~~Kaua'i Seabird Habitat Conservation Program (KSHCP)~~

~~Participant Inclusion Plan (PIP)~~

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Participant Inclusion Plan (PIP)

Name of Applicant/Participant:

SOF – XI Kauai PV Hotel, LP

(Princeville Resort Kauai)

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.

Participant/Applicant Name:		The Princeville Resort Kauai
Physical Address/Location of Facility:		The Princeville Resort Kauai 5520 Ka Haku Road Princeville, Hawaii 96722
Mailing Address:		Same as above
Primary Contact: Ownership Name:		Robert Geimer SOF – XI Kauai PV Hotel, LP
	Address: Telephone: Email:	 591 West Putnam Ave. Greenwich, CT 06830 (305) 436-4690 geimerb@starwood.com
Alternate Contact:		Thomas Meding General Manager
	Address: Telephone: Email:	The Princeville Resort Kauai 5520 Ka Haku Road Princeville, Hawaii 96722 (310) 403-9297 t.meding@shhotelsandresorts.com

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.

The Princeville Resort Kauai is located at a physical street address of 5520 Ka Haku Road, Princeville, Hawai'i. 96722. The resort encompasses approximately 23.23 acres of land identified as TMK(s): (4) 5-4-004-029, (4) 5-4-004-035 and (4) 5-4-011-004. Copies of these TMKs maps are included in Appendix A.

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 owner of the Princeville Resort Kauai is seeking coverage for operation of artificial lighting in connection with all activities associated with running a resort in Princeville. These activities include, but are not limited to the following: general operation of the hotel, parking lot, grounds, swimming pool and outdoor restaurants, ~~one bar~~bars and outdoor banquet activities, as well as all physical plant maintenance and landscape maintenance activities. The resort has a full complement of lights that one would expect at a resort of this size and location on the island of Kaua'i. The Hotel covers approximately 115,000 square feet of the site, and paved areas such as the parking lot, walkways, driveway and the pool deck cover an additional 151,400 square feet of the property.

Table 1: Outdoor Lighting

Outdoor Lighting at the Princeville Resort Kauai						
Location	**Light Type**	**Wattage**	**Bulb Color**	**Quantity**	**Purpose**	**Full cut-off/shielded**
Parking lot	Parking Pole Light/Mercury lamp	150 w	Warm White	26	Illuminate parking lot and pedestrian walkway	Full cutoff / shielded
Guard Shack - Entrance and Exit to the Resort	Shielded Flood Light/Florescent	11 w	Warm White	2	Entrance safety	Shielded
Guest walkway between Porte Cohere and Parking lot	Mushroom walkway Lights/Incandescent	20 w	Warm White	23	Illuminate pedestrian walkway	Full cutoff / shielded
Entry Drive and Walkway	Landscaping & grounds lights/Halogen	50 w	Cool white	36	Landscape illumination; accent lighting	Full cutoff / shielded
Coconut Trees around Porte Cohere water feature	Landscaping & grounds accent up lights/Halogen	20 w	Cool white	16	Landscape illumination; accent lighting	Shielded
Water Feature	Water Feature lights/Incandescent	100 w	Warm White	26	Accent lighting in water feature	No
Cooling Tower and Flower Shop	Shielded Flood Light/Florescent	11 w	Warm White	2	Staff safety	Shielded
Various locations around the Pool	Tiki Torches	N/A	Open Flame	18	Accent lighting and illumination for pedestrian walkway	N/A
Various locations around the Pool	Surface Mounted/Florescent	45 w	Cool white	2	Staff safety	No
Pool Restaurant and Pool Activity Desk	Chandelier/CFL	40 w	Cool white	22	Accent lighting and guest safety	Full cutoff / shielded
Pool Restaurant and Pool Activity Desk	Architectural Accent Lighting/Halogen	50 w	Cool white	82	Accent lighting and guest safety	Full cutoff / shielded
Pool walkway	Landscaping & grounds lighting/Halogen	50 w	Cool white	15	Landscape illumination; accent lighting and walkway illumination	Full cutoff / shielded
Pool Walkway	Incandescent	40 w	Warm White	9	Pedestrian walkway illumination	Shielded

The above description of outdoor lighting was current as of 2016. Modifications to lighting have been made since that time on an annual basis. The Resort has minimized lighting to the maximum extent practicable.

