

Written Public Comments on the Draft Kaua'i Seabird Habitat Conservation Plan (KSHCP)

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Comments on KSHCP

Helen Raine, Seabird Biologist and Resident of Kauai

10-25-2019

I would like to offer my support to the KSHCP. I believe that the plan will provide appropriate mitigation for take of seabirds by the applicants on Kauai and will deliver positive conservation benefit to endangered seabirds on the ground. It is important for the populations of Newell's Shearwater and Hawaiian Petrels that this plan is accepted in a timely fashion.

While I support the plan, there are some issues which need to be addressed, as follows:

- 1) The County PIP has a serious weakness. Section 5.3.2 of the KSHCP says:

"In order to receive incidental take authorization from the USFWS and DLNR, participants are required to reduce the presence of predators at their facilities.

*The following measures **are required**, to reduce the potential for Covered Seabird predation at Participant facilities:*

- 1) Prohibit loose, free-roaming cats and dogs (e.g. leash and/or restrain). This prohibition will be clearly communicated with appropriate signage; and*
- 2) Conduct a trapping and removal program at the facility for feral cats and dogs; feral animals should be taken to the Humane Society and not returned to the facility even if neutered."*

In response, in the PIPs, all applicant commits to trapping feral animals, except the County. They say: *"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."*

This is inadequate on several levels:

- i) This does not fulfil the requirements of the KSHCP 5.3.2 section noted above
- ii) The Kauai Humane Society (KHS) are no longer cooperating in euthanasia and in fact are charging \$90 just to accept cats into their facility. This being the case, it is not clear how the county propose to carry out the permanent removal of the cats on the landscape to protect downed Newell's Shearwaters and Hawaiian Petrels. They currently do not have the means to do this themselves.

- iii) I feel strongly that the County PIP must explicitly state that the County will trap and permanently remove cats and other predators from their properties and land.

- 2) Again on the subject of KHS, if the organization is not accepting cats, then the other applicants have nowhere to take cats or dogs that they trap either. The County are currently paying over \$1,000,000 in taxpayers' money to KHS but are not receiving public services needed in return i.e. that KHS accept all cats and

dogs, euthanizing those that can't be homed. If KHS will not carry out these actions, then that money should be rescinded and spent on a County facility and program that can provide the services.

- 3) The applicants should be trapping for cats currently as part of their minimization work, but feral cats have been noted regularly on a number of properties, so these trapping procedures are either not effective or not happening. More effective trapping regimes and better enforcement are required.
- 4) It is not clear how DOFAW will monitor compliance. The compliance monitoring regime should be spelled out by DOFAW in the KSHCP document as a commitment, otherwise take could increase if applicants fail to carefully monitor for downed birds or carry out their predator control commitments.
- 5) Reference should be made to the businesses that chose not to participate in the KSHCP, particularly those who had take or were likely to have take but did not allow researchers to check their land. Information should be provided on action that will be taken against those non-applicants.

Andrea Erichsen



November 7, 2019

Via Email

Jim Cogswell
Department of Land and Natural Resources, State of Hawai'i
1151 Punchbowl Street, Room 325
Honolulu, Hawai'i 96813
james.m.cogswell@hawaii.gov
dofaw.hcp@hawaii.gov

Re: *Comments on the Kaua'i Seabird Habitat Conservation Plan – DRAFT August 2019*

Dear Mr. Cogswell:

Mahalo for the opportunity to submit comments on the draft Kaua'i Seabird Habitat Conservation Plan (KSHCP), dated August 2019. I am an ornithologist, behavioral ecologist and environmental toxicologist who has worked on a wide range of wildlife and avian projects in the private, public and academic sectors across the country. From 2005-2013, I coordinated the development, planning and writing for the KSHCP and provided technical assistance to public and private sectors regarding seabird conservation and best practices to reduce light pollution across the state. I have spent thousands of hours observing lights across the state as well as seabird behaviors. As part of this process, I have become very familiar with facilities and lights across Kaua'i as well as the fallout associated with locations across the island.

Overall, I appreciate the tremendous amounts of time and effort that have gone into preparing the KSHCP. This draft is a critical first step toward bringing the Applicants into compliance with federal and state endangered species laws. There are, however, fundamental areas of the KSHCP in need of improvement, such as monitoring as well as predator control. Moreover, although the Participant Inclusion Plans (PIPs) contain some essential information for assessing their incidental take applications, there are several critical areas that require clarification and/or improvement. My comments on the KSHCP and the PIPs are discussed in further detail, below.

Measures To Avoid and Minimize Take Impacts (KSHCP Section 5.3)

Below are some questions and suggestions regarding certain aspects of the proposed avoidance and mitigation strategies.

