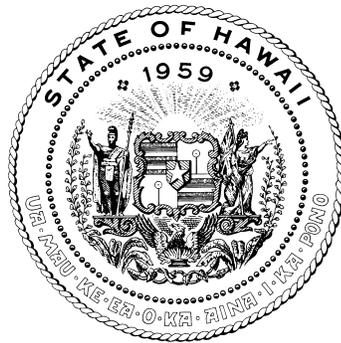


**REPORT TO THE TWENTY-FOURTH LEGISLATURE  
REGULAR SESSION OF 2008**

**STATUS OF THE ISSUANCE OF INCIDENTAL TAKE  
LICENSES FOR ENDANGERED, THREATENED, PROPOSED,  
AND CANDIDATE SPECIES;  
AND  
THE CONDITION OF  
THE ENDANGERED SPECIES TRUST FUND  
FOR THE PERIOD JULY 1, 2006 – JUNE 30, 2007**



**Prepared by**

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

In response to Section 195D-26, Hawaii Revised Statutes

Honolulu, Hawaii  
November 2007

**STATUS OF THE ISSUANCE OF  
INCIDENTAL TAKE LICENSES FOR ENDANGERED, THREATENED,  
PROPOSED, AND CANDIDATE SPECIES;  
AND  
THE CONDITION  
OF THE ENDANGERED SPECIES TRUST FUND  
FOR THE PERIOD JULY 1, 2006 – JUNE 30, 2007**

**PURPOSE**

Act 380, Session Laws of Hawaii 1997, amended the State Endangered Species Law, Chapter 195D, Hawaii Revised Statutes (HRS), to provide for the preparation and implementation of habitat conservation plans and safe harbor agreements, and to provide additional incentives for private landowners to recover and protect threatened and endangered species on their lands. Specifically, §195D-26, HRS, requires that an annual report be prepared by the Department of Land and Natural Resources (DLNR) on:

1. The effectiveness of habitat conservation plans or safe harbor agreements issued under Chapter 195D, HRS and the status of all species for which incidental take licenses have been issued;
2. Description of the condition of the Endangered Species Trust Fund established under §195D-31, HRS; and
3. Recommendations to further the purposes of Chapter 195D, HRS.

This annual report is submitted to fulfill the reporting requirement for Fiscal Year (FY) 2007.

**FINDINGS**

1. Effectiveness Of Habitat Conservation Plans (HCP) And Safe Harbor Agreements (SHA's) Issued Under Chapter 195D, HRS, and the status of all species for which incidental take licenses (ITL) have been issued;

The following individuals served on the Endangered Species Recovery Committee (Committee) during FY 2007.

Mr. Peter T. Young, Chairperson, Board of Land and Natural Resources (Agency Representative)

Designated Representatives

Mr. Bob Matsuda, Deputy Director for Land, DLNR, Honolulu

Dr. Scott Fretz, Wildlife Program Manager, DLNR - Division of Forestry and Wildlife (DOFAW), Honolulu

Dr. Patrick Leonard, Field Supervisor, United States Fish and Wildlife Service (USFWS), Pacific Islands Ecoregion (Agency Representative)

Designated Representative  
Dr. Jeff Newman, USFWS.

Dr. William Steiner, Director, United States Geological Survey (USGS), Pacific Islands  
Ecosystems Research Center (PIERC), Honolulu  
Designated Representative  
Dr. James Jacobi, USGS-PIERC, Honolulu

Dr. John Harrison, Executive Director, Environmental Center, University of Hawaii,  
Manoa, HI. (University Representative)

Dr. Karen Poiani, Senior Scientist, The Nature Conservancy, Honolulu, HI (Appointed  
Member, Term expired June 30, 2007).

Dr. Cliff Morden, Assistant Professor, University of Hawaii, Honolulu (Appointed  
Member, Term expires June 30, 2010)

The Legislature, during the 2007 Legislative Session, approved the appointment of Dr.  
Patrick Hart, Assistant Professor, University of Hawaii, for a term to begin July 1, 2007.

The Committee met four times during the reporting period and reviewed annual reports for  
the ITLs issued to date. The Committee made a recommendation to the Board of Land and  
Natural Resources to approve a programmatic SHA for landowners enrolled in Natural  
Resource Conservation Service habitat restoration programs statewide.

