



**Kaua‘i Seabird Habitat Conservation Program
(KSHCP)**

Participant Inclusion Plan (PIP)

Name of Applicant/Participant: County of Kaua‘i

Part 1: Landowner & Property Information; Description of the Facilities; Avoidance & Minimization Measures; Monitoring of Take

Item 1. Provide the name of the landowner, business, agency, or institution and complete contact information. If the applicant/participant is different from the landowner, please attach power of attorney (or other documentation) allowing the party to act on the landowner's behalf.

Submitted on behalf of the County of Kaua'i by:

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Note: Power of attorney for the County cannot be granted without the concurrence of the County Council.

Primary Contact:

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Item 2. Provide the legal description of the property at which the existing facilities and Covered Activities are located, including Tax Map Key (TMK) number. Provide a survey of the property and site plan drawings showing the locations of the Covered Activities (lights), property boundaries, buildings & structures, and site features. If properties containing the Covered Activities comprise separate parcels please include all Tax Map Key numbers and maps.

Existing facilities at which the Covered Activities occur are the same facilities at which take authorization is sought. As such, responses to Item 2 and Item 3 are addressed together. Please see Item 3.

Item 3. Describe the existing Covered Activities for which incidental take authorization is sought. Include list of buildings, type and description of lights present, purpose and location of lights and current seabird lighting accommodation in place (e.g. shielding, downward pointing, switched off during fledging season, etc.). For "Types of lights" please use the following categories:

- ***Parking Lights***
- ***Signage Illumination***
- ***Wall-pack Building Lights***
- ***Landscaping/Grounds/Accent/Bollards***
- ***Indoor Lights Visible from Outdoors***
- ***Roof Floodlights***
- ***Other Lights***

Facility lighting plan may be submitted as lighting inventory. Photos may be attached. The suggested light table, and Green Sea Turtle assessment table below may each be modified as needed to provide the necessary information.

The County of Kaua‘i (the “County”) wishes to have all of its facilities included in the Kaua‘i Seabird Habitat Conservation Plan (“KSHCP”) and covered by the Incidental Take Permit/Incidental Take License (ITP/ITL) that will be issued if this application is approved.

Lighting Inventory

The County uses a wide variety of lights at its facilities. Over the past decade, stray light has been minimized to the maximum extent practicable by either replacing or modifying the fixtures, or by instituting operational procedures and controls that prevent or minimize their use during periods when they are likely to disorient protected seabirds.

It is not practicable or useful to list every fixture showing all makes, models, and styles in use. Even if that were practicable, ensuring that such a list is kept up-to-date for every fixture would be administratively burdensome without yielding commensurate benefit. Consequently, for the purpose of this application, the County has worked with KSHCP staff to establish categories of facilities characterized primarily by the types of lighting and uses present at each of its facilities. These categories are shown below in Table 1.

The facilities that fall into each of the five categories are listed in alphabetical order and by category in Attachment A, *County Facility Listing to the KSHCP*. Attachment A contains a list of the facilities (current as of October 31, 2018) that the County wishes to be covered under the ITP/ITL. The County will update the list of facilities annually to the best of its ability and will make the then-current version of the listing available to the agencies in its annual report. Please note that unlit and very minor, lit facilities which do not have the potential to affect Covered Species are included in the listing.

Attachment B contains maps and graphics showing the location and characteristics of lighting at County facilities for which the County believes site-specific information is relevant. This demonstrates that the County is complying with the requirements of downward directed, shielded lighting, and the placement of lights under eaves. The County has already adjusted lighting at certain facilities to ensure that it does not employ more lighting than is needed for public safety and effective operation.

Attachment C, Attachment D, Attachment E, and Attachment F contain photographs illustrating the types of lighting in each of the four categories of lighted facilities. These are examples illustrating the specific fixtures; they are not intended to depict the possibilities, nor to prescribe specific makes, models, or styles. There are circumstances that will require the use of portable flood lights by County personnel and its contractors. In order to address any impacts this activity may have on the Covered Species, a draft policy and standard operating procedure is included as Attachment H.

