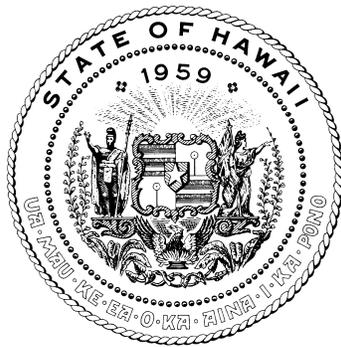


REPORT TO THE TWENTY-NINTH LEGISLATURE
STATE OF HAWAII
2017 REGULAR SESSION

RELATING TO SAFE HARBOR AGREEMENTS
FOR THE PERIOD JULY 1, 2015 – JUNE 30, 2016



Prepared by

THE STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
DIVISION OF FORESTRY AND WILDLIFE

In response to Section 2 of Act 37, Session Laws of Hawaii 2016

Honolulu, Hawaii
November 2016

**RELATING TO
SAFE HARBOR AGREEMENTS
FOR THE PERIOD JULY 1, 2015 – JUNE 30, 2016**

PURPOSE

Act 380, Session Laws of Hawai‘i (SLH) 1997, amended the State Endangered Species Law, Chapter 195D, Hawai‘i Revised Statutes (HRS), to provide for the preparation and implementation of habitat conservation plans (HCPs) and safe harbor agreements (SHAs) and to provide additional incentives for private landowners to recover and protect threatened and endangered species on their lands.

Incidental Take Licenses (ITLs) are issued in conjunction with an approved SHA for the legal take¹ of threatened or endangered species, if such take is incidental to an otherwise lawful activity. The cumulative impact of the activities under a SHA must provide net environmental benefits and must increase the likelihood that the endangered or threatened species for which incidental take is authorized will recover. Safe Harbor Agreements are important management tools in the State of Hawai‘i by accomplishing the following:

- Resolves conflicts between endangered species protection and legitimate use of natural resources;
- Contributes to endangered species recovery efforts through partnerships and proactive planning; and
- Provides essential ecological information for Hawai‘i’s resource managers by requiring a monitoring component.

This report complies with Section 2 of Act 37, SLH 2016, and provides:

- The number and kinds of SHAs approved pursuant to Section 195D-22, HRS; and
- Summary information regarding the content and performance of each SHA.

Pursuant to Section 2 of Act 37, SLH 2016, this report will be submitted to the Hawai‘i State Legislature prior to the convening of each odd-numbered regular legislative session. This report is submitted to fulfill the reporting requirement for Fiscal Year (FY) 2016 and provides detailed information for five SHAs approved under the ITL program. General locations for the SHAs are shown in Figure 1.

¹ “Take” means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect endangered or threatened species of aquatic life or wildlife, or to cut, collect, uproot, destroy, injure, or possess endangered or threatened species of aquatic life or land plants, or to attempt to engage in any such conduct (Section 195D-2, HRS).



Safe Harbor Agreements (As of FY 2016)