Table 2: Green Sea Turtle Assessment for the Site & Facility

Please provide the information requested below to help determine if measures to avoid impacts to the Green Sea Turtle(s) from the effects of light attraction are required to be implemented at any of the facility(s), parcel(s), or site(s) included in this PIP. Please consult with staff from the DLNR and the USFWS to arrange a site visit, if needed, discuss measures to avoid impacts to the Green Sea Turtle, and provide further guidance.		
Are any of the facilities located adjacent to a beach?	**YES/ No**	**If yes, provide length of beach frontage & brief description of facilities & lights adjacent to the beach** ~~Puu Poa~~Puʻu Pōā Beach is approximately 200 feet long and is located fronting the swimming pool. Facilities adjacent to the beach include the pool, pool restaurant, pool activity desk and pool walkway.
Are any of the Covered Activities (lights) visible from a beach?	**YES / No**	**If yes, describe the specific lights (type, , height, purpose) & specific location; provide map & photos showing distance from beach** See Table 1 above
Have green sea turtles been known to nest on any beaches adjacent to the facilities?	**Yes / NO**	**If yes, provide information about nesting occurrences, if known, including location and date and any other information**

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 no specific lighting standards, rules, restrictions or requirements that the Resort must comply with, beyond assuring that lighting is adequate to ensure guest and employee safety and security, and standards in the building code (IECC). Pre-seabird season lighting audits are conducted by a seabird biologist and necessary tweaks to the lighting are completed prior to the start of the seabird season each year – the program is now in its 10th year.

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

The owner of the Princeville Resort Kauai currently plans a renovation to refresh the property, with a reopening to follow in ~~third quarter 2021. The renovation will not involve expansion of the existing facilities. The planning team will work in close consultation with a seabird biologist~~the first quarter of 2022. This reopening date is subject to change. A project description, approved by the Kauai County Planning Commission on October 30, 2019, is included as Appendix K. Princeville Resort Kauai continues to work with its seabird biologist on appropriate lighting minimization measures for the renovations to ensure that they are dark sky compliant, utilize full cut-off fixtures, shielded fixtures, lights angled downwards, and/or lighting shifts during seabird season as required by Appendix E of the KSHCP. Once complete, the lighting for the renovation will be described in reporting to the agencies as required by 6.6.1.3. of the KSHCP ("Other Relevant Reporting") under the category "new facilities and facility light changes." For the period of construction, Princeville Resort Kauai is also working with its seabird biologist who will train construction workers to minimize lighting and search for downed birds.

Item 6. Pursuant to the Endangered Species Act (ESA), Section 10 (a)(2)(A)(iii), describe alternatives to <u>avoid</u> 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.

Activities that the Princeville Resort Kauai has direct control over that may result in covered species landing on the property are restricted to those associated with lighting. Other programs that the Resort implements that result in benefits to seabirds include, increased staff training, guest outreach, and monitoring and rapid recovery of downed seabirds. The resort has addressed all of these issues to the maximum extent practicable. Measures and protocols implemented are detailed in the following sections of the application.

In the following table light attraction avoidance and minimization alternatives that were analyzed are presented.

Table 3: Light Attraction Alternatives to the Taking

Artificial Light Attraction Alternatives to the Taking Considered	Reasons Alternatives are not Being Utilized (provide justification)
▪ **Deactivate all outdoor artificial lights from dusk to dawn during the fledgling fall-out season September 15 to December 15**	Guest and staff safety and security precludes this option.
▪ **Change operations to eliminate the need for outdoor artificial lighting (e.g., from nighttime to daylight hours)**	Guest and staff safety and security precludes this option. To do this the hotel would need to be closed at night, not a viable business option.
▪ **Shield all lights from visibility from the beach, or screen all Green Sea Turtle nests, from May 15 to December 15 to avoid impacting the green sea turtle (Green Sea Turtle)**	Guest and staff safety and security precludes this option at it would entail closing the hotel during those months which is not a viable business option.
▪ **Other alternatives to the taking considered, if any. If facility is proposed, include alternative designs considered**	The resort has replaced a very large number of lights on and in the resort to reduce the amount of stray light being produced. Window blinds have been placed in all hallways and rooms in the resort reducing the visible interior lighting. Bulbs have been reduced in lumens over the past 10 years. All upward pointing lights have been removed or are turned off during seabird fledging season. See Seabird Lighting Minimization Procedures on Page 1-14.