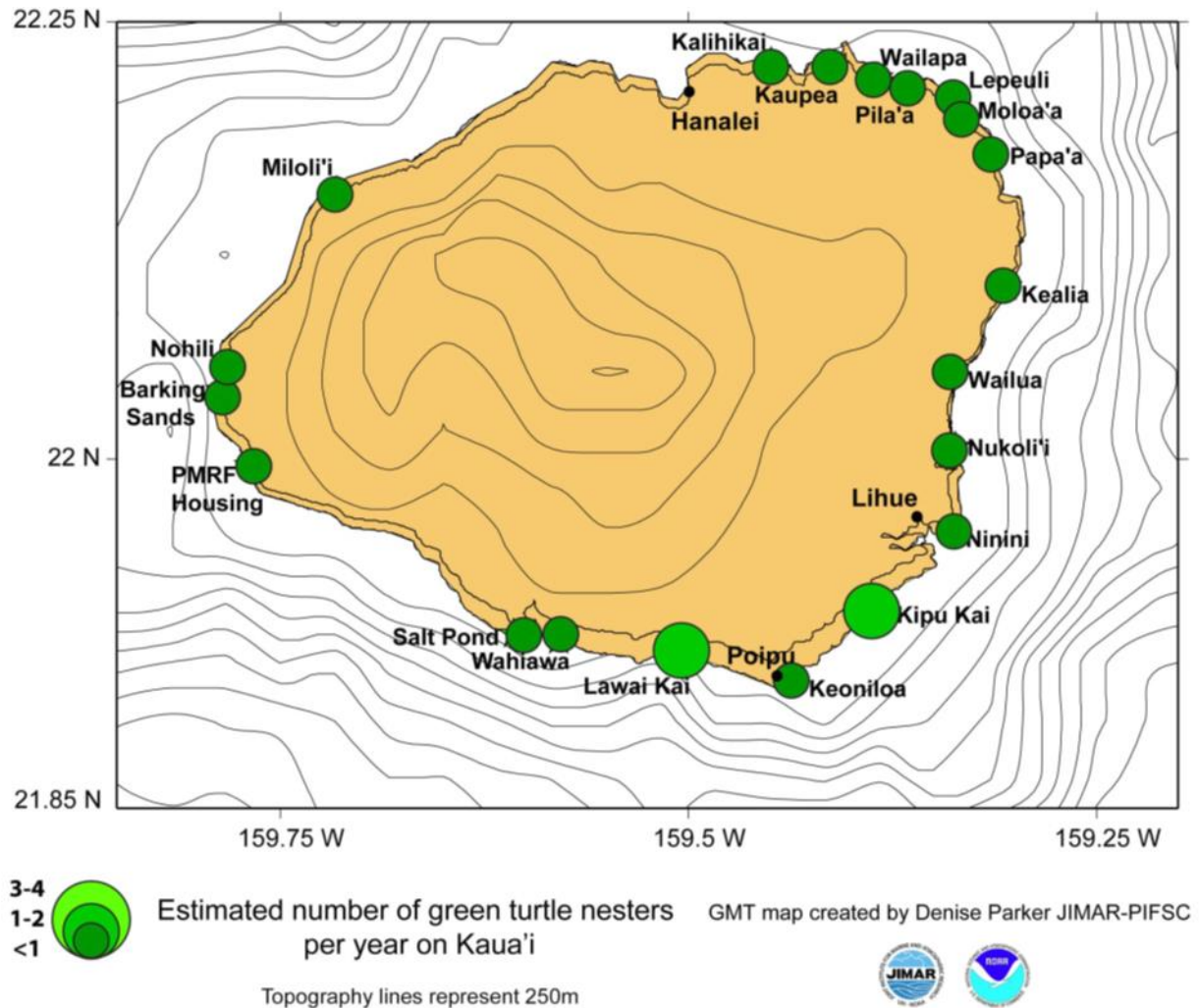
Table 1. Facility Classification

CATEGORY	NO. OF FACILITIES	USAGE
1. Confirmed Unlit Facilities	47	Unlit facilities.
2. Minimal Lighting	47 <u>5</u>	Facilities with minimal structural and/or parking lighting and/or lights are used infrequently. This includes such things as <u>bus stops</u> , neighborhood centers, base yards, and some beach parks. Some of the facilities in this category have lights that are under eaves or in other similar situations which prevent the light from shining directly outward. In general, none of the lamps present exceed 100 watts.
3. Limited External Lighting	37	Facilities with low levels (in lumens or on-time) of external building lighting or lit parking areas. In general, these facilities have a sufficient number of external lights to prevent their inclusion in Category 2, but whose lights can be managed and/or readily retrofitted so as to limit the release of stray light to insignificant levels and/or very short periods of time during sensitive periods.
4. Substantial Exterior Area & Court Lighting	11	Facilities with multiple high intensity lights and with significant area coverage. This category includes court lights (e.g., basketball courts, tennis courts, skateboard parks, volleyball courts, etc.) or significant external lighting such as parking or recreational areas (e.g. Kaua'i War Memorial Convention Center). <u>Lighting at these facilities are off from Sept. 15 through Dec. 15.</u>
5. High-Intensity Stadium & Field Lighting	12	Facilities which have numerous, frequently used, high-intensity light fixtures and whose use cannot be limited to non-seabird seasons. This category includes facilities that have field and stadium lights on high poles which by their nature are difficult to minimize. <u>Lighting at these facilities are off from Sept. 15 through Dec. 15.</u>
Note 1: Tabulation was taken as of October 31, 2018. The number of facilities, and possibly the categorization of individual facilities, will change over time as the County removes old facilities, adds new ones, and replaces older lighting fixtures.		
Note 2: Attachment C illustrates Category 3 lighting; Attachment D illustrates Category 4 lighting; and Attachments E and F illustrate Category 5 lighting.		
Note 3: Where lights are removed from a facility, qualifying it for a lower category designation, that change will be documented in the annual report submitted by the County.		
Note 4: In the decade since the KSHCP process began, the County facilities in Category 5 have been minimized to the extent that the County no longer has facilities which meet the Category 5 definition.		

Honu - Green Sea Turtle (*Chelonian mydas*) Assessment
Potential for Harm at Known Sea Turtle Nesting Areas.

Denise Parker and George Balazs (December 2015) of the NOAA-PIFSC Marine Turtle Research Program prepared a report showing known marine turtle nesting and basking areas in the Hawaiian Islands. Known nesting locations on Kaua'i, as identified in the report, are reproduced as Figure 1- NOAA - PIFSC and Table 2 - NOAA-PIFSC.

Figure 1. Known Green Sea Turtle Nesting Locations on Kaua'i



Source: Denise Parker and George Balazs (December 2015), *Map Guide to Marine Turtle Nesting and Basking in the Hawaiian Islands*, page 19.

Table 2. Green turtle (*Chelonia mydas*) nesting locations recorded on Kauaʻi

<i>PLACE NAME</i>	<i>LATITUDE (N)</i>	<i>LONGITUDE (W)</i>	<i>MAGNITUDE</i>	<i>FREQUENCY</i>
Lāwaʻi Kai	21° 53.3ʻ	159° 30.1ʻ	1-2	Regular
Wahiawa	21° 53.8ʻ	159° 34.5ʻ	<1	Intermittent
Salt Pond County Beach Park	21° 54.0ʻ	159° 36.4ʻ	<1	Intermittent
PMRF, Pacific Missile Range Facility Housing	21° 59.8ʻ	159° 46.1ʻ	<1	Intermittent
Barking Sands	22° 3.9ʻ	159° 46.9ʻ	<1	Intermittent
Nohili ditch	22° 3.2ʻ	159° 47.0ʻ	<1	Intermittent
Miloliʻi	22° 9.1ʻ	159° 43.1ʻ	<1	Intermittent
Kalihikai	22° 13.6ʻ	159° 26.9ʻ	<1	Intermittent
Kauapea (Secret Beach)	22° 13.4ʻ	159° 24.7ʻ	<1	Unknown
Wailapa	22° 13.0ʻ	159° 23.1ʻ	<1	Unknown
Pilaʻa	22° 12.7ʻ	159° 21.9ʻ	<1	Unknown
Lepeʻuli, (Larsenʻs Beach)	22° 12.3ʻ	159° 20.3ʻ	<1	Unknown
Moloaʻa	22° 11.6ʻ	159° 20.0ʻ	<1	Unknown
Papa	22° 10.4ʻ	159° 18.8ʻ	<1	Unknown
Keālia	22° 5.9ʻ	159° 18.3ʻ	<1	Unknown
Wailua	22° 3.0ʻ	159° 20.2ʻ	<1	Unknown
Nukoliʻi	22° 0.4ʻ	159° 20.2ʻ	<1	Unknown
Ninini, Nāwiliwili	21° 57.5ʻ	159° 20.3ʻ	<1	Unknown
Kīpū Kai	21° 54.8ʻ	159° 23.6ʻ	1-2	Regular
Keoniloa, Poʻipū	21° 51.5ʻ	159° 26.3ʻ	<1	Intermittent
Source: Denise Parker and George Balazs (December 2015), <i>Map Guide to Marine Turtle Nesting and Basking in the Hawaiian Islands</i> , page 20.				

Table 3 contains specific information about County facilities that have characteristics (e.g., sandy beaches, reported turtle nesting, or basking area) that make interaction possible. Of all the known nesting locations on Kauaʻi, only two are adjacent to land owned by the County, Salt Pond Park and Wailua Beach Park. The County facilities at those locations are not lighted during the turtle nesting season and, thus, do not have the potential for light attraction. The nesting locations themselves are below the certified shoreline and are subject to State rather than County jurisdiction. Consequently, the County is not in a position to erect blinds or other visual barriers that would prevent light attraction.

Potential for Harm at Potential Sea Turtle Nesting Areas.

In preparing this application, the County considered the possibility that during the term of the permit turtles might nest at locations where such behavior has not previously been documented (i.e., do not appear in Parker and Balazsʻ report) but which have suitable shoreline characteristics. Table 3 lists all the facilities that the County owns and operates that are near potential nesting areas. None of the facilities have lights visible from areas suitable for nesting and, thus, present no risk of harm.

Table 3. Green Sea Turtle Assessment

<u>LOCATION</u>	<u>TAX MAP KEY</u>	<u>Light Type</u>	<u>No. Of Lamps</u>	<u>Regular Usage</u>	<u>Frequency of Night Usage</u>	<u>Duration of Night Usage</u>	<u>Observed Nesting?</u>	<u>Observed Basking?</u>	<u>Sandy Shoreline</u>	<u>Risk of Harm</u>
Anahola Beach Park	4-8-014-006	No exterior lights.	0	n/a	None	n/a	No	No	Yes	No. No lights visible from areas suitable for nesting.
Anini Beach Park	5-3-05-05	No exterior lights.	0	n/a	None	n/a	No	No	Yes	No. No lights visible from areas suitable for nesting.
Blackpot Beach Park	5-5-001-004	No exterior lights, but vehicle lights.	0	n/a	None	n/a	No	No	Yes	No. No lights visible from areas suitable for nesting.
Hā'ena Beach Park	5-9-05-19	No exterior lights.	0	n/a	None	n/a	No	No	Yes	No. No lights visible from areas suitable for nesting.
Hanalei Pavilion	5-5-02-19	No exterior lights.	0	n/a	None	n/a	No	Yes	Yes	No. No lights visible from areas suitable for nesting.
Hanamā'ulu Beach Park Pavilion	3-7-03-08	No exterior lights.	0	n/a	None	n/a	No	No	Yes	No. No lights visible from areas suitable for nesting.
Hanapepe River Mouth Open Park Pavilion	1-9-08-07	No exterior lights.	0	n/a	None	n/a	No	No	No	No. No lights visible from areas suitable for nesting.
Kapa'a Beach Park	4-5-11-06	No exterior lights.	0	n/a	None	n/a	No	No	No	No. No lights visible from areas suitable for nesting.
Kapa'a Neighborhood Center	4-5-012-015	HPS Parking Lot Lights, Exterior Security Lights	4	Y	M-F Nights Only	6:00-7:30PM	No	No	No	No. No lights visible from areas suitable for nesting.
Kapa'a Swimming Pool & Bath House	4-5-012-001	4 1000-watt Pool Lights	0	n/a	None	n/a	No	No	No	No. No lights visible from areas suitable for nesting.
Kauai Sands Pump Station	4-3-02-12	No exterior lights.	2	Y	All week	All night	No	No	No	No. No lights visible from areas suitable for nesting.
Lucy Wright Park	1-6-06-01	HPS Parking Lot Lights	2	Y	All week <u>Daily</u>	<u>Dusk to dawn</u> <u>All night</u>	No	No	No	No. <u>No lights visible from areas suitable for</u>