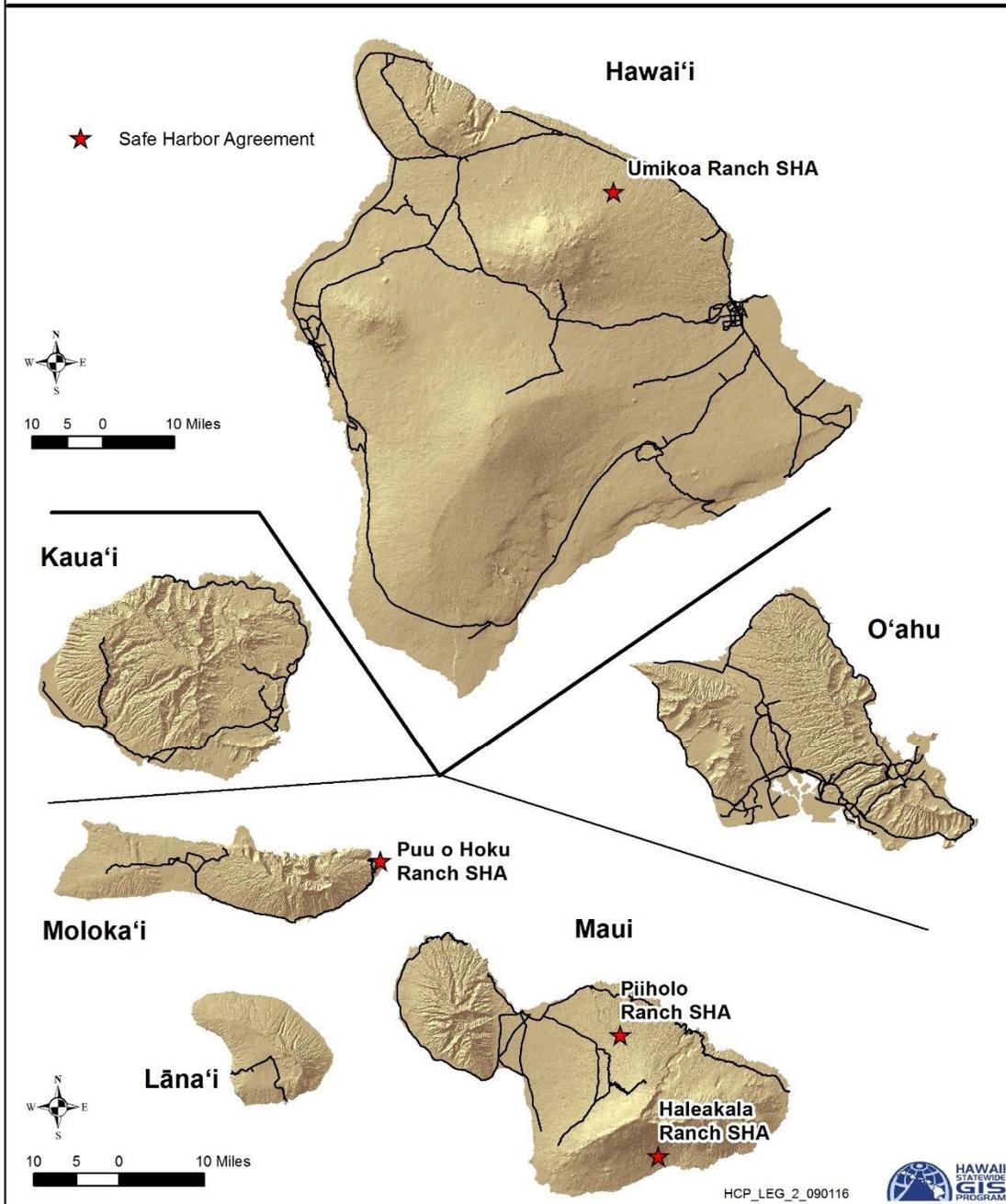


Figure 1. Location of Safe Harbor Agreements

**SUMMARY OF SAFE HARBOR AGREEMENTS AND ASSOCIATED
INCIDENTAL TAKE LICENSES**

Safe Harbor Agreement for Pu‘u o Hōkū Ranch, Moloka‘i. Approved 2001.

ITL Licensee: Pu‘u o Hōkū Ranch, Limited

Project: Reintroduce Nēnē (*Branta sandvicensis*) to Pu‘u o Hōkū Ranch, Moloka‘i.

ITL Duration: September 4, 2001 – September 3, 2008 (DOFAW is currently in discussion with Pu‘u o Hōkū Ranch to enter into a new agreement).

Take Authorization: Incidental take of Nēnē on lands owned or otherwise controlled by Pu‘u o Hōkū Ranch, Limited.



Nēnē, official bird of the State of Hawai‘i, resting in the foreground.

Baseline Condition: At the time of agreement execution, there was no wild Nēnē on Moloka‘i. Therefore the baseline condition is zero wild Nēnē on Pu‘u o Hōkū Ranch property.

Status of ITL: This SHA allows for the following: reintroduction of Nēnē on Pu‘u o Hōkū Ranch property, construct a release pen, provide habitat for Nēnē grazing and breeding, and control predators in the release pen and breeding areas.

Nēnē monitoring was performed on a weekly basis by Ranch and DOFAW personnel throughout the reporting period. Observations from surveys throughout the reporting period resulted in a total of 35 birds, as identified by their State and Federal bands, which is the estimated population size. A one-day annual nene survey of eastern Molokai was conducted on July 23, 2015 which resulted in a total of 18 banded birds observed.

