 8/31/2014 31 227.645 227644700 7.343 11.36 1049 7/1/2014 7/31/2014 31 263.243 263243100 8.492 13.137 1056 6/1/2014 6/30/2014 30 338.7 33870000 11.29 17.466 1044 5/1/2014 4/30/2014 30 358.8	1137	3/1/2015	3/31/2015	31	321.9	321900000		
1055 12/1/2014 12/31/2014 31 273.012 273011600 8.807 13.624 1054 11/1/2014 11/30/2014 30 248.843 248843300 8.295 12.832 1053 10/1/2014 10/31/2014 31 359.652 359651600 11.602 17.948 1052 9/1/2014 9/30/2014 30 211.954 211953500 7.065 10.93 1051 8/1/2014 8/31/2014 31 227.645 227644700 7.343 11.36 1049 7/1/2014 7/31/2014 31 263.243 263243100 8.492 13.137 1050 6/1/2014 6/30/2014 30 338.7 338700000 11.29 17.466 1044 5/1/2014 5/31/2014 31 362.8 358800000 11.96 18.502 1041 3/1/2014 3/31/2014 31 362.8 362800000 11.703 18.105 1028 2/1/2014 2/28/2014 28 248.249 <td>1129</td> <td>2/1/2015</td> <td>2/28/2015</td> <td>28</td> <td>206</td> <td>206000000</td> <td>7.357</td> <td></td>	1129	2/1/2015	2/28/2015	28	206	206000000	7.357	
1054 11/1/2014 11/30/2014 30 248.843 248843300 8.295 12.832 1053 10/1/2014 10/31/2014 31 359.652 359651600 11.602 17.948 1052 9/1/2014 9/30/2014 30 211.954 211953500 7.065 10.93 1051 8/1/2014 8/31/2014 31 227.645 227644700 7.343 11.36 1049 7/1/2014 7/31/2014 31 263.243 263243100 8.492 13.137 1050 6/1/2014 6/30/2014 30 338.7 338700000 11.29 17.466 1044 5/1/2014 5/31/2014 31 321.5 321500000 10.371 16.044 1039 4/1/2014 4/30/2014 30 358.8 358800000 11.96 18.502 1041 3/1/2014 3/1/2014 31 362.8 362800000 11.703 18.105 1042 1/1/2014 1/31/2013 31 252.658	1135	1/1/2015	1/31/2015	31	114.7	114700000	3.7	5.724
1053 10/1/2014 10/31/2014 31 359.652 359651600 11.602 17.948 1052 9/1/2014 9/30/2014 30 211.954 211953500 7.065 10.93 1051 8/1/2014 8/31/2014 31 227.645 227644700 7.343 11.36 1049 7/1/2014 7/31/2014 31 263.243 263243100 8.492 13.137 1050 6/1/2014 6/30/2014 30 338.7 338700000 11.29 17.466 1044 5/1/2014 5/31/2014 31 321.5 32150000 10.371 16.044 1039 4/1/2014 4/30/2014 30 358.8 35880000 11.96 18.502 1041 3/1/2014 3/31/2014 31 362.8 36280000 11.703 18.105 1047 1/1/2014 1/31/2014 31 252.658 252658100 8.15 12.608 961 12/1/2013 12/31/2013 31 223.859	1055	12/1/2014	12/31/2014	31	273.012	273011600	8.807	13.624
1052 9/1/2014 9/30/2014 30 211.954 211953500 7.065 10.93 1051 8/1/2014 8/31/2014 31 227.645 227644700 7.343 11.36 1049 7/1/2014 7/31/2014 31 263.243 263243100 8.492 13.137 1050 6/1/2014 6/30/2014 30 338.7 338700000 11.29 17.466 1044 5/1/2014 5/31/2014 31 321.5 321500000 10.371 16.044 1039 4/1/2014 4/30/2014 30 358.8 358800000 11.96 18.502 1041 3/1/2014 3/31/2014 31 362.8 362800000 11.703 18.105 1028 2/1/2014 2/28/2014 28 248.249 248249000 8.866 13.716 1047 1/1/2014 1/31/2013 31 223.859 223858600 7.221 11.171 960 12/1/2013 12/31/2013 31 304.399	1054	11/1/2014	11/30/2014	30	248.843	248843300	8.295	12.832