<u>LOCATION</u>	<u>TAX MAP KEY</u>	<u>Light Type</u>	<u>No. Of Lamps</u>	<u>Regular Usage</u>	<u>Frequency of Night Usage</u>	<u>Duration of Night Usage</u>	<u>Observed Nesting?</u>	<u>Observed Basking?</u>	<u>Sandy Shoreline</u>	<u>Risk of Harm</u>
										nesting Photo-cell activated.
Lydgate	3-9-06-01	100-watt sodium	7	Y	Daily	Dusk to dawn	No	No	No	No. No lights visible from areas suitable for nesting.
Nāwiliwili Park	3-2-04-05	No exterior lights	0	n/a	None	n/a	No	No	No	No. No lights visible from areas suitable for nesting.
Niumalu Park	3-2-02-01	No exterior lights.	0	n/a	None	n/a	No	No	No	No. No lights visible from areas suitable for nesting.
Po'ipū Beach Park	2-8-17-01	No exterior lights.	0	n/a	None	n/a	No	No	No	No. No lights visible from areas suitable for nesting.
Salt Pond Park	1-8-08-43	HPS Parking Lot	6	Y	Upon request.	6:00-10:00 PM	Yes	No	Yes	No. No lights visible from areas suitable for nesting.
Wailua Beach Lifeguard Station (Park)	4-1-04-20	No exterior lights.	6	Y	5-7 days a week	Upon request.	Yes	No	Yes	No. No lights visible from areas suitable for nesting.
Wailua Golf Course	3-9-02-04	7 Mercury Vapor Parking Lot Lights, 2 Mercury Vapor Putting Green Lights, 4 Driving Range Lights, 2 Flood Lamps	0	n/a	None	n/a	No	No	Yes	No
Wai'oli Town Park	5-5-06-08	8 Metal Halide Lamps	0	n/a	None	n/a	No	No	No	No
Wai'oli Beach Park	5-5-04-02	No exterior lights.	0	N	None	n/a	No	No	Yes	No
Note 1: Nesting data is from "Map Guide to Marine Turtle Nesting and Basking in the Hawaiian Islands, December 2015, Data mapping product by NOAA-PIFSC Marine Turtle Research Program."										
Note 2: Low-intensity inside lights, lights under roof that point downward, and other small lights that do not shine toward ocean are not classified as exterior lights.										
Note 3: All of these facilities are inland of the certified shoreline which is typically defined as the vegetation line.										

Item 4. If applicable, describe any lighting standards (e.g., foot candles/area) required for facility operations or other requirements that necessitate the use of lighting (e.g., required for security, safety, operations). Describe the relevant standard, or regulation, and the areas and Covered Activities at the site (e.g., type of lighting) to which it applies.

There are numerous regulations that govern the use and desirable intensity of lights at County facilities. Some of these are regulatory standards, while others are simply recommendations and guidance documents. Relevant standards for County operations are summarized below. The County is not in a position to impose other conditions on private development.

- The County has adopted the International Building Code, and all construction and renovation must comply with the provisions of the code, including those related to lighting.
- The County must comply with the requirements of the State of Hawai‘i Occupational Safety and Health Program (which implements the Federal Occupational Safety and Health Act of 1970) as they pertain to workplace lighting. The Hawai‘i Department of Labor and Industrial Relations administers the Hawai‘i OSH Law (Chapter 396, H.R.S.) through its Hawai‘i Occupational Safety and Health Division (HIOSH) and has the authority to enforce all laws and standards concerning safety and health at the worksite. HIOSH standards or rules are contained within Title 12, Subtitle 8 of the Hawai‘i Administrative Rules.
- The Illuminating Engineering Society of North America publishes the *Lighting Handbook* (now in its tenth edition). It contains recommendations for lighting in a wide range of applications. While not regulatory, the *Lighting Handbook* does define best practices and, therefore, forms the basis for possible lawsuits against the County in areas where these practices are not followed. Consequently, the County generally follows the recommendations in the handbook when designing and retrofitting its facilities.
- The Illuminating Engineering Society of North America also publishes a handbook that provides design guidance specifically for sports and recreational areas [*Sports and Recreational Area Lighting (Report ID: RP-6-01)*]. As is true of the recommendations in the *Lighting Handbook*, the design guidelines that are laid out in the document are not regulatory in nature, but they do establish “best management practices” that the County must follow if it is to limit possible liability.

Item 5. Describe any plans/proposals for future facilities or expansion of existing facilities. Include any proposed structures and lighting by type, purpose, location, and quantity. Plans (architecture and site plans), photos, and drawings can be attached.

Please note that the County’s long-range Capital Improvement Plan includes a number of possible future facilities that have not yet been fully funded or constructed. This list includes facilities in various stages of design and/or construction, and proposed facilities. The completion dates of these facilities, and whether these will ultimately be constructed, depend upon competing priorities of the County Administration(s), consequently, all dates are approximate and the list is subject to change. These facilities will have limited outdoor lighting qualifying each as Category 3 or less and none are expected to result in the take of Covered Species. Those facilities are listed in Table 4 below.

Table 4. Proposed Future Facilities and Expansions

<i>Project</i>	<i>Expected Date of Completion</i>	<i>Description</i>	<i>Category</i>
Adolescent Treatment and Healing Center	2019	Construction activity limited to daylight hours during peak seabird fallout period; all outdoor lights will be shielded to prevent upward radiation; and exterior lights not needed for safety and security will be off during the fledgling period.	2
Bryan J. Baptiste Sports Complex Soccer Field	202 5 9	New facility will include a lit comfort station. Low-output, fully shielded lights will be placed only at the entrance. Any use of external lighting will comply with the KSHCP.	3 or less
Helicopter Hangar	2020	Hangar will be on leased space at Līhu'e Airport. Site will include apron lighting and be run 24/7 in accordance with Airport policy set by the State Department of Transportation. (Location undetermined.)	3
Kapa'a Armory Building/ Mahelona Hospital Renovation	2020	Drawings are not yet available. The current Kapa'a Armory Building is being used by the Kaua'i Police Department as a substation under an Executive Order from the state. The project may entail a new addition to the Kapa'a Armory B for additional office space or the construction of a new facility on the Mahelona Hospital grounds.	2
Koa'e Affordable Housing Development	2020	All outdoor lights will be shielded to prevent upward radiation. Construction activity will follow the mitigation recommendations received in the EA and any use of external lighting will comply with the KSHCP.	3
Līhu'e County Building and Annex (Pi'ikoi Office Renovation)	2020	Renovation of the existing Pi'ikoi building within the Civic Center complex to create additional office space for county workers. No additional exterior lights will be installed.	2
Līhu'e Town Core Mobility Project	2019	All outdoor lights will be shielded to prevent upward radiation. Construction activity will follow the mitigation recommendations received in the EA and any use of external lighting will comply with the KSHCP.	2
Līhu'e Wastewater Treatment Plant Food Waste to Energy Addition	2020	The existing facility will add a food waste to energy operation. The addition will be constructed with low-wattage, fully shielded lights to be placed at the entrance. They will be controlled by motion sensors, with a manual control override for use only under special circumstances.	3 or less

<i>Project</i>	<i>Expected Date of Completion</i>	<i>Description</i>	<i>Category</i>
Lima Ola Affordable Housing Development	2021	All outdoor lights will be shielded to prevent upward radiation. Construction activity will follow the mitigation recommendations received in the EA and any use of external lighting will comply with the KSHCP.	3
New Landfill Facilities	2023	The facilities are not yet fully defined and drawings are not yet available. thus, the e- Expected completion date is 2017 unknown. The site is close to the mountains, in relatively flat, open pastureland. Because operations will are anticipated to be 7 am to 5 pm (i.e., during daylight hours), no outside lighting is needed. Once the new landfill facilities come online, the old landfill will be decommissioned. Material Recovery Facilities that may be constructed at or near the landfill will not be run or owned <u>or operated</u> by the County.	1 or 2

Item 6. Pursuant to the Endangered Species Act (ESA), Section 10 (a)(2)(A)(iii), describe alternatives to avoid the taking considered and evaluated. Provide reasons why those alternatives are not being utilized. Alternatives can include operational or facility design changes (attach pages as needed). The tables below may be altered as needed.