Adjusting Lighting at Facilities (KSHCP Section 5.3.1)

To this section's bullet list, I recommend refining criteria and information related to the last bullet "use longer wavelengths," which could also be inserted as an update to Appendix E item 13. Minimization of lights should indicate which lamp types and wavelength spectra to avoid (e.g. blue-white) as well as

what wavelengths to use (e.g. yellow-orange), balancing needs for color rendering and light intensities needed for Covered Activities. The addition of more guidelines/criteria related to this topic seems to be particularly important when evaluating LED lamps that tend to emit light in the shorter blue wavelengths. Longcore et al. (2018) discusses models that can help to assess the ecological effects of lights with varying spectral characteristics.¹ For current PIP adjustments and future lighting planning, one approach may include avoiding use of lamps with high actinic power and evaluating lamp effects using the actinic power/lux model and CCT model values for Newell's Shearwater. Updating this information will complement what is in Appendix E item 13.

Reducing Predators at Facilities (KSHCP Section 5.3.2, Items 1 and 2)

The requirements for reducing predation are too general and vague. Because many of the PIPs lack adequate detail or plans to reduce predation, these requirements should be strengthened to contain more specific minimum standards. Regarding the trapping and removal of feral cats and dogs (Item 2), the KSHCP should specify that trapping must occur year-round, rather than only around fallout season, to ensure that feral animal populations are more effectively controlled. Regarding prohibiting loose, free-roaming cats and dogs, the KSHCP should specify how this prohibition will be monitored and enforced. The KSHCP should require Applicants to bring animals to licensed animal care facilities where they will be treated humanely and not released anywhere on Kaua'i, thus providing more options rather than just recommending the Kaua'i Humane Society.

Conducting Seabird Awareness Training and Outreach (KSHCP Section 5.3.3)

The second paragraph

- **The first sentence states:** *"Under approved PIPs, each Participant is required to conduct annual outreach and training for workers at their facilities that is specific to Covered Seabirds beginning in Year 1 of the KSHCP."* This sentence should be clarified to reflect that Participants must conduct facility-wide outreach to guests/customers and also provide Seabird Awareness and Response Training to workers so they can help spot downed seabirds and know how to respond in a timely manner. Workers should also be required to communicate to supervisors about problems with lights. The KSHCP should specify that such Seabird Awareness and Response Training must be completed prior to September 15 of each year and within the first day of employment for new employees hired within the fallout season.
- **The second paragraph, second sentence states:** *"A detailed slideshow presentation was developed on this subject will be provided by the Prime Contractor staff on request."* The meaning of this sentence is unclear but it seems the intent is for the Prime Contractor to develop and provide a detailed slide presentation. What is the purpose of this presentation? Is it required or just a guide? The KSHCP should state that the Participants will receive a copy for use. The training must emphasize effective and required search techniques.

¹ Longcore, T, Rodriguez A, Witherington B, Penniman JF, Herf L, Herf M. Rapid assessment of lamp spectrum to quantify ecological effects of light at night. J. Exp. Zool. 2018:1-11.

Monitoring (KSHCP Section 6.8)

The most significant weakness of the KSHCP is monitoring (Section 6.8).

Compliance Monitoring (KSHCP Section 6.8.1)

Merely reviewing annual compliance reports, with the possibility for follow-up site visits, would be inadequate to ensure that Participants' plans and obligations to minimize and mitigate take are being implemented and effective. This annual review of compliance reports should occur *pre-season* (March-May) to better ensure compliance before the Covered Seabirds return to the island and are at risk. Moreover, the KSHCP should include unscheduled third-party monitoring of site conditions (e.g. lighting and predator control) during peak fallout season. Waiting until review of the following year's annual compliance review would eliminate the ability to correct deficient minimization and mitigation measures immediately, mid-season. Perhaps it could be an additional function of the Prime Contractor to evaluate details of monitoring plans and predator control efforts (duties are listed in Table 6-1).

Take Monitoring (KSHCP Section 6.8.3)

There are discrepancies between the KSHCP's template Monitoring Plan (Item 9) and the PIPs. The template should be clarified and the PIPs updated to specify what is meant by self-monitoring (Option 1) and DLNR-sourced monitoring (Option 2). Given the choice between self-monitoring and DLNR-sourced monitoring, all applicants have selected self-monitoring. Based on my regulatory and monitoring experience, self-monitoring is not reliable or effective because of Participants' and their employees' inherent bias against effectively documenting take. Thus, the KSHCP should justify why self-monitoring is deemed sufficient and how DLNR-sourced monitoring would differ in effectiveness and cost.