1051 8/1/2014 8/31/2014 31 227.645 227644700 7.343 11.36 1049 7/1/2014 7/31/2014 31 263.243 263243100 8.492 13.137 1050 6/1/2014 6/30/2014 30 338.7 338700000 11.29 17.466 1044 5/1/2014 5/31/2014 31 321.5 321500000 10.371 16.044 1039 4/1/2014 4/30/2014 30 358.8 358800000 11.96 18.502 1041 3/1/2014 3/1/2014 31 362.8 362800000 11.703 18.105 1028 2/1/2014 2/28/2014 28 248.249 248249000 8.866 13.716 1047 1/1/2014 1/31/2013 31 223.859 223858600 7.221 11.171 960 12/1/2013 12/31/2013 31 304.399 304398900 9.819 15.19 958 9/1/2013 10/31/2013 31 304.399	1053	10/1/2014	10/31/2014	31	359.652	359651600	11.602	17.948
1049 7/1/2014 7/31/2014 31 263.243 263243100 8.492 13.137 1050 6/1/2014 6/30/2014 30 338.7 338700000 11.29 17.466 1044 5/1/2014 5/31/2014 31 321.5 321500000 10.371 16.044 1039 4/1/2014 4/30/2014 30 358.8 358800000 11.96 18.502 1041 3/1/2014 3/31/2014 31 362.8 362800000 11.703 18.105 1028 2/1/2014 2/28/2014 28 248.249 248249000 8.866 13.716 1047 1/1/2014 1/31/2013 31 252.658 252658100 8.15 12.608 961 12/1/2013 12/31/2013 31 223.859 223858600 7.221 11.171 960 11/1/2013 11/30/2013 30 322.421 322421500 10.747 16.626 959 10/1/2013 9/30/2013 30 284.769	1052	9/1/2014	9/30/2014	30	211.954	211953500	7.065	10.93
1050 6/1/2014 6/30/2014 30 338.7 338700000 11.29 17.466 1044 5/1/2014 5/31/2014 31 321.5 321500000 10.371 16.044 1039 4/1/2014 4/30/2014 30 358.8 358800000 11.96 18.502 1041 3/1/2014 3/31/2014 31 362.8 362800000 11.703 18.105 1028 2/1/2014 2/28/2014 28 248.249 248249000 8.866 13.716 1047 1/1/2014 1/31/2014 31 252.658 252658100 8.15 12.608 961 12/1/2013 12/31/2013 31 223.859 223858600 7.221 11.171 960 11/1/2013 11/30/2013 30 322.421 322421500 10.747 16.626 959 10/1/2013 10/31/2013 31 304.399 304398900 9.819 15.19 958 9/1/2013 9/30/2013 30 284.769	1051	8/1/2014	8/31/2014	31	227.645	227644700	7.343	11.36
1044 5/1/2014 5/31/2014 31 321.5 321500000 10.371 16.044 1039 4/1/2014 4/30/2014 30 358.8 358800000 11.96 18.502 1041 3/1/2014 3/31/2014 31 362.8 362800000 11.703 18.105 1028 2/1/2014 2/28/2014 28 248.249 248249000 8.866 13.716 1047 1/1/2014 1/31/2013 31 252.658 252658100 8.15 12.608 961 12/1/2013 12/31/2013 31 223.859 223858600 7.221 11.171 960 11/1/2013 11/30/2013 30 322.421 322421500 10.747 16.626 959 10/1/2013 10/31/2013 31 304.399 304398900 9.819 15.19 958 9/1/2013 9/30/2013 30 284.769 284769200 9.492 14.685 957 8/1/2013 8/31/2013 31 365.457	1049		7/31/2014	31	263.243	263243100	8.492	13.137
1039 4/1/2014 4/30/2014 30 358.8 358800000 11.96 18.502 1041 3/1/2014 3/31/2014 31 362.8 362800000 11.703 18.105 1028 2/1/2014 2/28/2014 28 248.249 248249000 8.866 13.716 1047 1/1/2014 1/31/2013 31 252.658 252658100 8.15 12.608 961 12/1/2013 12/31/2013 31 223.859 223858600 7.221 11.171 960 11/1/2013 11/30/2013 30 322.421 322421500 10.747 16.626 959 10/1/2013 10/31/2013 31 304.399 304398900 9.819 15.19 958 9/1/2013 9/30/2013 30 284.769 284769200 9.492 14.685 957 8/1/2013 8/31/2013 31 365.457 265457500 8.563 13.247 956 7/1/2013 7/31/2013 31 329.765	1050	6/1/2014	6/30/2014	30	338.7	338700000	11.29	17.466