Attachment A, *County Facility Listing to the KSHCP*, contains a complete list of all covered County facilities and a discussion of specific avoidance and minimization measures for each facility and category. All lights are either fully shielded or off during the fledgling season with the exception of a few as indicated on Attachment A. The exceptions are needed for the safety of the public and/or to allow the facilities to perform their intended public function. All of the County's choices fall into the "Restricted Usage of Lighting" alternative described in Section 8.3 of the KSHCP.

In addition to the detailed listing contained in Attachment A, information concerning the alternatives considered is summarized in Table 5.

Table 5. Seabird Light Attraction Minimization Measures Considered

Minimization Measures Considered	Feasible?	If not Feasible, Provide Reason
▪ Change time of light use (lights off earlier)	Yes	The County has adjusted the time of light use at its facilities to the maximum extent possible. Further changes in the time of light use are not feasible while also meeting operational requirements.
▪ Deactivate unnecessary lights	Yes	The County has deactivated lights at its facilities that are unnecessary. Further deactivation is not feasible while also meeting its safety, operational, and other obligations.
▪ Replace all outdoor lights with full cut-off fixtures	Partial	The County has done this at all facilities where such lights provide satisfactory lighting.
▪ Shield all outdoor lights with full cut-off shields	Partial	The County has done this at all facilities where such lights provide satisfactory lighting.
▪ Angle all lights downward	Yes <u>Partial</u>	The County has done this at all facilities where such lights provide satisfactory lighting.
▪ Lower intensity (lumens) of outdoor lights	Yes	The County uses the lowest light levels that provide satisfactory performance and do not create unsafe conditions.
▪ Change bulb color to non-white spectrum	Yes	No colors have been scientifically proven to reduce seabird light attraction in the kinds of light fixtures typically employed by the County.
▪ Prohibit/control unleashed predatory animals; prohibit outdoor feeding of animals; require sealed rubbish containers	Yes	Section 22, Article 2 of the Kauai County Code requires that (with certain very specific exceptions) dogs must be leashed when off the owner's property. Fines for violation range from \$50 to \$200. Section 22, Article 10 of the Kauai County Code requires dogs over three months of age to be licensed. Ordinance No. 965, which went into effect on February 14, 2014, establishes a cat licensing and spay/neuter program. Its purpose is to protect both cats and native wildlife by requiring that cats allowed to roam off their owner's property and are four months of age be sterilized and have a license. The County offers refuse collection services as provided for in Chapter 21 of the County Code. Service is once per week and the County requires that the cart lid be fully closed prior to pickup.
▪ Provide Worker Seabird Awareness Training to staff	Yes	The County provides such training.
▪ Provide outreach materials to staff & guests	Yes	The County provides such materials to staff.
▪ Host Save Our Shearwaters (SOS) Aid Station	Yes	The County hosts numerous SOS Aid Stations.

Item 7. Describe all site-specific seabird minimization measures considered for the Covered Activities. This item should follow KSHCP minimization objectives and measures as specified in the KSHCP document. Please consult with staff from the DOFAW and the USFWS as needed. The suggested tables below can be altered as needed.

Minimization measures modify the Covered Activities to reduce the effects of the activity on the Covered Species. KSHCP Participants will be required to implement minimization measures that apply to the facility to the “maximum extent practicable” per applicable state and federal laws which regulate incidental take license/permit issuance by the DLNR and the USFWS.

Minimization also entails searching and recovering grounded seabirds to minimize the chance of mortality. In addition, the presence of on-site predators (i.e. feral cats, dogs) should be controlled and removed because these animals can prey on grounded seabirds.

Provide justification, such as policies, regulations, or other rationale for measures that will not be implemented.

- a. The County has retrofitted all but one of its Category 4 and 5 facilities with shielded lighting. The exception is Waimea Tennis Courts, which will not be allowed for light use at all during the fledgling season. Furthermore, lighting has been removed altogether from the Wai‘oli Town Park (Basketball Court) after it was decided that the facility no longer needed to be available for nighttime use.

In addition to the cut-off retrofits, a new lighting control system has been installed for the facilities listed in Table 6. This system allows the County to completely control the lighting system and track its usage. County staff can schedule when the lights are available as well as review its actual usage. This means that the County can ensure that all of the lighting at these sites are turned off during the seabird fledgling season. For these sites, even if a user breaks into a control box at the park, they will not be able to turn the lights on during the seabird fledgling season.

Table 6. Facilities with Lighting Control Systems

<i>Facilities with Lighting Control Systems</i>	<i>Category</i>
Anahola Village Park (Basketball Court)	4
Bryan J. Baptiste Sports Complex (formerly known as Kapa‘a New Town Park) (Softball, Tennis Court, Basketball Court, Hockey Rink)	4
Hanapēpē Stadium (Tennis Court)	5
Kalawai Park (Softball field, Tennis Court)	5
Kekaha Faye Park (Softball, Tennis Court, Basketball Court)	5
Kōloa Park Field (Softball, Tennis Court, Basketball Court)	5
Līhu'e County Park (Tennis Court)	4
Vidinha Stadium (Baseball Field)	5
Wailua Homestead Park (Tennis Court)	5
Wailua Houselots Park (Tennis Court)	4
Waimea Canyon Park (Softball, Basketball Court)	5

Facilities with outdoor lighting systems controlled strictly by staff and the controls are in a secure location (e.g., office, lock box, etc.) are listed in Table 7.

Table 7. Facilities with Secured Lighting Controls

<i>Facilities with Secured Lighting Controls</i>	<i>Category</i>
Bryan J. Baptiste Sports Complex (formerly known as Kapa‘a New Town Park) (Stadium)	5
Hanapēpē Stadium (Stadium)	5
Kīlauea Park (Softball Field)	5
Peter Rayno Park (Softball Field)	5
Vidinha Stadium (Stadium)	5

With the exception of certain nights, the County has not and will not allow any of its Category 4 and 5 outdoor recreational facilities to have high-intensity lighting illuminated during the fledgling season.

During the non-fledgling season, the County will:

- Have timers set to turn off lights after a specified amount of time (e.g., one hour) to avoid lights being on with no users. Users can continue use of lights by pressing a ‘restart’ button at the site;
- continue to shut off ALL high-intensity lighting at its outdoor recreation facilities no later than 10:00 PM; and
- limit use of lights at softball fields and stadiums to permitted users only.

Together, the retrofitted lighting and operational procedures at its facilities (including prohibitions on the use of high-intensity/unshielded lights at most locations during the fledgling season) will avoid and/or minimize the impact of the County’s facilities on the Covered Species.

As an implemented policy, the County now requires all of its new facilities to comply with KSHCP recommendations for full cut-off fixtures to minimize light pollution.

County parks staff typically check light timers at least twice a month as part of their overall maintenance responsibilities. When they find a timer that is malfunctioning, staff report the information to their supervisor. In turn, the supervisor works with other County Staff as appropriate to schedule repairs and/or replacement. Lights are inoperable when timers are inoperable.

For all new construction and maintenance work where light fixtures are installed or replaced, the County will do its utmost to comply with KSHCP lighting recommendations for full cut-off fixtures. Only in those unusual circumstances (e.g., DUI checkpoints where motorists are subject to unannounced traffic stops, or emergency rescue and response), where the use of full cut-off fixtures would make it impossible to meet the operational requirements (e.g., where they would not provide sufficient illumination to meet safety codes or provide adequate safety or security), will the County consider the use of other types of lighting.