The sunset date on the issuance and approval of new SHAs, HCPs, and ITLs was extended to  
July 1, 2012 as a result of Act 90, Session Laws of Hawaii (SLH) 2006, amending Act 380,  
SLH 1997. ITLs have been issued to accompany the following HCPs and SHA's as of June  
30, 2007.

- A. Reintroduction of Nene to Puu O'Hoku Ranch, Molokai. Issued: September 4, 2001. The  
Puu O'Hoku Ranch was the first SHA issued in Hawaii. The SHA calls for Puu O'Hoku  
Ranch to allow the reintroduction of Nene on the Ranch, construct a release pen, provide  
habitat for Nene grazing and breeding, and to control predators in the release pen and  
Nene breeding areas. A total of 74 Nenes were released.

During FY 2007, monitoring movements, nesting activities and banding were  
continued on Puu O Hoku Ranch. Twenty-one nests were located in Puu O Hoku's  
open-top release pen. There were no nests located outside the pen on the ranch or  
around adjacent lands. Of the 21 nests, 22 goslings were reared and fledged into the  
wild. There were no additional releases made from Maui Bird Conservation Center.

Ninety-nine Nene were identified by their coded bands with the assistance of Ranch  
personnel. Twenty-one additional fledglings were captured and fitted with state and  
federal bands. There were no known deaths recorded this season. Data obtained from  
yearly sightings and an annual Nene survey indicated a population of 146 birds.

The predator trapping program continued surrounding the release pen and other areas of the Ranch. Thirty traps in and around the open-top release pen were monitored on a weekly basis by state personnel. Sixteen mongooses were removed from the Ranch. Additional trapping was also conducted by Ranch personnel around the stables and ranch house.

Twenty acres were mowed in the open-top release pen at the Ranch and 30 acres outside the pen were mowed by Ranch personnel. The Ranch also continues to assist in maintaining grass habitat for nene by cattle and horse grazing.

### Summary

Puu 'O Hoku							
Year	# released	# mortalities	# nests found	# fledged	# nests predated	# predators killed*	Est. pop size
2002	14	0	0	0	0	61	14
2003	41	1	4	2	no data	59	55
2004	8	1	6	10	no data	179	>54
2005	11	2	12	21	no data	17	>47
2006	0	5	12	9	2	83	>56
2007	0	0	21	22	10	16	146
Total	74	9	55	64	12	415	

\*includes mongooses, cats, dogs

- B. SHA and Habitat Management Plan for Koloa (Hawaiian Duck) and Nene (Hawaiian Goose) on Umikoa Ranch, Island of Hawaii. Issued: December 5, 2001. The Umikoa SHA calls for the creation and management of 2.0 acres of wetland ponds and 150 acres of riparian and associated uplands, fencing ponds, predator and weed control, and outplanting of food items to benefit Koloa and Nene. As per the SHA, eight permanent and two seasonal ponds ranging from 0.05 to 0.57 acres (totaling 2.01 acres) and 151.3 acres of ponds and uplands have been fenced, and are being managed for Koloa and Nene.

During FY 2007, the Umikoa Ranch continued its predator control program using diphacinone mongoose bait in pond areas. The current Koloa population is estimated to be six birds, which is three times the baseline number at the beginning of the SHA. There were no birds taken on the ITL.

- C. Programmatic SHA for the Nene on the Island of Molokai. Issued: April 7, 2003. This is the first "programmatic" SHA issued in the State. DOFAW is the licensee. Landowners can voluntarily enroll by signing a cooperative agreement with DOFAW, which commits them to make appropriate habitat on their land available to Nene for a period of 10 years, and in return, the landowner receives assurances from both state and federal agencies that they will not be held responsible if Nene should be accidentally harmed or killed on their property for the duration of the ITL, which expires in 2053.

During FY 2007, there were no landowners enrolled under this SHA prior to the end of FY 2007. DOFAW has conducted the necessary baseline surveys on the site immediately adjacent to Puu O Hoku Ranch where Nene reestablishment is occurring.