1041 3/1/2014 3/31/2014 31 362.8 362800000 11.703 18.105 1028 2/1/2014 2/28/2014 28 248.249 248249000 8.866 13.716 1047 1/1/2014 1/31/2014 31 252.658 252658100 8.15 12.608 961 12/1/2013 12/31/2013 31 223.859 223858600 7.221 11.171 960 11/1/2013 11/30/2013 30 322.421 322421500 10.747 16.626 959 10/1/2013 10/31/2013 31 304.399 304398900 9.819 15.19 958 9/1/2013 9/30/2013 30 284.769 284769200 9.492 14.685 957 8/1/2013 8/31/2013 31 265.457 265457500 8.563 13.247 956 7/1/2013 7/31/2013 31 346.967 346967200 11.192 17.315 955 6/1/2013 6/30/2013 30 321.283	1044	5/1/2014	5/31/2014	31	321.5	321500000	10.371	16.044
1028 2/1/2014 2/28/2014 28 248.249 248249000 8.866 13.716 1047 1/1/2014 1/31/2014 31 252.658 252658100 8.15 12.608 961 12/1/2013 12/31/2013 31 223.859 223858600 7.221 11.171 960 11/1/2013 11/30/2013 30 322.421 322421500 10.747 16.626 959 10/1/2013 10/31/2013 31 304.399 304398900 9.819 15.19 958 9/1/2013 9/30/2013 30 284.769 284769200 9.492 14.685 957 8/1/2013 8/31/2013 31 265.457 265457500 8.563 13.247 956 7/1/2013 7/31/2013 31 346.967 346967200 11.192 17.315 955 6/1/2013 6/30/2013 30 321.283 321282800 10.709 16.567 954 5/1/2013 5/31/2013 31 329.765	1039	4/1/2014	4/30/2014	30	358.8	358800000	11.96	18.502
1047 1/1/2014 1/31/2014 31 252.658 252658100 8.15 12.608 961 12/1/2013 12/31/2013 31 223.859 223858600 7.221 11.171 960 11/1/2013 11/30/2013 30 322.421 322421500 10.747 16.626 959 10/1/2013 10/31/2013 31 304.399 304398900 9.819 15.19 958 9/1/2013 9/30/2013 30 284.769 284769200 9.492 14.685 957 8/1/2013 8/31/2013 31 265.457 265457500 8.563 13.247 956 7/1/2013 7/31/2013 31 346.967 346967200 11.192 17.315 955 6/1/2013 6/30/2013 30 321.283 321282800 10.709 16.567 954 5/1/2013 5/31/2013 31 329.765 329765000 10.638 16.456 953 4/1/2013 4/30/2013 30 84.732 84732200 2.824 4.369 952 3/1/2013 3/31/2	1041	3/1/2014	3/31/2014	31	362.8	362800000	11.703	18.105
961 12/1/2013 12/31/2013 31 223.859 223858600 7.221 11.171 960 11/1/2013 11/30/2013 30 322.421 322421500 10.747 16.626 959 10/1/2013 10/31/2013 31 304.399 304398900 9.819 15.19 958 9/1/2013 9/30/2013 30 284.769 284769200 9.492 14.685 957 8/1/2013 8/31/2013 31 265.457 265457500 8.563 13.247 956 7/1/2013 7/31/2013 31 346.967 346967200 11.192 17.315 955 6/1/2013 6/30/2013 30 321.283 321282800 10.709 16.567 954 5/1/2013 5/31/2013 31 329.765 329765000 10.638 16.456 953 4/1/2013 4/30/2013 30 84.732 84732200 2.824 4.369 952 3/1/2013 3/31/2013 31 250.228 250228200 8.072 12.487 951 2/1/2013 2/28/2013 28 292.366 292365700 10.442 16.153 950 1/1/2013 1/31/2013 31 419.058 419058100 13.518 20.912 738 12/1/2012 12/31/2012 31 362.436 362436100 11.691 18.087	1028	2/1/2014	2/28/2014	28	248.249	248249000	8.866	13.716