- b. In addition to the many avoidance and minimization measures that are described above that the County has implemented concurrently with the development of the KSHCP, the County proposes to implement the following additional conservation measures:
 1. For all County facilities listed in Categories 2 and 3, over time the County will replace all lighting so as to comply with KSHCP recommendations for full cut-off fixtures; this will be done as the existing fixtures reach the end of their useful lives. These retrofits will occur as part of the normal renovation and replacement of County facilities, or sooner where any specific problem of take might occur. All such replacements are anticipated to be completed within ten (10) years of issuance of an ITP/ITL the County is requesting. Finally, in addition to the physical changes, the County has altered its operations and the use of its facilities as much as it possibly can while prioritizing and ensuring the public's safety. The County believes that this represents the maximum extent practicable for Category 2 and 3 facilities for the following reasons:
 - a. The lights and activities that are located at Category 2 facilities are of such a "*de minimis*" character (e.g., 60-, 75-, and 100-watt incandescent bulbs in fixtures mounted on the sides of buildings; 40-watt fluorescent tubes under cover of roofs; etc.) that they have no quantifiable potential for light attraction. In view of this, the County believes that ensuring that these fixtures are replaced with fully shielded fixtures at the end of their useful lives minimizes the potential for adverse effect to the maximum extent practicable.
 - b. Most of the lights at Category 3 facilities are of the same "*de minimis*" sort as those discussed above for Category 2 facilities. The County believes that for these lights upgrading at the end of their useful lives minimizes the potential for adverse effect to the maximum extent practicable. Certain lights at Category 3 facilities (e.g., 150-watt floodlights at police and fire stations) cast more light than the lower-wattage fixtures, and the County proposes to minimize the potential for adverse effect from these by: (i) turning these lights on only when needed to maintain safe and secure operations and (ii) using them only for the shortest reasonable length of time. That will be accomplished through the use of devices such as motion-sensors (which will keep lights off when there is no activity) and increased awareness training of County personnel.

2. For Category 4 facilities (i.e. playing areas for field sports such as baseball and soccer and for tennis and basketball courts), as indicated in Attachment A:
 - a. The County will not illuminate Category 4 playing fields from September 15 through December 15 (i.e., during the fledging season), thereby eliminating all potential for light-related take at those facilities during this period.
 - b. The County will not allow any Category 4 playing courts to be lit from September 15 through December 15, thereby eliminating all potential for light-related take at those facilities during this period.
3. As described in detail in the attachments to this application, for Category 5 facilities (particularly football stadiums) where night games currently occur during the fledgling season, the County will maintain the partially shielded fixtures that it installed following review and approval by the USFWS. Where nighttime events at stadiums that have shielded lighting are allowed, the County will monitor those events in accordance with the provisions outlined in the Memorandum of Understanding between the County and USFWS, effective September 13, 2018 (Attachment J). The results of the County's monitoring of games during the 2017, ~~and 2018, and 2019~~ seabird fledgling season indicates that the modifications that it has made to the stadium lighting have greatly reduced the potential for light attraction. Because of this, the County will continue to allow night-time light use at some facilities; provided the selected nights avoid the peak fledgling migration period and are timed to the moon phase such that fallout is deemed low-risk; provided further that such use does not cause it to exceed the take that is authorized if this application is approved. If the real-time results of monitoring during any year indicate that it is likely to result in take in excess of the authorized amount for the then-current calendar year, the remaining night-time use dates will be rescheduled to a time and/or place where light attraction will not result. In response to agency suggestions, the County has considered and carefully evaluated a County-wide or County facility-wide ordinance that would require the use of seabird-friendly lighting for all new development within the County. A number of considerations, however, make such a measure infeasible at this time. Therefore, the County Administration is not proposing such a measure as part of this application.

Proposing such a measure would not in any way ensure that it would become law since the Kaua'i County Council would ultimately vote on any such measure. In addition, imposing such a requirement on the people of Kaua'i differs from other commitments that are part of the County's application in two fundamental ways:

- First, it would impose requirements on parties (such as individual home and business owners seeking building permits) other than the County itself.
- Second, it would burden the County with a costly enforcement role that it does not presently have.

Moreover, if the County were to impose such requirements on parties other than itself, it would constitute substantial "mitigation" that should offset unavoidable take by County-owned facilities. In the absence of a mechanism by which the magnitude of that benefit

could be fairly judged, it could not be adequately addressed in any decision related to the adequacy of the overall avoidance, minimization, and mitigation package.

Notwithstanding the foregoing, the County is investigating the possibility of adding advisory language to certain building and development permit forms that will inform applicants that all property owners must comply with federal and state endangered species requirements. The language could be modeled on the following language that is currently included in County Film Permit applications:

IMPORTANT! The applicant acknowledges that the fledgling season for the endangered 'U'au or Hawaiian Petrel and threatened 'A'o or Newell's Shearwater is from September 15 – December 15. The applicant acknowledges and understands that it is responsible to comply with the Endangered Species Act of 1973 (7 U.S.C. sect. 136, 16 U.S.C. sect. 1531 et seq.) and Hawai'i Revised Statutes Chapter 195D for any activities that could cause any take of endangered or threatened species, including the installation and use of any lights while filming during the fledgling season at any property. To minimize adverse impacts on listed endangered and threatened species, the applicant shall use only the following types of external lights: shielded lights, cut-off luminaries, or indirect lighting, all preferably having a 90-degree cut-off. Spotlights aimed upward or spotlighting of structures, landscaping, or the ocean shall be prohibited. Applicants should contact the United States Fish and Wildlife Service to obtain an Incidental Take Permit (ITP) and/or the Department of Land and Natural Resources, Division of Forestry and Wildlife to obtain an Incidental Take License (ITL) for any activities that could cause take of threatened or endangered species.

The applicant agrees and understands that it shall defend, indemnify, and hold harmless the County of Kaua'i, its officers, agents, assigns, and employees from and against any and all claims arising directly or indirectly out of the applicant's activities that affects any endangered or threatened species, including the use of lights during the fledgling season.

- c. Measures which the County will take in order to avoid or minimize the impact of future facilities include:
 - 1. Continue to install and use seabird-friendly lighting at all new County facilities.
 - 2. Promote seabird-friendly practices by County employees and users of County facilities through education and training.
- d. The County will deploy as necessary traps or other appropriate mechanisms during the seabird fallout period to reduce the presence of predators at facilities where minimization measures are not likely to result in the avoidance of seabird take.
- e. It is unlawful for any person to lead or let loose any domestic animal at County parks and recreation facilities.

Item 8. Minimization Plans. Provide a plan to minimize the effects to the Covered Seabirds due to the Covered Activities. KSHCP Participants will be required to minimize the effects of the Covered Activities to the “maximum extent practicable” per applicable state and federal laws which regulate take license/permit issuance. The KSHCP document provides minimization objectives and measures to follow.

The Minimization Plans should include the proposed minimization measures, an estimated completion schedule, and estimated cost for each facility. In this item, the Participant can include measures already completed or in place (new lights, shields, operational changes).

For minimization measures not yet determined but anticipated to occur at the facility, this section should include an estimated cost that will be earmarked to future minimization measures and a process to determine how and when those measures will be evaluated, selected, and decided (such as a cost-benefit analysis).

If applicable, the participant must provide the reasoning why certain measures will not be implemented. The suggested table below may each be altered to best describe the Minimization Plan. Attach additional pages, photos, and drawings as needed.

With the exception of the Waimea Tennis Court due to budget constraints, all of the Category 4 and 5 facilities have already been retrofitted with shielded lighting. Furthermore, a new light control system has been installed and implemented at most of the Category 4 and 5 facilities. In addition, the County has already implemented procedures to minimize use of all of its lights at all of its facilities. Please see Attachments A-F for details on the County’s minimization measures. In addition, all minimization measures described in Items 7 and 8 will be applied to any new facilities constructed, acquired, and operated by the County during the term of the take authorization.

Item 9. Take Monitoring Plan. Provide a plan to monitor take of the Covered Species at the facilities proposed to be covered by the incidental take permit/license. The take monitoring plan describes how the property will be searched for downed Covered Seabirds. The KSHCP document provides standards and guidelines for take monitoring to ensure that take of the species is accurately measured and recorded.