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 *Appendix E (Guidelines for Adjusting Lighting at Facilities)* of 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.

Table 4: Seabird Light Attraction Minimization Measures Considered

Minimization Measures Considered	Feasible? (Y / N)	If not Feasible to Implement Measures, Provide Reason
▪ **Change time of light use (lights off earlier)**	**YES / No**	
▪ **Deactivate unnecessary lights**	**YES / No**	
▪ **Replace all outdoor lights with full cut-off fixtures**	**YES / No**	
▪ **Shield all outdoor lights with full cut-off shields**	**YES / No**	
▪ **Angle all lights downward**	**YES / No**	
▪ **Lower intensity (lumens) of outdoor lights**	**YES / No**	
▪ **Change bulb color to non-white spectrum**	**YES / No**	
▪ **Prohibit/control unleashed predatory animals; prohibit outdoor feeding of animals; require sealed rubbish containers**	**YES / No**	
▪ **Provide Worker Seabird Awareness Training to staff**	**YES / No**	See previous section and Appendix C
▪ **Provide outreach materials to staff & guests**	**YES / No**	See previous section and Appendices F, G H, I, and J.
▪ **Host Save Our Shearwaters (SOS) Aid Station**	**YES / No**	

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, timeline, and estimated cost for each facility. In this item, the Participant can include measures already completed or in place (new lights, shields, operational changes). Timeline should include estimated completion schedule, and annual schedule for minimization that will occur only during fledging season.

Minimization measures not yet determined but anticipated to occur at the facility; this section should include an estimated cost that will be earmarked for future minimization measures.

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.

Pre-Renovation 8A

The Princeville Resort Kauai is providing two Item 8 write ups due to the rather unusual situation that it applicant found itself in when it was decided in 2008 that the owners of the property were going to remodel the Resort. The following section details the Avoidance and Minimization Plan implemented by the Resort in 2007. The following Section 8B details the Avoidance and Minimization Plan that the Resort implemented in 2008-2009 and has followed for the past ten years.

In 2007 the Resort undertook the following minimization measures to reduce the potential that its lights would result in attracting the covered species onto the property. The lighting modifications presented below are grouped into seven separate locations; these locations are illustrated in the Resort schematic provided in Appendix B.

The 40-watt bulbs in the main lobby chandelier were replaced with 15-watt bulbs. The Living Room and Café Hanalei chandeliers were dimmed to approximately 50% of the intensity that they are traditionally set at. In the Living Room Lanai, two floodlights were fitted with red filters and directed downwards to reflect into the stairwell, rather than the garden.

The three spotlights illuminating the flagpole at the front of the hotel were turned off, for the duration of the seabird season. All of the palm tree accent floodlights along Royal Palm Drive were redirected so as to shine on the ground rather than up at the palm fronds. During the seabird season, half of the parking lot lights were disabled guests are not allowed to park ~~there~~their own cars, all cars are parked by the resorts valet staff.

The large chandelier and the fluorescent trough lighting located in the third floor elevator shaft and hallway were disabled during the seabird season.

The floodlights located on the 3rd floor roof were disabled and new solar powered low wattage landscape lighting was installed to illuminate the walkways formerly illuminated by the 3rd floor roof floodlights.

The landscape accent lighting that illuminates the palm trees in the front of the hotel were redirected at the ground. Light shields were installed on the guardhouse, and the lights were redirected downwards to illuminate the road and entrance rather than the structure. Light shields were installed on the lights that illuminate the entrance sign to the property.

The foregoing avoidance and minimization measures were implemented, and costs associated with implementing these measures have already been incurred.