960 11/1/2013 11/30/2013 30 322.421 322421500 10.747 16.626 959 10/1/2013 10/31/2013 31 304.399 304398900 9.819 15.19 958 9/1/2013 9/30/2013 30 284.769 284769200 9.492 14.685 957 8/1/2013 8/31/2013 31 265.457 265457500 8.563 13.247 956 7/1/2013 7/31/2013 31 346.967 346967200 11.192 17.315 955 6/1/2013 6/30/2013 30 321.283 321282800 10.709 16.567 954 5/1/2013 5/31/2013 31 329.765 329765000 10.638 16.456 953 4/1/2013 4/30/2013 30 84.732 84732200 2.824 4.369 952 3/1/2013 3/31/2013 31 250.228 250228200 8.072 12.487 951 2/1/2013 2/28/2013 28 292.366 292365700 10.442 16.153 950 1/1/2013 1/31/2013 31 419.058 419058100 13.518 20.912 738 12/1/2012 12/31/2012 31 362.436 362436100 11.691 18.087	1047	1/1/2014	1/31/2014	31	252.658	252658100	8.15	12.608
959 10/1/2013 10/31/2013 31 304.399 304398900 9.819 15.19 958 9/1/2013 9/30/2013 30 284.769 284769200 9.492 14.685 957 8/1/2013 8/31/2013 31 265.457 265457500 8.563 13.247 956 7/1/2013 7/31/2013 31 346.967 346967200 11.192 17.315 955 6/1/2013 6/30/2013 30 321.283 321282800 10.709 16.567 954 5/1/2013 5/31/2013 31 329.765 329765000 10.638 16.456 953 4/1/2013 4/30/2013 30 84.732 84732200 2.824 4.369 952 3/1/2013 3/31/2013 31 250.228 250228200 8.072 12.487 951 2/1/2013 2/28/2013 28 292.366 292365700 10.442 16.153 950 1/1/2013 1/31/2013 31 419.058				31	223.859	223858600	7.221	11.171
958 9/1/2013 9/30/2013 30 284.769 284769200 9.492 14.685 957 8/1/2013 8/31/2013 31 265.457 265457500 8.563 13.247 956 7/1/2013 7/31/2013 31 346.967 346967200 11.192 17.315 955 6/1/2013 6/30/2013 30 321.283 321282800 10.709 16.567 954 5/1/2013 5/31/2013 31 329.765 329765000 10.638 16.456 953 4/1/2013 4/30/2013 30 84.732 84732200 2.824 4.369 952 3/1/2013 3/31/2013 31 250.228 250228200 8.072 12.487 951 2/1/2013 2/28/2013 28 292.366 292365700 10.442 16.153 950 1/1/2013 1/31/2013 31 419.058 419058100 13.518 20.912 738 12/1/2012 12/31/2012 31 362.436		5 15		30	322.421	322421500	10.747	16.626
957 8/1/2013 8/31/2013 31 265.457 265457500 8.563 13.247 956 7/1/2013 7/31/2013 31 346.967 346967200 11.192 17.315 955 6/1/2013 6/30/2013 30 321.283 321282800 10.709 16.567 954 5/1/2013 5/31/2013 31 329.765 329765000 10.638 16.456 953 4/1/2013 4/30/2013 30 84.732 84732200 2.824 4.369 952 3/1/2013 3/31/2013 31 250.228 250228200 8.072 12.487 951 2/1/2013 2/28/2013 28 292.366 292365700 10.442 16.153 950 1/1/2013 1/31/2013 31 419.058 419058100 13.518 20.912 738 12/1/2012 12/31/2012 31 362.436 362436100 11.691 18.087				31	304.399	304398900	9.819	15.19