- D. Conservation Plan for Hawaiian Stilt at Cyanotech Aquaculture Facility Keahole Point, Island of Hawaii. Approved: June 13, 2002. The Plan covers ongoing operations and maintenance activities at Cyanotech's Aquaculture Facility within the Natural Energy Laboratory of Hawaii (NELHA) along the Kona Coast of the Big Island, and provides mitigation for the accidental loss of juvenile stilts in the Facility's production ponds. The following mitigation measures have been implemented: 1) Cyanotech created and maintained a 1.7-acre pond to produce optimum stilt breeding habitat – 48 Stilt chicks were fledged before the pond was drained and netted, to prevent further nesting at the facility because of safety concerns at the adjacent Kona Airport; 2) Predator control was conducted to reduce mortality of stilts present at the facility; and 3) Deterrent measures were implemented to discourage stilts from occupying the facility.

During FY 2007, the nesting habitat and Ducks Unlimited raceway continued to be maintained in a manner unusable to the stilts. Cleaning the *Spirulina* production raceways reduced the invertebrate food source. No Hawaiian Stilt incidental take was reported at Cyanotech. Cyanotech's conservation plan was amended to extend incidental take permits for ten years. There were no nests at the Cyanotech facility or in the lava field of Keahole International Airport.

Cyanotech supported predator control efforts at 'Opae'ula Pond in order to increase survivorship of all life stages of nesting Hawaiian Stilts and Hawaiian Coots. Predator control efforts consisted of utilizing 27 tamper-resistant bait boxes around the perimeter of the wetland baited with Diphacinone rodenticide. The predator control work and wildlife surveys were conducted on the second and fourth Monday of each month. In 2007, three stilt nests with three fledglings and three hatchlings were observed at the pond.

- E. HCP for *Abutilon menziesii* at Kapolei, Island of Oahu. Approved: April 8, 2004. This HCP was developed to cover the impacts and measures that will be taken to mitigate the impacts to the endangered plant species, *Abutilon menziesii*, that are present on a 1,381-acre of state and city-owned property, which is the site of the proposed construction of the North-South Road Highway, Kapolei Parkway and subsequent developments. Although the Department of Transportation is the sole applicant, the implementation of the HCP mitigates for the impact of development actions that may be conducted by other agencies/organizations that are not yet identified. To date, Certificates of Inclusion, which authorize incidental take to third parties, have been issued to the Department of Hawaiian Home Lands, the University of Hawaii, and the City and County of Honolulu. The HCP outlines a strategy to take cuttings and collect seeds from the existing plants prior to their removal and using these materials to: 1) Maintain genetic representation of the original population by growing cuttings in nurseries and placing seeds in seed storage facilities; and 2) Establish three new populations in protected areas elsewhere on Oahu.

In addition, the HCP provides funding to protect and maintain the wild populations for a minimum period of 20 years to ensure that they will survive. Cuttings from plants continue to be propagated in the greenhouse and to date, *Abutilon menziesii* has been outplanted at seven different sites: Diamond Head, Honouliuli Wildlife Refuge, Kealia Trail, Kaena Point, Ka Iwi State Park, Ewa Villages Golf Course, and Koko Crater Botanical Garden. Five of these sites will be used towards the goal of establishing three self-reproducing wild populations (Ewa Villages Golf Course, Diamond Head, Honouliuli Wildlife Refuge, Ka Iwi State Park, and Kaena Point). The Koko Crater Botanical Garden population will function as a protected repository for the full genetic stock of the Kapolei population. The Kealia Trail site was an experimental site to test the biological requirements of the plant.

During FY 2007, the focus was maintaining the established outplanting sites and to establish a test site at Pouhala Marsh to determine the feasibility of a full population at this site. The final known individual plants of the existing population were transplanted into the fenced "Contingency Reserve Area" at the Kapolei site. Twenty-five plants were translocated and none were killed. There are now approximately 50 individual plants of the original population contained within the Contingency Reserve Area. The three outplanting sites outlined within the HCP are at Diamond Head State Park, Honouliuli Wildlife Refuge, and another site to be determined from several test sites including Ewa Golf Course Rough, Pouhala Marsh, and Ka Iwi State Park. The original outplanting site at Kaena was essentially eliminated as one of the three sites due to the lack of recruitment over 3-4 years. This site had been threatened by fire in the past and the remaining outplants were destroyed by the Kaena fire in August 2007.