Light Attraction Avoidance and Minimization Plan

Facility Lights / Description of Action

- Guard shack lights were shielded with in house constructed shields and fixtures redirected downward
- Light shields were installed on the lights illuminating the entrance sign to the property
- Up---pointing landscape accent lighting on the palm trees in front of the fountain were redirected downward
- The three floodlights illuminating the flagpole in front of the ~~porte~~Porte cochere were turned off for the duration of the seabird season
- All of the up---pointing accent lighting on the palms along Royal Palm Drive were redirected to shine downward. During the seabird season, the parking lot lights were disabled and guests were escorted to the hotel by valets using flashlights
- The 40---watt bulbs in the main lobby chandelier were replaced with 15---watt bulbs
- The lights within the Café Hanalei and the Living Room were dimmed to approximately 50% of their intensity
- The 2 spotlights on the Living Room Lanai were fitted with Red filters and redirected downwards
- The large chandelier and fluorescent soffit lighting located on the third floor elevator shaft and corridor were disabled during Seabird season
- The three floodlights located on the 3rd floor roof were removed and new solar powered low---wattage landscape lighting was installed to illuminate the walkways formerly lit by the 3 floodlights

Post -Renovation 8b

In 2008 and early 2009 the Princeville Resort Kauai underwent a major resort-wide renovation. This planned upgrade of the property allowed the then-St. Regis to make permanent modifications to its lighting fixtures. Planners and electrical engineers met with the St. Regis' consulting biologist to explore measures that could be taken to reduce extraneous light to the maximum extent practicable as part of the resort renovation. The following changes were made to the lighting at the Resort as part of the Resort renovation.

Where practical, electrical lighting circuits were put on separate circuits so as to make it easier to turn off selected lights during the seabird's season if needed – formerly light bulbs had to be physically removed from some fixtures to turn them off.

The main lobby chandelier was replaced with a much lower intensity fixture, and the glass skylight above the chandelier was covered, preventing light from shining up through the roof. The two exterior floodlights were removed. The chandeliers in the Makana Terrace (formerly the Café Hanalei) were removed and replaced with a trellis, and lit with ribbon accent lighting, which does not put off much light. This new fixture was also lowered preventing it from being seen from outside the hotel. Polarized window shades in the Bar of the Princeville Resort Kauai (formerly the Living Room) are lowered during evening hours during the seabird season to darken the windows that face Hanalei Bay. Lighting within the Makana Terrace consists of low wattage can lighting that is directed at the floor and is under roof.

All of the palm tree and landscape accent floodlights along Royal Palm Drive were removed and replaced with downward facing heavily shielded low wattage LED lights, which cast a small circle of light on the ground and vegetation but are completely shielded. The lights in the parking lot are shielded and downward facing, and if necessary will be turned off during the seabird season.

The large chandelier located in the third floor elevator shaft and hallway is no longer operational.

The landscape accent lighting that illuminates the palm trees in the front of the hotel were changed out to small canister low wattage LED lights that are totally shielded and are aimed at the ground.

Additional Locations – The lighting in the new pool has been placed on a separate circuit and can now be selectively turned off during the seabird season. Bollard lighting with deflection shields (Turtle lights) have replaced floodlights and accent lighting along the walkways on the ocean side of the hotel. A new restaurant / bar, the Nalu Kai has been constructed adjacent to the pool, lighting within the new bar is contained with under-

roof soffits or downwards facing light fixtures, all lights at this location are under roof. The bollard lighting that ran up slope from the Porte Cochere to the Fort Alexander interpretive kiosk has been removed. Additionally, several outside floodlights and work lights that were located in and around the cooling tower and loading dock have been disabled or removed.

The foregoing A&M measures have already been implemented, and costs associated with implementing these measures have already been incurred.

During the seabird fledging season, the Resort implements additional light minimization measures detailed in: Shearwater Lighting Minimization Measures, attached as Appendix F. The 29 measures detailed in that set of procedures requires that the engineering and other responsible parties identified sign off that the procedures have been implemented.