The KSHCP document provides two options for accomplishing monitoring of take at facilities covered under an incidental take permit/license issued to a landowner:

Option 1: “Self-monitoring.” Participants arrange for monitoring of take at their facilities and fund the DLNR to conduct calibration of the monitoring. Self-monitoring can be accomplished with “in-house” staff trained as searchers, or other means such as contracting for the service; or

Option 2: Participants fund the DLNR to conduct compliance monitoring of take at their facilities (requires consultation with DLNR-DOFAW).

The KSHCP document provides details including terms and conditions that apply to these two options. For large-scale facilities, Participants should consult with the USFWS and the DLNR for monitoring methods that are scale-appropriate to the size and scale of the facility.

The regulatory agencies will make the final determination as to the adequacy of the take monitoring plan.

<i>KSHCP Options for Monitoring of Take</i>	<i>Check box (leave unchecked if not sure)</i>
<i>Option 1. “Self-monitoring” of take.</i>	<input checked="" type="checkbox"/>
<i>Option 2. The DLNR conducts monitoring of take (requires Participant funding & DLNR consultation).</i>	<input type="checkbox"/>

Since fulfilling the terms and conditions of probation, the County has continued to monitor its facilities by searching and reporting any grounded or downed seabirds (there have been none) at its facilities lighted with retrofitted lights. At Category 3 facilities, ~~f~~For example, during the fledgling season, Fire Department personnel walk a 10-foot perimeter around the fire stations to locate, record, and report any downed seabirds at the beginning of their shifts at around 7:00am. The facility maintenance personnel with the Department of Public Works (now with the Department of Parks and Recreation) also conduct a search of the Līhu‘e Civic Center at the beginning of their shifts. In addition, during the 2017, ~~and~~ 2018, and 2019 KIF football seasons when night games were held, the County coordinated with the State of Hawai‘i Department of Education, the Kaua‘i Endangered Seabird Recovery Program (KESRP), the State of Hawai‘i Department of Land and Natural Resources (DLNR), and the USFWS to monitor, record, and report any circling or downed seabirds.

Aside from the incidental observations that designated personnel would make as they carry out their regular duties, the County does not anticipate undertaking any monitoring of facilities in Categories 1 and 2.

County staff will continue to ensure that there are no unintended changes in facilities or operating procedures that would compromise their qualification for that category. For example, staff will periodically check the facilities to ensure that there has been no damage that has compromised light shielding, removed controls designed to limit light use, etc.

As described earlier in this PIP, the County has categorized its facilities primarily by the types of lighting and uses present at each of its facilities. These categories are shown in Table 1, above, and are listed in alphabetical order and by category in Attachment A. In Attachment I the County has chosen a facility for each category as representative of that category and, using that representative facility, has illustrated the monitoring plan that the County will employ for each category. While the search route will vary slightly, the frequency, personnel, time required, dates, problem areas, and data to be collected are consistent by category.

The County’s monitoring plans for Category 5 facilities call for monitoring similar to that conducted at select facilities in 2017, 2018, and 2019. Specifically, whenever lights are on at night at any County-operated Category 5 facility between September 15 and December 15, the County will coordinate with the KSHCP staff to ensure that the facility grounds are monitored by an appropriately sized group of persons trained by KSHCP staff or other agency-designated personnel. The monitoring will include: documentation of the number, species, timing, height and flight patterns of observed seabirds; the number and species of seabirds that appear to have been grounded or downed, as well as seabirds that appeared to be headed for grounding but were not found; and information on the

condition of any recovered grounded or downed seabirds. In addition, before turning off the lights immediately following the nighttime use of facilities, the facility grounds will be searched for any grounded or downed Covered Species.

The County will maintain detailed records of the monitoring results which will be provided to the agencies in its annual report in accordance with the terms of the ITP/ITL and KSHCP. The data will include the location, times, dates, and personnel (including volunteers utilized) involved in the monitoring; and the location, condition, identification, in situ photographs, and fate of each recovered Covered Species. Any grounded Covered Species encountered during such monitoring will be reported to the USFWS and DOFAW, and all retrieved Covered Species will be transferred to the Save Our Shearwater ("SOS") program in conformance with recommendations of that program.

Table 8. Monitoring Plan

<u>CATEGORY</u>	<u>No. of Facilities</u>	<u>USAGE</u>	<u>FREQUENCY (Fledgling Season, Sept. 15- Dec. 15)</u>	<u>FREQUENCY (Non-Fledgling Season, Dec. 16- Sept. 14)</u>	<u>% OF TOTAL PROPERTY THAT WILL BE SEARCHED & TOTAL AREA</u>	<u>TIME OF DAY OF SEARCHES</u>	<u># OF SEARCHERS</u>	<u>PROPOSED TRAINING</u>
1. Confirmed Unlit Facilities	47	Unlit facilities	None	None	None	None	None	New-hire orientation training
2. Minimal Lighting	475	Facilities with minimal structural and/or parking lighting and/or lights are used infrequently. This includes such things as neighborhood centers, base yards, and some beach parks. Some of the facilities in this category have lights that are under eaves or in other situations which prevent the light from shining directly outward. In general, none of the lamps present exceed 100 watts.	None	None	None	None	None	New-hire orientation training
3. Limited External Lighting	37	Facilities with low levels (in lumens or on-time) of external building lighting or lit parking areas. In general, these facilities have a sufficient number of external lights to prevent their inclusion in Category 2, but whose lights can be managed and/or readily retrofitted so as to limit the release of stray light to insignificant levels and/or very short periods of time during sensitive periods.	If report is received, daily	Only if report is received, weekly	An area up to 10' around the area where downing is reported	A.M. prior to the start of employees shifts.	1	New-hire orientation and annual training

<u>CATEGORY</u>	<u>No. of Facilities</u>	<u>USAGE</u>	<u>FREQUENCY (Fledgling Season, Sept. 15- Dec. 15)</u>	<u>FREQUENCY (Non-Fledgling Season, Dec. 16- Sept. 14)</u>	<u>% OF TOTAL PROPERTY THAT WILL BE SEARCHED & TOTAL AREA</u>	<u>TIME OF DAY OF SEARCHES</u>	<u># OF SEARCHERS</u>	<u>PROPOSED TRAINING</u>
4. Substantial Exterior Area & Court Lighting	11	Facilities with multiple high intensity lights and with significant area coverage. This category includes court lights (e.g., basketball courts, tennis courts, skateboard parks, volleyball courts, etc.) or significant external lighting such as parking or recreational areas (e.g. Kaua'i War Memorial Convention Center).	If report is received, daily	Only if report is received, weekly.	The entire site.	A.M. prior to the start of employees shifts.	1 or 2	New-hire orientation and annual training
5. Stadium & Field Lighting	12	Facilities which have numerous, frequently used, high-intensity light fixtures and whose use cannot be limited to non-seabird seasons. This category includes facilities that have field and stadium lights on high poles which by their nature are difficult to minimize.	If in use, then when in use: daily	If in use, then weekly.	The entire site.	A.M. prior to the start of employees shifts. When in use during the fledgling season, the facility grounds will be searched immediately after lights are turned off.	1 or 2; during the fledgling season, up to 4.	New-hire orientation and annual training
<p>Note 1: Tabulation was taken as of October 31, 2018. The number of facilities, and possibly the categorization of individual facilities, will change over time as the County removes old facilities, adds new ones, and replaces older lighting fixtures.</p> <p>Note 2: See Attachment A for facilities listing by category; Attachment C for illustrations of category 2 and 3 lighting; Attachment D for illustrations of category 4 lighting; and Attachment E and F for illustrations of category 5 lighting.</p>								

Item 10. Components of the Green Sea Turtle Minimization and Monitoring Plan (if required). Monitoring and minimization for the Green Sea Turtle is in two parts: A) Monitoring to detect nests and B) Monitoring and minimizing impacts to nests detected.

For reasons discussed in Item 3 above, available data suggest that County facilities will not adversely affect Green Sea Turtles and the County has not, therefore, prepared a Green Sea Turtle (Honu) Minimization and Monitoring Plan.