A total of 74 birds were translocated to the Pu‘u o Hōkū Ranch from 2002-2005. Table 1 provides survey data over the past 13 years for the original 74 birds translocated to the Pu‘u o Hōkū Ranch. The percentage of the original 74 birds that were re-sighted is a factor of survey effort and does not account for any unknown mortality or emigration from the ranch, and may not necessarily be a measure of translocation success. The percentage of the original 74 birds that were re-sighted is a factor of survey effort and does not account for any unknown mortality or emigration from the ranch, and may not necessarily be a measure of release success.

Table 1. Observations of Nēnē translocated to Pu‘u o Hōkū Ranch

| Year | No. of Birds Translocated | Total Birds Translocated | No. of Known Fatalities | No. of Birds Sighted | Percentage (%) of Translocated Birds Sighted (excluding known fatalities) |
|------|---------------------------|--------------------------|-------------------------|----------------------|---|
| 2016 | 0 | 74 | 0 | 2 | 3 |
| 2015 | 0 | 74 | 0 | 4 | 5 |
| 2014 | 0 | 74 | 0 | 6 | 9 |
| 2013 | 0 | 74 | 0 | 6 | 9 |
| 2012 | 0 | 74 | 0 | 6 | 9 |
| 2011 | 0 | 74 | 0 | 7 | 11 |
| 2010 | 0 | 74 | 0 | 8 | 13 |
| 2009 | 0 | 74 | 0 | 18 | 28 |
| 2008 | 0 | 74 | 1 | 33 | 52 |
| 2007 | 0 | 74 | 0 | 38 | 58 |
| 2006 | 0 | 74 | 5 | 29 | 45 |
| 2005 | 11 | 74 | 2 | 47 | 67 |
| 2004 | 8 | 63 | 1 | 42 | 69 |
| 2003 | 41 | 55 | 1 | 54 | 100 |
| 2002 | 14 | 11 | 0 | 14 | 100 |

During the August – April nesting season a total of four nests were recorded within the open-top release pen at Puu O Hoku Ranch and no additional nests were located on the ranch or adjacent areas. One nest was successful in producing three goslings and all were banded. Two nests were abandoned and one nest was depredated, with no re-nesting.

The 3 acres within the open-top release pen was maintained monthly. A total of approximately 63 acres was mowed during this reporting period. A total of 45 mongoose and five cats were removed around the open-top release pen at the Pu‘u o Hōkū Ranch. No rats, mice or dogs were trapped this year.

Programmatic Safe Harbor Agreement for Nēnē on the Island of Moloka‘i, Hawai‘i. Approved 2003.

ITL Licensee: DOFAW to issue Certificates of Inclusion under authority of §195D-22, HRS, to landowners signing Cooperative Agreements.

Project: Encourage private landowner management activities to benefit Nēnē and provide regulatory assurances if Nēnē occupy or breed on their property.

ITL Duration: April 7, 2003 – April 6, 2053

Take Authorization: Any Nēnē or Nēnē habitat above Baseline Conditions, as defined in respective landowner Cooperative Agreements.

Baseline Condition: To be set in each landowner Cooperative Agreement.

Status of ITL: During the reporting period and to date, there are no landowners enrolled under this SHA; discussions with interested landowners are ongoing.

Safe Harbor Agreement for the Introduction of Nēnē to Pi‘iholo Ranch, Maui. Approved 2004.

ITL Licensee: Pi‘iholo Ranch, LLC

Project: Establish a Nēnē population on Pi‘iholo Ranch.

ITL Duration: September 21, 2004 – September 20, 2054

Take Authorization: Incidental take of Nēnē on lands owned or otherwise controlled by Pi‘iholo Ranch, LLC.



Pi‘iholo Ranch on Maui.

Baseline Condition: Following Nēnē reintroduction efforts on Maui that began at Haleakalā National Park in 1962, DOFAW began establishing a population in west Maui through a reintroduction program at Hana‘ula in 1995. However, prior to the development of the SHA, there had been no known Nēnē sightings at Pi‘iholo Ranch premises by DOFAW staff or Ranch personnel. Therefore the baseline condition was determined to be zero.

Status of ITL: Under this SHA, Pi‘iholo Ranch is maintaining or improving approximately 600 acres of Nēnē habitat for a period of 10 years. In cooperation with DOFAW, Pi‘iholo Ranch is undertaking the following activities: (1) construction of a Nēnē release pen; (2) predator control activities around Nēnē nesting and breeding sites; and (3) out-planting native plant species known to be Nēnē food sources.