The Princeville Resort Kauai biologist accompanies the head of loss prevention and the engineering departments to conduct a lighting audit of the entire property prior to the onset of the seabird fallout season annually. The resort biologist follows up with the resort to ensure that any lighting minimization modifications that the biologist identified have been implemented. The resort biologist also checks the hotel several times during the season without notifying the Resort to ~~ensue~~ensure that all measures are in place. At this juncture after more than 10 years of implementing the seabird season specific lighting minimization measures we have found that it takes less than half a day each year to correct any lighting minimization measures that may need to be modified. The biologist monitors the fallout season in real time and returns to the Resort if anything shows up in the data that suggests that there may be a problem with the lighting minimization measures.

During the season the head of loss prevention, and the engineering department manager do regular checks of the lighting minimization measures to ensure that they ~~age~~are still in operation. All of the lighting is now computerized, so maintaining and reduced lighting that may be implemented is very simple and is controlled from one location.

List of Buildings	Minimization Measures	Cost to Implement	Responsible Staff	Timeline

Table 5: Lighting Minimization Measures

See narrative above.

Table 6: Seabird Mortality Minimization Plan

Minimization Measures	Describe minimization method (e.g. trapping, outreach, enact policy)	Cost to Implement	Responsible Staff
Remove & control loose predatory animals at the facility. (Loose animals can kill grounded seabirds and this measure aims to prevent seabird mortality by animals.)	The resort employs commercial pest control services, additionally they deploy cat traps as soon as a cat is spotted on property (very rarely). The resort will meet the biological goals and objectives in KSHCP Table 5-1 to "Minimize mortality of Covered Seabirds downed due to light attraction by implementing actions to reduce presence of free-roaming seabird predators such as cats and dogs at Participant facilities." It will also satisfy the requirement in Section 5.3.2 of the KSHCP that "All measures to reduce presence of predators must be implemented within Year 1 of an ITP/ITL."	N/A	
Prohibit outdoor feeding of predatory animals. (feeding animals attracts them to the site and this measure aims to reduce the presence of animals that can cause seabird mortality.)	Staff is trained that this is not allowed, and security monitors compliance	N/A	

Conduct nightly/morning searches to recover downed birds at the property & turn them into SOS following protocols (see monitoring plan below).	See Item 9 below.	N/A	
Train staff to follow minimization measures.	See Item 9 below, and Appendix C.	N/A	

Item 9. Take Monitoring Plan. Provide a plan to monitor take of the Covered Seabirds 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 regulatory agencies will make the final determination as to the adequacy of the take monitoring plan.

Loss prevention personnel search the entire Resort multiple times a day, 365 days of the year. The entire staff is retrained prior to the seabird season every year. As part of their job responsibilities, they are required to search their duty stations every day that they are on the property. Since there are approximately 400 employees, the coverage of the property is complete. If a bird is found, employees are required to call loss prevention and stay with the bird until they arrive to record, handle and deliver the bird to the SOS station and prepare all of the needed reporting.

Table 7: Covered Seabird Take Monitoring Protocols

Please provide the following information for the protocol items below		
Item	**Protocol** (fill in protocol & provide reasons)	**KSHCP Guideline**
Percentage of the total property that will be searched & the total area to be searched	The entire built upon portion of the property is searched multiple times a day, as all associates are required to search their duty stations and Security staff search the rest of the property.	Search as much area as possible
Frequency of searches (# per day or per week)	During the Seabird season, security staff inspects the grounds of the hotel at least twice a day and staff members are required to actively look for birds that have landed on the property in the areas that they work during their entire eight hour shifts	Twice daily
Time of day of searches	See above	2-3 hours after sunset, and within 3 hours after sunrise
Number of searchers per search area	The entire staff, amounting to some 400 employees	Depends on site conditions and safety considerations and vegetation, nearby hazards/threats
Proposed training	See Item 7 above, Item 9 below, and Appendix C.	Annual training covering seabird identification, seabird handling, response procedures, verified and documented

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.

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;
    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 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;
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).