Part A: Monitoring to detect Green Sea Turtle Nests

Please provide the following information; the table below may be used and altered as needed.

- 1) Detailed location and description of beaches, including linear distance, at which searching for nests of the green sea turtle will take place. Searches should take place at any beach from which light at the facility can be viewed;*
- 2) Monitoring protocols indicating:*
 - a) Annual training of searchers;*
 - b) Frequency of searches (every other day or as much as possible);*
 - c) Conduct active searching (searching the beach width);*
 - d) Sufficient number of trained searchers to cover the area; and*
 - e) Record results of search monitoring.*
- 3) All Participants conducting self-monitoring are required to record the results of search efforts. Records should provide:*
 - a) Evidence (what was seen). Include description and provide photographs*
 - b) Location on the beach (GPS) and physically mark the location if possible*
 - c) Date and time of day*
 - d) Description of surrounding land use (e.g., vacant, or developed), and*
 - e) Proximity to the facility.*

Part B: Monitoring of Identified Green Sea Turtle Nests

Each identified nest of the green sea turtle should be monitored and protected from light attraction. Please provide the following monitoring protocols; the tables below may be used and altered as needed.

- 1. Light avoidance measure for identified nests (either shield/deactivate lights at the facility or install and maintain a light shield around each identified nest);*
- 2. Frequency of searches. Searches should take place every 1-2 days. Incubation takes approximately 45 days at which time monitoring should increase in frequency (e.g. daily);*
- 3. Number of searches monitoring the nests. The number of needed to monitor active nests will depend on number of nests identified and amount of beach needed to be covered;*
- 4. Record the results of nest monitoring. Monitoring should provide:*
 - a. Evidence of hatchling emergence (description and photos);*
 - b. Date and time of emergence,*
 - c. Direction of tracks*
 - d. Condition of the nest area (e.g., disturbed or not).*

Green Sea Turtle Take Monitoring Protocols – Part A: Monitoring to Detect Nests

<i>Please provide search protocols for detecting nests of the green sea turtle (Attach pages as needed)</i>		
<i>Item</i>	<i>Protocol (fill in protocol & provide reasons)</i>	<i>KSHCP Guideline</i>
<i>Location & description of the beach, or beaches, surveyed and the linear distance of the beach.</i>		<i>Beach area surveyed should coincide with visibility from the facility with the lights.</i>
<i>Frequency of searches (# per day or per week)</i>		<i>Every other day during nesting season (typ. May 15 to end of August)</i>
<i>Number of searchers per search area</i>		<i>Depends on site conditions and safety considerations</i>
<i>Proposed training</i>		<i>Searchers should receive annual training conducted by the DLNR or the USFWS, or their designee. See item 9a.</i>

Green Sea Turtle Take Monitoring Protocols – Part B: Monitoring of Identified Nests & Minimization

<i>Please provide search protocols to monitor identified nests (from Part A) of the green sea turtle (Attach pages as needed)</i>		
<i>Item</i>	<i>Protocol (fill in protocol & provide reasons)</i>	<i>KSHCP Guideline</i>
<i>Frequency of searches (# per day or per week)</i>		<i>Active nests should be monitored every 1-2 days; then daily during expected hatching date</i>
<i>Light avoidance</i>		<i>If lights cannot be deactivated or shielded from the nest, each nest should be screened from visible light.</i>
<i>Number of searchers per search area</i>		<i>Depends on site conditions and safety considerations</i>

Item 11. Training. Describe the schedule that will be followed to provide training for staff. Training must be provided to those that will conduct and oversee the searches at the facility.

The “self-monitoring” training should include:

- 1. Summary of regulations protecting the Covered Species;*
- 2. Search procedures, route, frequency and timing specific to the facility’s monitoring plan, for seabirds and green sea turtle nests;*
- 3. Response procedures including safe and proper techniques for handling seabirds;*
- 4. Recognizing evidence of green sea turtle nests (if lights shine on a beach), proper nest light screening, and hatchling activity (e.g., emergence);*
- 5. Procedures to document the results of searches;*
- 6. Downed wildlife agency contacts; and*
- 7. Nearest SOS aid station.*

Rescuing Downed Seabirds—Standard Operating Procedures (SOP)

The following steps provide the procedure for recovering downed seabirds found:

- 1. Take the seabird recovery kit and pet carrier to the downed seabird.*
- 2. Put on gloves.*
- 3. Using towel to gently cover the bird, pick up the seabird.*
- 4. Place the seabird in the pet carrier, and close the pet carrier.*
- 5. Put the gloves and towel back in the seabird rescue kit.*
- 6. Take the bird and pet carrier to an SOS Aid Station.*
- 7. Transfer the bird to the Aid Station’s pet carrier.*
- 8. Call SOS at 632-0610 or 635-5117.*
- 9. Return the seabird rescue kit and pet carrier.*
- 10. Complete the Bird Take Field Report.*
- 11. Give the completed “Bird Take Field Report” to the General Manager, or other responsible staff person at the facility.*

Contents of Seabird Recovery Kit

- 1. Latex or nitrile gloves;*
- 2. Three towels;*
- 3. Hand sanitizer;*
- 4. Flashlight or headlamp;*
- 5. Clipboard, pen and blank “Bird Take Field Reports”, or similar; and*
- 6. Pet carrier –medium sized. If a box is used it must be well ventilated and marked conspicuously “LIVE ANIMAL”.*

During probation, the County was required to train its officers and employees. That training was recorded and is accessible to all County personnel on demand on the County intranet. Upon issuance of an ITL/ITP, all new County personnel will be required to watch the recorded training via the County on-boarding website and will be required to provide an acknowledgment of completion of the training during new-hire orientation. In addition, all new hires will be provided the Monitoring Policy and Procedure (Attachment I) during the new-hire orientation.

Upon issuance of an ITL/ITP, all County personnel that are required to perform self-monitoring tasks, will receive annual training in August. This will incorporate the volunteer monitor training presentation that the County provides pursuant to protocols established by USFWS as indicated in Attachment J. The County may incorporate or replace the current training with the detailed slide show proposed to be created by the Prime Contractor under the KSHCP and/or Appendix F of the KSHCP. The current training includes general information on the KSHCP, Covered Species biology and identification, cultural and ecological importance of the Covered Species, light attraction and harm, federal and state laws, County efforts, rescue procedures, and the SOS program.

Item 12. Describe any outreach conducted (e.g., handing out pamphlets on seabird awareness to facility employees or guests, etc.):

The County will provide educational flyers to all organizations that use Category 3, 4, and 5 facilities. The flyers will inform the users of the possible presence of Covered Species, the impacts of the use of lights during the fledgling season, and what to do should the users see seabirds being impacted by the lights. In addition, the County will post signage at all lighted softball fields, basketball courts, and tennis courts, where users are able to manually turn on the lights. The signage will be installed immediately adjacent to the light switches and controllers. The signage will be based on the notices that the County already posts at all lighted facilities during the fledgling season. Please see Attachment G for the sample flyers. The County posted the following notice on its Parks and Recreation website, which lists all County facilities, informing the public of the time of year and reason for prohibiting the use of lights at night at County facilities.