956 7/1/2013 7/31/2013 31 346.967 346967200 11.192 17.315 955 6/1/2013 6/30/2013 30 321.283 321282800 10.709 16.567 954 5/1/2013 5/31/2013 31 329.765 329765000 10.638 16.456 953 4/1/2013 4/30/2013 30 84.732 84732200 2.824 4.369 952 3/1/2013 3/31/2013 31 250.228 250228200 8.072 12.487 951 2/1/2013 2/28/2013 28 292.366 292365700 10.442 16.153 950 1/1/2013 1/31/2013 31 419.058 419058100 13.518 20.912 738 12/1/2012 12/31/2012 31 362.436 362436100 11.691 18.087				30	284.769	284769200	9.492	14.685
955 6/1/2013 6/30/2013 30 321.283 321282800 10.709 16.567 954 5/1/2013 5/31/2013 31 329.765 329765000 10.638 16.456 953 4/1/2013 4/30/2013 30 84.732 84732200 2.824 4.369 952 3/1/2013 3/31/2013 31 250.228 250228200 8.072 12.487 951 2/1/2013 2/28/2013 28 292.366 292365700 10.442 16.153 950 1/1/2013 1/31/2013 31 419.058 419058100 13.518 20.912 738 12/1/2012 12/31/2012 31 362.436 362436100 11.691 18.087			6 6	31	265.457	265457500	8.563	13.247
954 5/1/2013 5/31/2013 31 329.765 329765000 10.638 16.456 953 4/1/2013 4/30/2013 30 84.732 84732200 2.824 4.369 952 3/1/2013 3/31/2013 31 250.228 250228200 8.072 12.487 951 2/1/2013 2/28/2013 28 292.366 292365700 10.442 16.153 950 1/1/2013 1/31/2013 31 419.058 419058100 13.518 20.912 738 12/1/2012 12/31/2012 31 362.436 362436100 11.691 18.087				31	346.967	346967200	11.192	17.315
953 4/1/2013 4/30/2013 30 84.732 84732200 2.824 4.369 952 3/1/2013 3/31/2013 31 250.228 250228200 8.072 12.487 951 2/1/2013 2/28/2013 28 292.366 292365700 10.442 16.153 950 1/1/2013 1/31/2013 31 419.058 419058100 13.518 20.912 738 12/1/2012 12/31/2012 31 362.436 362436100 11.691 18.087				30	321.283	321282800	10.709	16.567
952 3/1/2013 3/31/2013 31 250.228 250228200 8.072 12.487 951 2/1/2013 2/28/2013 28 292.366 292365700 10.442 16.153 950 1/1/2013 1/31/2013 31 419.058 419058100 13.518 20.912 738 12/1/2012 12/31/2012 31 362.436 362436100 11.691 18.087					329.765	329765000	10.638	16.456
951 2/1/2013 2/28/2013 28 292.366 292365700 10.442 16.153 950 1/1/2013 1/31/2013 31 419.058 419058100 13.518 20.912 738 12/1/2012 12/31/2012 31 362.436 362436100 11.691 18.087				30	84.732	84732200	2.824	4.369
950 1/1/2013 1/31/2013 31 419.058 419058100 13.518 20.912 738 12/1/2012 12/31/2012 31 362.436 362436100 11.691 18.087				31	250.228	250228200	8.072	12.487
738 12/1/2012 12/31/2012 31 362.436 362436100 11.691 18.087					292.366	292365700	10.442	16.153
				31	419.058	419058100	13.518	20.912
				31	362.436	362436100	11.691	18.087
737 11/1/2012 11/30/2012 30 196.254 196254300 6.542 10.12					196.254	196254300	6.542	10.12
736 10/1/2012 10/31/2012 31 192.585 192584800 6.212 9.611				31	192.585	192584800	6.212	9.611
735 9/1/2012 9/30/2012 30 345.439 345439300 11.515 17.813							11.515	17.813
734 8/1/2012 8/31/2012 31 319.99 319990300 10.322 15.969					319.99		10.322	15.969
641 7/1/2012 7/31/2012 31 359.946 359946200 11.611 17.962							11.611	
640 6/1/2012 6/30/2012 30 295.136 295135900 9.838 15.219	640	6/1/2012	6/30/2012	30	295.136	295135900	9.838	15.219