Nēnē monitoring was performed on a weekly basis by Ranch and DOFAW personnel throughout the reporting period. Observational survey monitoring for Nēnē on Pi‘iholo Ranch throughout the reporting period resulted in a population estimate of 23 birds, including translocated birds.

Of the 48 birds translocated to the Ranch from 2005-2008, a total of 10 were sighted on Pi‘iholo Ranch during the reporting period.

Table 2 provides survey data over the past 10 years for the original 48 birds released to the Ranch. The percentage of the original 48 birds that were re-sighted is a factor of survey effort and does not account for any unknown mortality or emigration from the ranch, and may not necessarily be a measure of release success.

Table 2. Observations of Nēnē translocated to Pi‘iholo Ranch

| Year | No. of Birds Translocated | Total Birds Translocated | No. of Known Fatalities | No. of Birds Sighted | Percentage (%) of Translocated Birds Sighted (excluding known fatalities) |
|------|---------------------------|--------------------------|-------------------------|----------------------|---|
| 2016 | 0 | 48 | 0 | 9 | 20 |
| 2015 | 0 | 48 | 0 | 10 | 23 |
| 2014 | 0 | 48 | 0 | 10 | 23 |
| 2013 | 0 | 48 | 0 | 11 | 25 |
| 2012 | 0 | 48 | 0 | 11 | 25 |
| 2011 | 0 | 48 | 1 | 16 | 36 |
| 2010 | 0 | 48 | 0 | 23 | 51 |
| 2009 | 0 | 48 | 1 | 26 | 58 |
| 2008 | 10 | 48 | 0 | 30 | 65 |
| 2007 | 25 | 38 | 2 | 26 | 72 |
| 2006 | 8 | 13 | 0 | 12 | 92 |
| 2005 | 5 | 5 | 0 | 5 | 100 |

During the breeding season seven nests were observed within the Piiholo Ranch open-top release pen. One nest was successful this year and produced one fledgling. Four nests were abandoned. The other two nests in the open-top release pen had a total of four goslings hatch out but none survived to fledge; their deaths were attributed to avian predation. There were no re-nests this season.

At Pi‘iholo, a total of 9.75 acres were mowed annually both in and around the open-top release pen. Another 3.5 acres of grass was maintained by weed-eating along the perimeter fence line of the open-top release pen. Predator control efforts resulted in a total of 19 mongooses and one rat trapped and removed around the open-top release pen at Pi‘iholo Ranch. No cats, dogs, or mice were trapped during the reporting period.

Safe Harbor Agreement for the Reintroduction of Nēnē to Haleakalā Ranch, Island of Maui. Approved 2012.

ITL Licensee: Haleakalā Ranch Company

Project: Establish a Nēnē population on Haleakalā Ranch, Maui.

ITL Duration: May 22, 2012 – May 21, 2062

Take Authorization: Incidental take of Nēnē on lands owned or otherwise controlled by Haleakalā Ranch.

Baseline Condition: There had been no Nēnē sightings at Haleakalā Ranch by DOFAW staff or ranch personnel, prior to execution of the SHA. Therefore the baseline condition was determined to be zero.

Status of ITL: Haleakalā Ranch is creating or improving approximately 1,600 acres of Nēnē habitat for a period of 10 years. In cooperation with DOFAW, Haleakalā Ranch is undertaking the following activities: (1) construction of a Nēnē release pen; (2) predator control activities around Nēnē nesting and breeding sites; and (3) maintenance of access roads leading to the Nēnē release pen.

DOFAW conducted weekly monitoring during the reporting period at Haleakalā Ranch. Data and observations indicate an estimated population of 63 individual birds. A total of 53 birds were translocated to Haleakalā Ranch between 2011 – 2016. A total of 55 banded birds were sighted at Haleakala Ranch during the reporting period. On August 11, 2015, a Maui Island-wide Nene Survey was conducted, where twelve (12) banded Nēnē were counted at Haleakala Ranch. data obtained from yearly sightings produced an estimated population of 61 birds for Haleakala Ranch.

Table 3 provides survey data over the past five years for the original 53 birds translocated to the Ranch. Seven Nēnē (four adults and three goslings) from Kaua‘i and one injured bird from Moloka‘i were translocated to Haleakalā Ranch during this reporting period. The percentage of the original 53 birds that were re-sighted is a factor of survey effort and does not account for any unknown mortality or emigration from the ranch, and may not necessarily be a measure of release success.