Because the PIPs' monitoring plans lack sufficient details to ensure adequate search of harder to search areas, the KSHCP's "guidelines" for take monitoring, Table 6-4, should include more specific search requirements. Specifically, the KSHCP should require that searches be extremely thorough and include looking under and within ground cover, landscaping, drainage ditches, and around water features, for example. Morning searches should occur within 1 hour before sunrise, and if up to 3 hours is deemed sufficient (e.g. open areas, no prevalence of loose predatory animals), the searches (and training) must clearly include how to search all vegetation and structures/vehicles. Employees must search underneath all vehicles before they are moved at night and first thing in the morning.

The guidelines for monitoring of loose predatory animals in Table 6-4 must be clarified to better define when to inform management and how (*i.e.*, immediately via email or phone) and what actions management will take within a specific timeframe. It is important to act immediately during the fallout season.

Participant Inclusion Plans

With the exception of Norwegian Cruise Lines (which does not have feral animals aboard its vessels), all PIPs lack adequate methods to reduce and manage the presence of loose/feral/fed animals—predominantly cats. In addition to DLNR including clearer minimum standards in the KSHCP, discussed above, the Participants must include more detailed information in their PIPs regarding how they will monitor and humanely control loose/feral/semi-tamed cat colonies within and adjacent to their facilities during the

Jim Cogswell
Department of Land and Natural Resources, State of Hawai'i
November 7, 2019
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fallout season or throughout the year. My specific comments on each of the eight PIPs are included in the attached table.²

Please contact me should you have any questions regarding my comments on the draft KSHCP.

Sincerely,

Andrea Erichsen

Attachment

Cc (via email):

jade.butay@hawaii.gov
wtrugillo@kauai.gov
paul.toner@marriott.com
fcowell@kauaicoffee.com
geimerb@starwood.com
dfarkas@ncl.com
joseph.kanekua@sheraton.com
pconry@harveyecology.com
davidr003@hawaii.rr.com

² The descriptions of site conditions in the table are based on my personal observations made in October 2019.

Applicant	Section (of PIP) and/or Page (of KSHCP PDF)	Observation	Recommendation/Question
Norwegian Lines	<p>1. Page 360: Description of facility</p> <p>2. Part 2, Page 381-82, Tables 11-14: Take estimates</p> <p>3. Appendix B: Manufacturers specification sheets for exterior lighting fixtures</p>	<p>1. NCL is seeking coverage for all activities associated with operating its vessels, including but not limited to the Pride of America, in Hawaiian waters and says that all vessels have similar lighting.</p> <p>SOS on Kauai is the only rehabilitation facility mentioned.</p> <p>Table 5, page 369, states: under hosting an SOS station: “Not applicable on an ocean going ship – there is a SOS Aid Station at the harbor where any downed birds are placed.”</p> <p>2. Take estimates for all species seem low and are not broken down by vessel. Tables 12-14 are empty.</p> <p>3. Some lights do not satisfy the requirement to avoid take to the maximum extent practicable in that they are not fully shielded, full cutoff lights, e.g., globe lights (Page 405) and half-moon lights (Page 389).</p>	<p>1. The A&M plan should discuss/clarify SOS type services/plans for other islands such as Maui, Honolulu and Big Island in case a seabird is recovered during transit.</p> <p>2. NCL should provide the data it has collected on its own as part of its seabird monitoring and recovery efforts and report take estimates by vessel. It seems certain that some birds that collide with the ship at night will fall into the ocean. Therefore, search efficiency would not be 100% unless NCL has a method to document this. In addition, birds that fall off the ship, must be attributed as lethal take since the outcome of the bird’s survival is unknown. Tables 12-14 should be completed.</p> <p>3. Globe lights and half-moon lights should be modified/replaced to be fully shielded with full cutoff.</p>

Applicant	Section (of PIP) and/or Page (of KSHCP PDF)	Observation	Recommendation/Question
Princeville Resort Kaua'i	1. Item 2, Page 469, Tables 11-13: Re-requested Take	1. Tables 11-13 are empty and application of a 90% search efficiency seems unjustifiably high.	1. Tables 11-13 should be completed. Application of a 90% searcher efficiency seems high. The Participant should provide the map data and discussion as to why the analysis used is sufficient for that site. Based on my assessment of the site, I think the searcher efficiency should be lower, particularly if cats live in unsearchable vegetation or adjacent facilities.
Kaua'i Marriott	1. Item 2, Page 550, Tables 11-13: Re-requested Take	1. Tables 11-13 are empty.	1. Tables 11-13 should be completed. My general comments on ways to improve or verify self-monitoring apply. Staff training must really focus on how to search non-paved areas and under vehicles prior to use.
Kaua'i Coffee	1. Item 3 Table, Page 578-79, Item 8 Table, Page 587 2. Take Monitoring, Page 591 and Item 9a, #2, Page 592 3. Item 3 Funding Assurance, Page 597 4. Checklist, Page 598	1. Some lights are not listed as fully shielded, with full cutoff, including those needed for Korvan Harvester machines. The lights on these machines should be shielded. 2. Page 591, Table first row, should provide more detailed information regarding percentage of property to be monitored/searched. Same Table states monitoring will occur twice daily at 5:30 a.m. (which is fine), and 5:30 p.m., which violates KSHCP guidelines. Item 9a, #2 lacks adequate details of monitoring during night harvest operations. 3. The Funding Assurance section is empty.	1. Item 8 Table needs more detailed information on light adjustments particularly the harvesters since it is not clear at this time. For example, can harvester lights be shielded? 2. Overall this table needs more details of areal coverage, protocols, and reasons as listed in the header of the table. Evening monitoring must occur 1-2 hours after sunset and more frequently during harvesting operations. The PIP must better specify how staff working during harvesting and processing operations will monitor fall-out. For example the number of monitors (10 during harvesting and 20 for processing) may be sufficient depending on the scale of the searched areas,