- F. SHA for the Introduction of the Nene to Piiholo Ranch, Island of Maui – Issued: September 21, 2004. Under this SHA, Piiholo Ranch is maintaining or improving approximately 600 acres of Nene habitat for a period of 10 years by continuing cattle ranching operations, thereby maintaining open, short-grass habitat; in cooperation with DOFAW, a Nene release pen was constructed and Piiholo Ranch has agreed to control predators around breeding and release sites and outplant native plant species known to be Nene food sources.

During FY 2007, banding and monitoring of movements and nesting activities were conducted on Piiholo Ranch with the assistance of Ranch personnel. Three nests were observed in the open-top release pen but no young fledged. There were two Nene deaths this past season on Piiholo Ranch. Both birds were found outside of the open-top release pen by Ranch personnel. Causes of death were undetermined due to the decomposition of the carcasses.

An annual Nene survey was conducted in June. Ten released birds were sighted on the Ranch. An additional 16 released birds were sighted throughout the year. Three released birds were reported at the Olinda Breeding Facility where their presence is not desirable. These birds were placed back into the open-top release pen at Piiholo.

On Piiholo Ranch, approximately 4.5 acres were mowed on a monthly basis. Cattle grazing continued throughout the ranch to maintain suitable habitat for Nene. One hundred 'ulei and 100 a'ali'i were planted in and around the open-top release pen by Ranch personnel and volunteers.

Seventeen predator traps were monitored weekly by Ranch personnel. Twenty-three mongooses, two cats and one dog were removed from the ranch.

### Summary

Pi'iholo							
Year	# released	# mortalities	# nests found	# fledged	# nests predated	# predators killed**	Est. pop size
2005	5	0	no data	no data	no data	no data	no data
2006	8	0	0	0	0	35	no data
2007	25	2	3	0	0	26	26
Total	38	2	3	0	0	61	26

\*includes mongooses, cats, dogs

- G. SHA for Chevron Hawaii Refinery, James Campbell Industrial Park, Island of Oahu. Issued: November 7, 2005. This SHA is for the management of nesting and foraging habitat for endangered Hawaiian Stilt and Hawaiian Coot at the Chevron Refinery Hawaii at the James Campbell Industrial Park on Oahu. The SHA has a term of six years and during that period, Chevron will maintain six acres of stilt nesting habitat and five acres of habitat for stilt and coot foraging. Chevron manages the water level and vegetation in a basin known as Rowland's Pond to maximize nesting habitat and conduct predator control around Rowland's Pond and several other ponded areas within the Refinery to provide additional foraging habitat. Chevron has committed to monitor the Stilts and Coots occurring on their property and implement adaptive management strategies, should current management activities appear ineffective. In addition, Chevron conducts an education program for its employees and contractors about the Hawaiian Stilt and Hawaiian Coot at the Refinery.

During the 2007 breeding season, 16 nests were found, containing a total of 51 eggs. Chicks hatched from a total of six nests, and a total of 12 chicks fledged. Only two nests were found outside of the area covered by the SHA, one of which fledged three chicks. One nest failed because the nest was constructed on a net, which was unstable and subsequently resulted in the disruption of the nest and the incidental take of two eggs. No other take incidents of juvenile or adult stilts were recorded. Three birds were seen with soiled plumage, presumably the result of sludge accumulation in the oxidation ponds, but the birds were not handled and there were no subsequent sightings. The fate of these birds is unknown.

- H. HCP for Kaheawa Pastures Wind Energy Generation Facility, Island of Maui. Issued: January 30, 2006. This HCP was developed to mitigate for impacts that construction and operation of the wind farm facility may have to four listed species: Hawaiian Petrel,

Newell's Shearwater, Hawaiian Goose and Hawaiian Bat. These species are known to be in the vicinity and could be injured or killed if they collide with one of the 20 wind turbines constructed on the site.

During FY 2007, Kaheawa Wind Power (KWP) continued ground searches near the turbines to detect any downed wildlife in accordance with the specifications of the HCP. One Hawaiian Petrel was reported to have struck and been killed by one of the wind turbines. No take from the other covered species was reported.

KWP has provided \$20,000 to DLNR to be used for the DLNR's Bat Conservation Program. KWP continues to work with DLNR to develop conservation measures for nene. DLNR is exploring two new reintroduction sites and hopes to develop and implement reintroductions at one of those sites in the next year.