639	5/1/2012	5/31/2012	31	355.582	355582300	11.47	17.745
638	4/1/2012	4/30/2012	30	395.908	395908000	13.197	20.416
637	3/1/2012	3/31/2012	31	354.914	354914200	11.449	17.711
636	2/1/2012	2/29/2012	29	253.459	253459300	8.74	13.521
635	1/1/2012	1/31/2012	31	205.321	205320800	6.623	10.246
634	12/1/2011	12/31/2011	31	413.215	413214900	13.33	20.621
633	11/1/2011	11/30/2011	30	368.388	368388100	12.28	18.997
632	10/1/2011	10/31/2011	31	230.686	230685900	7.441	11.512
631	9/1/2011	9/30/2011	30	272.714	272713600	9.09	14.063
630	8/1/2011	8/31/2011	31	337.976	337975700	10.902	16.866
629	7/1/2011	7/31/2011	31	348.278	348278300	11.235	17.38
628	6/1/2011	6/30/2011	30	428.988	428988200	14.3	22.121
627	5/1/2011	5/31/2011	31	189.327	189327000	6.107	9.448
626	4/1/2011	4/30/2011	30	395.513	395512500	13.184	20.395
625	3/1/2011	3/31/2011	31	406.502	406502000	13.113	20.286
624	2/1/2011	2/28/2011	28	339.198	339198100	12.114	18.741
623	1/1/2011	1/31/2011	31	269.273	269272600	8.686	13.438
622	12/1/2010	12/31/2010	31	421.906	421905500	13.61	21.054
621	11/1/2010	11/30/2010	30	394.509	394509000	13.15	20.344
620	10/1/2010	10/31/2010	31	230.686	230685900	7.441	11.512
619	9/1/2010	9/30/2010	30	224.347	224347400	7.478	11.569
618	8/1/2010	8/31/2010	31	346.815	346814700	11.188	17.307
486	7/1/2010	7/31/2010	31	281.626	281626200	9.085	14.054
486	5/1/2010	5/31/2010	31	357.879	357878500	11.544	17.859
486	6/1/2010	6/30/2010	30	301.807	301806800	10.06	15.563
486	4/1/2010	4/30/2010	30	413.077	413077100	13.769	21.301
456	3/1/2010	3/31/2010	31	383.416	383415600	12.368	19.134
455	2/1/2010	2/28/2010	28	201.66	201659700	7.202	11.142
454	1/1/2010	1/31/2010	31	285.311	285311400	9.204	14.238
372	10/1/2008	10/31/2008	31	299.491	299490700	9.661	14.946
294	9/1/2008	9/30/2008	30	352.421	352421000	11.747	18.173
289	8/1/2008	8/31/2008	31	404.439	404438500	13.046	20.183
288	7/1/2008	7/31/2008	31	396.97	396969800	12.805	19.81
280	6/1/2008	6/30/2008	30	374.48	374479800	12.483	19.311
272	5/1/2008	5/31/2008	31	286.824	286824000	9.252	14.313
266	4/1/2008	4/30/2008	30	304.73	304730000	10.158	15.714
260	3/1/2008	3/31/2008	31	377.867	377866500	12.189	18.857
250	2/1/2008	2/29/2008	29	413.942	413942300	14.274	22.082
247	1/1/2008	1/31/2008	31	217.491	217491000	7.016	10.854
241	12/1/2007	12/31/2007	. 31	99.648	99648060	3.214	4.973
240	11/1/2007	11/30/2007	30	300.329	300328800	10.011	15.487
233	10/1/2007	10/31/2007	31	441.357	441357100	14.237	22.025
128	9/1/2007	9/30/2007	30	309.436	309435900	10.315	15.957
127	8/1/2007	8/31/2007	31	259.002	259001500	8.355	12.925
126	7/1/2007	7/31/2007	31	242.8	242800000	7.832	12.117
125	6/1/2007	6/30/2007	30	464.599	464599000	15.487	23.958
124	5/1/2007	5/31/2007	31	216.645	216644700	6.989	10.811