Table 8: Green Sea Turtle Monitoring Protocols – Part A: Monitoring to Detect Nests

Please provide search protocols for detecting nests of the green sea turtle (Attach pages as needed)		
Item	**Protocol** (fill in protocol & provide reasons)	**KSHCP Guideline**
Location & description of the beach, or beaches, surveyed and the linear distance of the beach.	~~Puu Poa~~Puʻu Pōā Beach is approximately 200 feet long and is located directly in front of the pool. Groundskeepers rake the beach every morning shortly after daylight.	Beach area surveyed should coincide with visibility from the facility with the lights.
Frequency of searches (# per day or per week)	Groundskeepers rake the beach every morning shortly after daylight 365 days of the year. Life guards and pool attendants are in the area 365 days of the year as well and are trained to see sea turtles	Weekly during nesting season (typ. May 15 to end of August)
Number of searchers per search area	Groundskeepers rake the beach every morning shortly after daylight 365 days of the year. Life guards and pool attendants are in the area 365 days of the year as well and are trained to see sea turtles	Depends on site conditions and safety considerations
Proposed training	N/A	Searchers should receive annual training conducted by the DLNR or the USFWS, or their designee. See item 9a.

Table 9: Green Sea Turtle Monitoring Protocols – Part B: Monitoring of Identified Nests & Minimization

Please provide search protocols to monitor identified nests (from Part A) of the green sea turtle (Attach pages as needed)		
Item	**Protocol** (fill in protocol & provide reasons)	**KSHCP Guideline**
Frequency of checks (# per day or per week)	N/A there has never been a nest recorded on ~~Puu Poa~~Pu'u Pōā beach since the hotel has been in operation. Should a nest be discovered the Resort would immediately contact USFWS and follow their standard Hawaii protocols for protecting the nest.	Active nests should be monitored every 1-2 days; then daily during expected hatching date
Light avoidance	N/A	If lights cannot be deactivated or shielded from the nest, each nest should be screened from visible light.
Number of searchers per search area	N/A	Depends on site conditions and safety considerations

Item 11. 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 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 (if applicable);**
3. **Response procedures including safe and proper techniques for handling seabirds;**
4. **Recognizing evidence of green sea turtle nests, proper nest light screening, and hatchling activity (if green sea turtle minimization and monitoring plan is applicable);**
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".**

The entire staff of the resort is retrained every year, and training is usually conducted in early August. The specific dates for the training are based on the hotel occupancy and other personnel issues, but training always happens prior to the seabird season starting in September.

See Table 7 and Section 9 above and Appendix C.

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

During the seabird season an article is printed in the weekly guest newsletter about the shearwater season, this newsletter is placed in every guest room. A copy of a typical seabird season guest newsletter is attached as Appendix G. Additionally, a printed brochure entitled "The Princeville Resort Kauai Seabird Conservation Program" is handed out to each hotel guest during the seabird season at check-in that encourages them to close their louvered window panels at night to shield light sources that may attract fledgling shearwaters and that also provides information on the birds, the SOS program and the Princeville Resort Kauai's commitment to the conservation of native island resources. A copy of the current brochure is attached as Appendix G. Additionally, in guest rooms, staff close the wooden window louvers each evening during turndown service, and shearwater awareness signage has been placed in all guest rooms that requests that guests keep their window louvers closed during nighttime hours during the seabird season. A copy of this display in attached as Appendix H. Printed cards are placed in the Prince Junior Suites requesting that guests turn of the bathroom lights when not in use during the seabird season. A copy of these signs ~~are~~is attached as Appendix I.

The Princeville Resort Kauai commissioned artist Patrick Ching to produce a children's coloring book that tells the story of a Newell's Shearwater that has been downed, told through the eyes of other native species including a Hawaiian Monk Seal, Laysan Albatross, crabs etc. The coloring book is used as part of the resort's "Young Voyagers Club," ~~,~~ its in-house children's program that is directed at children between the ages of 5 and 12. A copy of the cover and two typical inside pages of the coloring book is attached as Appendix J.