Figure 2. Department of Parks and Recreation Website Notice



Source: <https://www.kauai.gov/Government/Departments-Agencies/Parks-Recreation/Facilities>

~~In addition to the above, the County has brought up the possibility of implementing an outreach program for credit that would be applicable to off set the County's non-lethal take costs. Outreach activities for credit could include the following:~~

- ~~• Conducting a signage contest for all school age keiki throughout the County in which participants are challenged to create artwork for a particular County facility so that each County facility will have a facility specific artwork (sign) and the artwork entries would be judged on i) depiction of~~

~~one of the Covered Species, ii) illustration of the impact of the Covered Activity on the Covered Species, iii) use of Hawaiian language or culture and/or history of the facility location, iv) use of endemic or native flora and fauna other than the Covered Species representative of the facility location, v) incorporation of the specific County facility in the artwork;~~

- ~~• conducting county-wide training on the cultural, biological, and historical importance of the covered species;~~
- ~~• appearing as the “Sherman the Shearwater” mascot at parades and events (e.g. the Farm Fair);~~
- ~~• coordinating an endangered/threatened species law and government case study program with Kaua‘i schools and organizations like Leadership Kaua‘i (studying legal cases, how a bill becomes a law at the congressional level, and how the executive branch makes decisions based on those types of laws etc.);~~
- ~~• initiating a free rat trap program with an accompanying educational video briefing; and~~
- ~~• appearing on local television programs (e.g. Wala‘au or Hiki Nō).~~

~~These activities would be to offset the non-lethal take cost.~~

From 2009 through the present, the County has conducted a number of outreach activities which.~~They~~ included:

- conducting a county-wide training on the cultural, biological, and historical importance of the covered species to over a thousand (1,000) county employees;
- television appearances on the Mayor’s Show, County Council, Hiki Nō, and Wala‘au where we discussed the cultural, biological, and historical importance of the covered species; featuring our “Sherman Saves Christmas” performance at our county-wide Holly Jolly Competition;
- presenting the training on the cultural, biological, and historical importance of the covered species to Kapa‘a High School teachers and students;
- presenting the training on the cultural, biological, and historical importance of the covered species to Kaua‘i High School teachers and coaches; and
- conducting an endangered/threatened species law and government case study class for the Waimea High School ROTC Program and Close Up class, and Leadership Kaua‘i.

Part 2. Take Estimate, Requested Take Authorization, & Funding

Item 1. Show the calculation of estimated take for each of the Covered Species.

Following the take estimation methods in the KSHCP for estimating a Participant's take (Section 6.2.2), the tables below show the take estimate calculation for the facility(s) for each of the Covered Seabirds.

The KSHCP take estimate method utilizes the average of the most recent 5 years of SOS recovery data for the facility, and/or results of KSHCP monitoring data if available. Applied to the data is an adjustment for downed birds not found, based on a 50 % discovery rate and an adjustment based on SOS mortality (birds dead on arrival or those that die in care) – average SOS mortality is 12%.

If the landowner-applicant submits a take estimate with an alternate discovery rate, they must provide the reasons why an alternate rate was used to estimate take, including relevant information supporting their reasoning (% of searchable area, search protocols that will be used, any searcher efficiency trials that have been or will be conducted at facilities and/or demonstration of quick, effective recovery of birds). Please include narrative and/or photos and maps to support this.

Responses to Item 1 and Item 2 are addressed together in Item 2.

Item 2. Select the requested take authorization and permit/license term coverage for each of the Covered Species.

Estimated Take for Newell's Shearwaters (NESH or 'A'o)

The County is accepting the estimate for NESH direct fallout by existing facilities and operations which were provided to it by KSHCP staff in June 2016 and anticipates that level of take will continue at non-stadium facilities. This includes 4.2 birds per year found at the facilities themselves and the same number of birds that are attracted but are never found (i.e., a "discovery rate" of 50%). This results in an estimate of 3.696 non-lethal take per year.

The County is also requesting take coverage for potential take related to night-time use of some Category 5 facilities, as previously mentioned in Part 1, Item 7 above. While there has been no take in 2017, ~~and 2018, and 2019,~~ conservatively, the County accepts the estimates provided to it during technical assistance that such use could result in 4.48 lethal and 3.52 non-lethal takes each year during the term of the permit.

Estimated Average Annual Take for Hawaiian Petrel (HAPE or 'Ua'u)

The County also accepts KSHCP staff's estimate that take of Hawaiian Petrel will average 0.63 birds per year. ~~Of these, it is the County-estimateds~~ that 0.5 will be lethal and 0.13 will be non-lethal.

Estimated Average Annual Take for Band-Rumped Storm Petrel ('Ake'ake)

SOS and other data suggest that it is very unlikely that County facilities will be responsible for the take of any Band-Rumped Storm Petrel. However, as such a possibility cannot be completely

discounted, the County requests coverage for an average annual lethal take of 0.1 birds per year and no non-lethal take.

30-Year Estimated Take

Based on the estimated annual take numbers given above for each of the three species, the County is requesting 30-year take authorization totals summarized in Table 9 below.

Table 9. Requested Annual Take Authorization

	Newell's Shearwater	Hawaiian Petrel	Band-rumped Storm Petrel
Annual average number of downed NESH (5 most recent yrs), HAPE or BRSP (15 most recent years)	4.2	0.5 .63	0.1
Annual observed lethal take estimate (12% of 1, all downed birds)	.9 0.04	<u>0.06</u>	0.012
Annual unobserved lethal take estimate (e.g. 100% of 1, all downed birds if 50% searcher efficiency assumed)	4.2	0.5 6	0.1
Total estimated annual lethal take from light attraction	4.704	<u>0.56</u>	0.112
Total Requested Annual Lethal Take	<u>9.184</u> ¹	0.506 <u>0.56</u>	0.112
Estimated 30 Year Lethal Seabird Take	<u>276</u> ²	16.8 <u>17</u> ³	3.36 <u>4</u> ⁴
Estimated 30 Year Non-Lethal	<u>217</u> ⁵	<u>4</u> ⁶	<u>0</u>
Total Take Authorization	<u>493</u>	<u>21</u>	<u>4</u>

¹ As allowed in the KSHCP, sec. 6.2.2.1(b)(5), and as described above, the County is requesting additional take of 'A'o to provide a cushion so that it does not have unpermitted take. This additional request is based on the SOS data and technical assistance from the agencies dated May 16, 2018 and further clarified on May 7, 2020.

² Per April 27, 2020 agency comment, calculation is rounded up from 275.52.

³ Per April 27, 2020 agency comment, calculation is rounded up from 16.8.

⁴ Per April 27, 2020 agency comment, calculation is rounded up from 3.36.

⁵ Per April 27, 2020 agency comment, calculation is rounded up from 216.48.

⁶ Per April 27, 2020 agency comment, calculation is rounded up from 3.9.

Item 3. Funding Assurance. Provide proof of adequate funding (see KSHCP document). All participants must demonstrate requisite funding prior to permit/license approval to ensure that the proposed measures and actions, including monitoring, will be undertaken in accordance with the terms and schedule of the KSHCP.

The County guarantees adequate funding for this permit for the first year. For the remaining term of the permit, the County commits only to including funding for the HCP permit as a line item in the proposed County budget. The County will certify in its Annual Report that it will request in its annual budget and, if appropriated and allocated, expend the operating funds necessary to continue its obligations throughout the term of its ITP and ITL. The County will promptly notify the Prime Contractor and regulatory agencies if the funds requested are not appropriated and allocated. Please note that all commitments expressed in this application are subject to Kaua‘i County Council approval.

Signature of Participant: _____

Printed Name : Patrick Porter

Date: _____

The undersigned affirms that all the information included is true and accurate to the best of the participant’s knowledge and that this PIP is voluntarily submitted.

☐ check to waive confidentiality

Table of Figures and Tables

Figure 1.	Known Green Sea Turtle Nesting Locations on Kaua‘i.....	5
Figure 2.	Department of Parks and Recreation Website Notice	26
Table 1.	Facility Classification.....	4
Table 2.	Green turtle (<i>Chelonia mydas</i>) nesting locations recorded on Kaua‘i	6
Table 3.	Green Sea Turtle Assessment.....	7
Table 4.	Proposed Future Facilities and Expansions.....	10
Table 5.	Seabird Light Attraction Minimization Measures Considered.....	12
Table 6.	Facilities with Lighting Control Systems	14
Table 7.	Facilities with Secured Lighting Controls.....	14
Table 8.	Monitoring Plan.....	21
Table 9.	Requested Annual Take Authorization	29

List of Attachments

Attachment A	List of the facilities (current as of October 31, 2018)
Attachment B	Illustrates the location and characteristics of lighting at County facilities
Attachment C	Illustrates Category 3 lighting
Attachment D	Illustrates Category 4 lighting
Attachments E and F	Illustrates Category 5 lighting
Attachment G	Sample fliers
Attachment H	Portable Floodlight Policy
Attachment I	Monitoring Policy and Procedure
Attachment J	Night-time Category 5 events protocol