A total of ten (10) other birds were captured in Central Maui and relocated to Haleakala Ranch pens.

Table 3. Observations of Nēnē translocated to Haleakala Ranch

| Year | No. of Birds Translocated | Total Birds Translocated | No. of Known Fatalities | No. of Birds Sighted | Percentage (%) of Translocated Birds Sighted (excluding known fatalities) |
|------|---------------------------|--------------------------|-------------------------|----------------------|---|
| 2016 | 8 | 53 | 0 | 28 | 60 |
| 2015 | 8 | 45 | 1 | 25 | 64 |
| 2014 | 0 | 37 | 2 | 23 | 84 |
| 2013 | 7 | 37 | 1 | 31 | 91 |
| 2012 | 20 | 30 | 2 | 30 | 100 |
| 2011 | 10 | 10 | 0 | 10 | 100 |

Six nests were found at Haleakala Ranch, five inside the open-top release pen and one on the ranch property outside the open-top release pen. Once the nest outside of the pen hatched, the family was moved into the open-top release pen. Of these six nests, four were successful resulting in the eight goslings fledged, all of which were banded. Additionally, a Central Maui family was relocated to Haleakala Ranch pen from which three goslings successfully fledged. This resulted in a total of eleven fledglings successfully fledged from Haleakala Ranch open-top release pen.

Satellite transmitters are being placed on selected Nēnē from Kaua‘i prior to release at Haleakalā Ranch. The satellite transmitters will be used to track Nēnē movement and habitat use on Maui to better inform management approaches. Currently, three Kaua‘i translocated birds have active transmitters and no new satellite telemeters were placed on birds this year.

The two-acre pen was mowed monthly and an additional 20.5 acres around the open-top release pen were mowed this reporting period. An additional 7.5 acres were maintained along the perimeter fence lines. Predator control efforts resulted in a total of 33 mongoose and 6 rats, removed around the open-top release pen. No cats, dogs, or mice were trapped during the reporting period.

Safe Harbor Agreement for the Koloa Maoli or Hawaiian Duck (*Anas wyvilliana*) and the Nēnē or Hawaiian Goose (*Branta sandvicensis*) on Umikoa Ranch, Island of Hawai‘i. Approved 2001.

ITL Licensee: Umikoa Ranch

Project: Establish a Koloa and Nēnē population on privately owned lands of Umikoa Ranch in the Hamakua District of Hawai‘i Island.

ITL Duration: December 5, 2001 – December 4, 2100

Take Authorization: Incidental take of Nēnē and Koloa, including their progeny, on lands owned or otherwise controlled by Umikoa Ranch, provided that such take is above established baseline conditions.

Baseline Condition: The Baseline Conditions for Koloa and Nēnē were determined from monthly biological surveys conducted between January and October 2000. During this time there were five existing ponds ranging from 0.12 to 0.30 acres, providing approximately one acre of open water habitat, in addition to 5 acres of adjacent upland habitat. Surveys indicated that the Umikoa wetland area was frequented by a single pair of wild Koloa. Therefore, the baseline for Koloa was determined to be two individuals, one acre of open water habitat, and five acres of adjacent upland habitat. The baseline for Nēnē was determined to be zero.

Status of ITL: Umikoa Ranch is maintaining fencing around a minimum of ten ponds, consisting primarily of open water, and surrounding riparian and associated upland habitat totaling a minimum of 50 acres.

No Koloa or Nēnē were reported using the ponds in the reporting period according to the landowner’s manager of the property. The fencing and maintenance of the ponds do support Koloa and Nēnē habitat. No non-native waterfowl were reported using the ponds during the reporting period. Fencing around four of the larger ponds was redone during the reporting period. Predator traps for cats and mongoose are maintained around the cabins in the lower portion of the property. Mongooses are being caught but no cats have been caught within the past six months. Stray dogs are also controlled.



Koloa Maoli or Hawaiian Duck, endemic to the Hawaiian Islands.

For information on DLNR's Endangered Species Recovery Committee, please see <http://dlnr.hawaii.gov/wildlife/esrc/>. For a full listing of the State's Safe Harbor Agreements please see <http://dlnr.hawaii.gov/wildlife/hcp/safe-harbor/>.

For further information on the State's Safe Harbor Agreements contact:

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