A seabird awareness-training program is conducted for all employees once a year. It is an employment requirement that all employees undergo the training program. There are two modules to the training program, one is given to every employee and the second "Downed Seabird Advanced Training" is given to the security staff and to the managers. The training module is revised each year prior to the start of the seabird season incorporating any needed changes to the program identified during the previous season's activities. A seabird specialist initially conducted all of the seabird awareness training, for

the first four years. During that period the biologist trained the HR and Security department to conduct the training on an annual basis. Copies of the 2017 version of the PowerPoint slides used in this training program are provided in Appendix C.

Synopsis of the Princeville Resort Kauai Seabird Awareness Training:

- Agency and Seabird Program Contacts
- Slides illustrating both threatened and endangered seabird species as well as the more commonly occurring species protected under the federal MBTA.
- Regulatory framework, both federal and state
- Definitions of “take”
- Penalties for non-compliance
- Seabird season lighting rules and protocols
- Seabird handling procedures and protocols

Synopsis of the Advanced Seabird Awareness Training:

- Downed seabird response protocols
- Downed seabird security report
- Seabird reporting loop
- Seabird identification
- This module also has a workshop in which the following topics are discussed
- Cameras, camera settings, image numbering
- How to take photos of the birds
- Data recording and reporting

PART 2. Take Estimate, Requested Amount of Take Authorization, and 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, the tables and charts below show the take estimate calculation for the facility 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. Applied to the data is an adjustment for downed birds not found, assumed at 50 percent.

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.

We have used the numbers generated by the SOS program, and verified through our own database to determine take. ~~To determine the searcher efficiency of the property we~~We have generated a lot of empirical data over the more than 10 years that the seabird program has been operating. We have detailed information on the locations of every bird that has been recovered on the property over the past 10 plus years and feel confident that we understand the areas that birds are most likely to fallout on the property. We commissioned a large-scale map of the property and then calculated the amount of the property that is impossible to search due to cliff faces and/or very dense hau bushes, these areas are located predominantly along the northeast facing cliffs. From those calculations we determined that we could not effectively search slightly less than 10% of the property. With that said any bird that came down close to the edge of the cliff or on the cliff face would have no problem getting airborne again.

The entire property with the exception of the cliff faces are searched multiple times a day. We have been training our staff of over 600 employees every year for more than 10 years prior to the start of the fallout season. That training includes general awareness of the fallout issue, search procedures, response, recovery and reporting procedures. In addition, the staff has been searching the grounds each day for more than 20 years for dead chickens, and other wildlife which are promptly removed. Additionally, we provide guest information both at check-in and in their rooms on seabird awareness and reporting protocols if they encounter a downed seabird every fallout season. There is virtually no circumstance under which a fallout bird would escape detection by staff or guests in short order.

The combination of staff training, a mature seabird season set of protocols, active predator control and the nature of this high-end property results in very high searcher efficiency. Technical consultation with USFWS from 2016 through 2018, including a site visit to the

property, resulted in a determination by USFWS that a 90% searcher efficacy rate is appropriate for this PIP.

Table 10: Annual Lethal Take Estimate Calculation[i]

~~Table 10: Annual Take Estimate Calculation~~

		Newell's Shearwater	Hawaiian Petrel	Band-rumped Storm-Petrel
1.	Avg. from SOS data–or—monitoring data (5 most recent yrs. = 2012-2016)	18	–	–
2.	Avg. from SOS data–or—monitoring data (15 most recent yrs. =2002-2016)	–	0.33	0
3.	Avg. lethal take estimate = 12% of SOS birds not released	2.16	0.04	0
4.	Adjustment for unobserved take (10% not searchable vs 50% typical)	~~1.8~~2	~~0.03~~0.04	0
5.	Total annual lethal take from light attraction	~~3.96~~4	~~0.07~~0.08	0
6.	Requested Annual Take	4	0.2 (1 every five years)	0.033 (1 for 30 year permit)
7.	Requested Take Over Permit Term	~~120~~125	6	1

[i] Title of table revised per email from Kate Cullison on 4/10/20.