123	4/1/2007	4/30/2007	30	248.5	248500000	8.283	12.814	
122	3/1/2007	3/31/2007	31	23.2	23200000	0.748	1.158	
121	2/1/2007	2/28/2007	28	110.7	110700000	3.954	6.116	
120	1/1/2007	1/31/2007	31	64.3	64300000	2.074	3.209	
119	12/1/2006	12/31/2006	31	42	42000000	1.355	2.096	
229	11/1/2006	11/30/2006	30	53.7	53700000	1.79	2.769	
228	10/1/2006	10/31/2006	31	370.45	370450000	11.95	18.487	
118	9/1/2006	9/30/2006	30	343.5	343500000	11.45	17.713	
117	8/1/2006	8/31/2006	31	256.47	256470000	8.273	12.799	
116	7/1/2006	7/31/2006	31	326.4	326400000	10.529	16.288	
115	6/1/2006	6/30/2006	30	363	363000000	12.1	18.719	



November 16, 2018

Mr. Ian Hirokawa, Special Projects Coordinator Department of Land and Natural Resources Land Division P. O. Box 621 Honolulu, Hawai'i 96809

RE: Updates on KIUC Activities per BLNR Request

Dear Mr. Hirokawa:

This letter provides a summary of Kaua'i Island Utility Cooperative's (KIUC) activities at the diversion facilities located on the North Fork River and Waikoko Streams, which they manage and operate through Revocable Permit No. S – 7340. We are also requesting an opportunity to present these updates directly to the Board of Land and Natural Resources (BLNR) at the December 2018 meeting.

As you know, during the December 2017 meeting RP No. S-7340 was approved for holdover by the BLNR with an amendment as outlined below and memorialized in the BLNR meeting minutes approved on January 12, 2018;

- 1. Within one year, KIUC will provide the Board with a proposal for the partial restoration of flow to the Wailua River (which could be satisfied by the adoption of interim instream flow standards).
- 2. Direct DLNR staff to work with landowners on what is expected for the watershed management plan.
- 3. KIUC shall consult with the Department of Hawaiian Homelands (DHHL) and honor DHHL's reservation rights of water under the law.

KIUC has taken the following steps to meet these conditions:

- On December 12, 2017, the KIUC Board approved funds for temporary modifications to the ditch system that will ensure stream flow continuity during all flow conditions. These modifications included constricting inflow into the ditch and releasing water at the sluice gate immediately downstream of the spillway. Also, KIUC has completed draft designs of long-term modifications to the spillway structures at both North Fork and Waikoko that will maintain interim instream flow standards (IIFS) as set by CWRM. The draft designs have been submitted to CWRM for review.
- On January 9, 2018, KIUC met with DHHL and discussed DHHL's plans on DHHL lands located within
 the Wailua watershed and any associated water needs. In March, KIUC hosted DHHL for a site visit of
 the North Fork and Waikoko diversions and the Waiahi Hydropower Plants. In September 2018 CWRM
 approved a DHHL water reservation of 1.2213 MGD for DHHL for waters from the surface water
 hydrologic unit of Wailua.
- KIUC has been in regular contact with DOFAW regarding expectations for the watershed management plan associated with water lease requirements.



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As background, KIUC applied with the Board of Land and Natural Resources (BLNR) for a water lease in 2004. At that time the Office of Hawaiian Affairs (OHA) filed a request for a contested case, which was later withdrawn due to the execution in 2006 of a Memorandum of Agreement (MOA) between OHA and KIUC. Per conditions set forth in the MOA, KIUC completed a Stream Biota Study in 2013, and a draft Cultural Impact Assessment (CIA) was completed in 2017. KIUC is currently undertaking additional cultural resource studies that will be included in the final CIA, which will likely be completed by the end of this year.

Additionally, KIUC has completed other studies in support of an environmental disclosure document including a flora fauna survey, an update to the Stream Biota Study and additional stream studies, and additional cultural and archaeological surveys. Initial study results have indicated that a minimal flow release at the North Fork and Waikoko diversions will address stream connectivity and ensure mauka to makai flow and there are no identifiable impacts to stream health or aquatic species, cultural and archaeological resources, or taro cultivation in the watershed.

While there are no construction activities related to KIUC's request for a water lease and no change of use of the facilities, KIUC is including plans for modifications at the spillway structures at North Fork and Waikoko streams in the environmental disclosure document, since this work would be implemented immediately after a water lease is granted. The diversions are located within the conservation district and the work associated with these spillway modifications may require the following permits: conservation district use permit, a SCAP from CWRM, consultation with SHPD, and possibly a 404 and 401. KIUC is consulting with the associated regulatory agencies regarding plans and associated permitting requirements.

We would appreciate the opportunity to give a presentation to the Board updating them on the work KIUC has accomplished over the last year in direct response to the Board's requests and in support of an environmental assessment.

Best regards,

David Bissell`

President and Chief Executive Officer

Cc: Laurel Loo, Shiramizu, Loo, & Nakamura, LLP

Dawn Huff, Joule Group