

# AKC Leasing Corporation

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October 19, 2022

David Smith  
Department of Land and Natural Resources  
Division of Forestry and Wildlife  
1151 Punchbowl Street, room 325  
Honolulu, HI 96813  
CERTIFIED RETURN RECEIPT: 7022-0410-0000-3039-2100

**Re: Request to close out *Achyranthes* HCP**

Dear Mr. Smith

Prior to, and at the ESRC meeting on February 4, 2022, we requested to close out our ITL for take of ewa hinahina (*Achyranthes splendens* var. *rotundata*) at our property at Kenai Industrial Park. With this letter we reiterate that we have met the success criteria and the intent of the HCP associated with our ITL, and formally request that DOFAW close out our ITL.

We acquired the subject property in September 2014 and the ITL and its conditions transferred to us with that acquisition. To date we have allocated significant resources to fulfill the mitigation requirements in the HCP, including implementation of adaptive management measures as outlined in the HCP.

The success criteria and our fulfillment of these criteria are as follows:

1. Outplanted individual survivorship:

- a. 100% of 120 outplanted individuals will survive by Year 1
- b. 95% of 120 outplanted individuals will survive by Year 2
- c. 85% of 120 outplanted individuals will survive by Year 3
- d. 75% of 120 outplanted individuals will survive by Years 4 and 5

We requested removal of the success criterion in August 2017 because information from botanists (Bruce Koebele, who has undertaken outplantings of ewa hinahina at Kalaeloa since the 1990's, David Aikoff, and Matthew Schirman) indicate the species is not as long-lived as assumed when the success criteria were approved. The ESRC agreed based on this conversation on April 26, 2018 that the success criterion should be removed. The language describing this conversation has been included in the past four annual reports.

The issue of the removal of Success Criterion 1 is still unresolved. Since 2018 DOFAW staff has promised to take the proposed revision to the HCP to the BLNR for approval, but this has not yet happened, despite our efforts to follow up and provide a draft board submittal. This year we further attempted to resolve this item in a letter from our consultants, SCWA, on March 2.

2. There must be:

a. Recruitment of seedlings that survive through the dry season, in absence of any supplemental watering.

The original outplants were watered during the 120-day establishment period in 2014-2015, after which no water was used until we repaired the irrigation system for the June 2021 outplants. There was no irrigation between April 10, 2015 and June 2021, meaning the recruitment and survival during those years happened in absence of supplemental watering. Successful recruitment of progeny has thus taken place and progeny have survived for at least six years without supplemental watering, therefore they meet the standard set forth in this success criterion.

The success criterion specifically requires progeny to survive without watering through the dry season, not the outplanted individuals. Seedling survival and recruitment have been documented in the annual reports as well as the monitoring reports.

b. Seed production by at least 25% of the outplanted lineages by Year 5.

Pursuant to the 2013 HCP for this project, the outplanted *ewa hinahina* consisted of 50% grown from KIP stock and 50% from the CCH stock. All outplanted *ewa hinahina* flowered and set seed, therefore the minimum criterion of at least 25% of the outplanted lineages producing seed has been met.

3. Number of seedlings recruited into the mature age class must be greater than the mortality rate of existing adult plants over a 5-year period, with a minimum recruitment of 25% of the number of outplanted individuals over a 5-year period.

The mortality of recruited progeny exceeded the number of plants reaching and surviving as adults over the five-year period, based on the total number of outplanted individuals. However, note that the minimum recruitment required was 25% as 75% of the original outplants were expected to still be alive at year 5. Considering the much higher than anticipated mortality of the original outplants, recruitment, which was at 97 individuals in May 2020, has far exceeded the expectations set by the HCP. The low survival rate of the original outplants triggered adaptive management, which in accordance with the HCP has resulted in additional outplanting at the mitigation site. The removal of the first success criterion did not fully consider the requirements of the third criterion, which resulted in progeny recruitment levels well beyond what was expected during the HCP approval process, yet still fell short of the success criterion. Furthermore, naturally recruited plants are generally more resilient and may be longer lived than outplanted individuals, thus the replacement rate of outplanted individuals by natural recruitment may not be an adequate indication of population viability. Therefore, we request that the evaluation of this success criterion be reconsidered.

To address the shorter than anticipated survival of the original outplants and related shortfall in short-term replacement by progeny, we have initiated further adaptive management measures in addition to outplanting additional *ewa hinahina* at the mitigation site. Cuttings were taken from the *ewa hinahina* plants at the mitigation site and grown in a nursery until DOFAW was able to take possession of the 113 plants on September 27, 2022. The plants will be held at DOFAW's Waimano nursery until they can be planted at the Kalaeloa Heritage Park, which is approximately 2.4 miles from the original mitigation site, in collaboration with the Kalaeloa Heritage and Legacy Foundation staff and volunteers. This will probably take place in December, depending on optimal conditions related to precipitation. A total of at least 100 plants will be installed at the Kalaeloa Heritage Park site and these plants are expected to grow under more favorable conditions compared to those planted at the original mitigation site.

4. No fewer than 120 mature plants, which will include plants recruited from the planted lineages, will be established by Year 5.

The adaptive management measures were not needed in order to meet the fourth success criterion, which states that “No fewer than 120 mature plants, which will include plants recruited from the planted lineages, will be established *by year 5*” (italics added). In April 2019, which was in year 5, 50 outplants were alive, and 79 mature progeny had been tagged, for a total of 129 plants. Therefore, this success criterion was met in year 5.

5. Cover of herbaceous non-native plants (e.g., buffelgrass, khaki weed [*Alternanthera pungens*], and golden crownbeard) will be less than 25% within the planting plots by Year 5.

The maintenance schedule specified in the HCP was maintained as described in the HCP. Because of the prevalence of non-native plants at the mitigation site, this success criterion is management dependent. During periods of time following maintenance visits and mechanical or hand weeding, the plots were mostly free of non-native plant cover. The timing of the monitoring visits relative to the maintenance visits strongly determined the actual cover of non-native species at the time of monitoring. The intent was to keep the plots mostly free of non-native vegetation cover to increase native plant cover and reduce resource competition for the outplanted ewa hinahina and their progeny, which was achieved during the monitoring period.

6. No mature kiawe will be within the planting plots over the 5-year period.

All kiawe trees were removed from the planting plots prior to plant installation, and no mature kiawe became established in the plots after the initial removal.


7. Native plant species cover within the planting plots will be greater than 25% by Year 5.

Similar to Success Criterion 5, this criterion is management-dependent as well as rainfall-dependent. Generally, plots met this success criterion throughout the monitoring period.

Ultimately, we care about the fate of the ewa hinahina plants, and hope the plants continue to fare well at the mitigation site as well as at the Kalaeloa Heritage Park site. Considering the fact that the HCP was based on a 30:1 mitigation ratio, a total take of two individual plants from an industrial park (requested take of 3), and shorter than expected life span of outplanted individuals, we consider the mitigation success criteria met, and have exhausted our funds implementing this mitigation program. We would like to reiterate that with the exception of the first success criterion, the success criteria were largely met before initiation of adaptive management. Adaptive management should be commensurate with the small shortfalls in mitigation success, and we believe that our additional outplantings and propagation have achieved that.

If you have any questions, we are happy to discuss. We would appreciate a response by November 11, 2022.

Sincerely,



Melwyn de Wolff  
AKC Leasing Corporation



Elisabeth “Betsy” Wilson  
AKC Leasing Corporation

CC: SWCA, Jaap Eijzenga <jeijzenga@swca.com>