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

Table 11: Newell's Shearwater:

Age Class	Annual Take Estimate: Fledglings	Annual Take Estimate: Adults or sub-adults	Take Limit for License/Permit Term
Mortality (Lethal)	4[i]	0	125[ii]
Injury (Non-lethal)	15.84[iii]	0	475.2[iv]

[i] This number is repeated from Line 5 of Table 10, above, and should not be added to the number in Table 10.
[ii] This number is NCL's requested take limit, repeated from Line 7 of Table 10, above, and should not be added to the number in Table 10.
[iii] This number of nonlethal take is derived by using the formula in KSHCP Section 6.2.2.1. As set forth in Section 6.2.2.1, "Lethal Take =100% undiscovered birds + 12% of birds that are discovered and turned into SOS." It follows, then, that nonlethal take is 88% of birds that are discovered and turned into SOS, or 88% of Line 1 of Table 10.
[iv] This number is derived by multiplying 15.84 by 30 years.

Table 12: Hawaiian Petrel:

Age Class	Annual Take Estimate: Fledglings	Annual Take Estimate: Adults or sub-adults	Take Limit for License/Permit Term
Mortality (Lethal)	0.07[i]		6[ii]
Injury (Non-lethal)	0.3 (1 every five years)[iii]	0	6[iv]

[i] This number is repeated from Line 5 of Table 10, above, and should not be added to the number in Table 10. It is different than Princeville Resort Kauai's requested annual take for Hawaiian Petrels in Table 10, above, which is 0.2 (1 every five years).

[ii] This number is Princeville Resort Kauai's requested take limit, repeated from the last line of Table 10, above, and should not be added to the number in Table 10.

[iii] This number of nonlethal take is derived by using the formula in KSHCP Section 6.2.2.1. As set forth in Section 6.2.2.1, "Lethal Take =100% undiscovered birds + 12% of birds that are discovered and turned into SOS." It follows, then, that nonlethal take is 88% of birds that are discovered and turned into SOS, or 88% of Line 1 of Table 10.

[iv] This is Princeville Resort Kauai's requested coverage for nonlethal take.

Table 13: Band-rumped Storm-Petrel:

Age Class	Annual Take Estimate: Fledglings	Annual Take Estimate: Adults or sub-adults	Take Limit for License/Permit Term
Mortality (Lethal)	0[i]		1[ii]
Injury (Non-lethal)	0[iii]		1[iii]

[i] This number is repeated from Line 5 of Table 10, above, and should not be added to the number in Table 10. It is different than Princeville Resort Kauai's requested annual take for Band-rumped Storm Petrels in Table 10, above, which is 0.033 (1 for 30 year permit).

[ii] This number is Princeville Resort Kauai's requested take limit, repeated from the last line of Table 10, above, and should not be added to the number in Table 10.

[iii] This is Princeville Resort Kauai's requested coverage for nonlethal take.

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 Princeville Resort Kauai currently undertakes all minimization and conducts all monitoring using its existing staff as part of annual operating budget, and will continue to do so through the term of the KSHCP. The Princeville Resort Kauai will provide financial assurances as required by the KSHCP.

Signature of Participant:

_____ Date:_____

Printed Name :

_____

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

~~1.~~ Appendices

Appendix A – Tax Map Keys (TMKs) of the Princeville Resort Kauai

Appendix B – Schematic layout of the resort

Appendix C – Staff seabird awareness training program

Appendix D – Typical seabird data recovery form

Appendix E – Seabird season lighting protocols

Appendix F – Typical guest newsletter

Appendix G – Guest Seabird Conservation Program brochure

Appendix H – In room window louver seabird awareness rack card

Appendix I – Prince Junior Suite bathroom lighting seabird awareness rack card

Appendix J – Young Voyagers Club coloring book – Cover and two typical inside pages

Appendix K – Excerpted Project Description approved by the Kauai County Planning Commission on October 30, 2019

Document comparison by Workshare Compare on Wednesday, May 13, 2020 9:50:16 AM

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Rendering set	Standard

Legend:	
Insertion	
~~Deletion~~	
~~Moved from~~	
Moved to	
Style change	
Format change	
~~Moved deletion~~	
Inserted cell	
Deleted cell	
Moved cell	
Split/Merged cell	
Padding cell	

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Format changed	0
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