KWP continues to conduct seabird surveys in the West Maui mountains in order to identify breeding colonies and conservation opportunities. Hawaiian Petrel and Newell's Shearwater were detected in several areas. A potential colony was identified in the West Maui Natural Area Reserve. Work is in progress to document the distribution of the colony and develop and implement conservation measures that will protect and enhance the colony and serve as mitigation in accordance with the HCP.

2. Description of the condition of the Endangered Species Trust Fund established under §195D-31, HRS; and

The sources of revenue for the Endangered Species Trust Fund are deposits into the Fund for implementation of SHAs, donations earmarked for endangered species projects, and proceeds from the sale of environmentally-themed products such as endangered species stamps, posters, books, etc., sold to the public to raise money for conservation of Hawaii's resources. Act 144, SLH 2004, amended the provisions establishing the Endangered Species Trust Fund by changing its status from a special fund to a trust fund, and to allow deposits of money provided as security, or to implement the obligations of a HCP. Trust funds are not currently assessed central services fees and administrative costs. This change in the statute is expected to encourage donations and use of the Fund by contributors and donors that have expectations that monies deposited into a trust fund, will be protected and available in the future for use for the intended purpose, such as actions required to implement HCPs or SHAs.

Revenues into the Fund in FY 2007 were derived from interest income (\$51,755), deposits in compliance with HCPs (\$139,600), a donation to support fire-related conservation measures (\$750), and a deposit from United States Department of Interior through the Natural Resource Damage Assessment Program of the USFWS, by way of Tesoro Corporation, to support projects conducted as mitigation for the Tesoro oil spill (\$175,000). The revenues derived from interest will be allotted to the various projects from which they were earned.

Expenditures made from the Endangered Species Trust Fund during FY 2007 included support of the HCP for *Abutilon menziesii* (\$53,876), the Hamakua Marsh Restoration Project (\$6,207), predator control in support of the Cyanotech HCP, and offshore island habitat management and restoration to support the Tesoro oil spill mitigation (\$55,588).

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**Status Of The Endangered Species Trust Fund (T-919, S-97-800, S-324)**

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Beginning Balance of Fund on July 1, 2006	1,117,610
Revenues during FY 2007	385,015
Expenditures during FY 2007:	119,438
Cash Balance as of June 30, 2007	1,383,187
Unpaid encumbrances as of June 30, 2007:	30,837
<b>Unencumbered Cash for carryover as of June 30, 2007:</b>	<b>1,352,350</b>

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**Summary of Revenues FY 2007**

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Investment Pool	51,755
Fire Suppression Donation	750
Abutilon HCP - UH West Oahu	50,000
Cyanotech Security Deposit	39,600
Abutilon HCP - City and County of Honolulu	30,000
Kaheawa Wind Power HCP - Bat Mitigation	20,000
Tesoro Oil Spill Restoration - 25K Kauai NESH, 150K Oahu Offshore Islands	175,000
Transfer from S-324	17,910
<b>Total Revenue for FY 2007</b>	<b>385,015</b>

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**Summary of Expenditures FY 2007**

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Abutilon HCP Mitigation	53,876
Tesoro Oil Spill Restoration - Oahu Offshore Islands	55,588
Cyanotech HCP - Predator Control	3,750
Administration	17
Hamakua Marsh Restoration	6,207
<b>Total Expenditures</b>	<b>119,438</b>

3. Recommendations to further the purposes of Chapter 195D, HRS.
  - A. Establish full time, civil service position for a Program Coordinator. This position is needed to conduct routine coordination with applicants to complete the process to issue ITLs, including close coordination with applicant to ensure compliance, assistance in the development of HCPs and SHAs that are required as conditions of the licenses, and communication and coordination with the Endangered Species Recovery Committee.

- B. Enact legislation to remove the “sunset” date on the use of new SHAs, HCPs, and ITLs as recovery options for conserving and protecting the State’s endangered species.
  
- C. Investigate need for further legislation to strengthen landowner incentives such as additional statutory recognition and guidance for the development of programmatic HCPs and SHAs to provide coverage for multiple landowners where appropriate. This will benefit endangered species by encouraging landowners to implement habitat conservation measures and will increase efficiency in the administration of the Program.