Applicant	Section (of PIP) and/or Page (of KSHCP PDF)	Observation	Recommendation/Question
		4. Some items in table not complete.	<p>but more information must be provided on when and how they will work. Monitoring during the harvest is key. Twice per day during harvesting does not seem adequate.</p> <p>3. Provide information under Item 3 regarding funding assurances.</p> <p>4. Complete outstanding items on checklist.</p> <p>My general comments for most PIPs on ways to improve or verify self-monitoring apply. Staff training must really focus on how to search non-paved areas and under vehicles prior to use.</p>
Sheraton Kaua'i Resort	<p>1. Tables 1 and 2, Pages 619-20, 623-24</p> <p>2. Table 4, Page 627 and Table 5, Page 629</p> <p>3. Predator Control, Table 6, Page 630</p> <p>4. Take Estimate and Search Efficiency, Table 10, Page 638</p>	<p>1. These tables were included twice.</p> <p>2. The avoidance and minimization measure to replace all outdoor lights with fully shielded full cutoff fixtures and shields has not been implemented. For example, there are unshielded sets of bright string lights out in the open in the Makai side courtyard.</p> <p>The pagoda lights (N=18) outside the Garden wing reception area are numerous and shine a lot of light out the sides of the lamps, thus resulting in a glow in this area. When out in the open, the large ones especially should not be considered fully shielded full cutoff fixtures or down lights.</p> <p>Floodlights on the roof above the east side eave of the Lava Pool Bar do not point down far enough.</p>	<p>1. Remove the duplicate or inaccurate tables.</p> <p>2. Existing, used facilities are not addressed completely in practice and in the PIP and therefore the PIP does not meet KSHCP A&M standards or maximum extent practicable.</p> <p>3. Table 6 needs to provide more concrete details as to how this minimization will be monitored and managed. The PIP must address humane trapping and data collection on cats around the grounds, which must be active year round. Procedures for managing feral cats must be developed, posted, and enforced.</p> <p>On a related topic, because feral/loose cats are present currently in certain areas around the resort and adjacent lands, staff training must strongly focus on how to search non-paved areas and under vehicles prior to use.</p>

Applicant	Section (of PIP) and/or Page (of KSHCP PDF)	Observation	Recommendation/Question
		<p>There are indoor lights on second and third story common areas that shine out through windows and likely do not meet the A&M standards. These should be re-evaluated to see how window treatments may be used to prevent lights shining out laterally into the sky because the lights are on all night.</p> <p>3. The PIP states that the Resort implements this measure, staff is trained that this is not allowed, and security monitors compliance. More detail on these topics is needed. Numerous feral cats were noted in Sheraton parking lots adjacent to Kiahuna Plantation in October 2019.</p> <p>4. Search efficiency of 90% seems unjustifiably high.</p>	<p>4. The Participant should provide maps and data to support the 90% search efficiency. On the map, please identify areas with “rank” vegetation.</p> <p>Data regarding the presence of cats will inform the survival rate of downed seabirds that are not detected. This will increase the lethal take estimate, further calling into question the claimed 90% search efficacy.</p>
County of Kaua‘i	<p>1. Item 7, Page 674</p> <p>2. Predator Control, Table 5, Page 673</p> <p>3. Light shielding, Page 676</p> <p>4. Lighting Ordinance, Page 677, #4</p> <p>5. Monitoring, Table 8, Page 682</p>	<p>1. County staff to check timers at Category 4 facilities 2x/month. There is no timeframe for fixing broken timers and or any explanation of how use will be managed until repairs are completed.</p> <p>2. Description of predator control at County facilities is too vague, particularly at Category 4 and 5 locations.</p> <p>3. The PIP states that shielded lights may not be used at 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 and that they will</p>	<p>1. County staff should check timers more frequently than 2x/month, i.e., 2x/week for Category 4 lights being used. The PIP should provide a timeframe for fixing timers and protocol for controlling use until timers are fixed.</p> <p>2. The table merely lists statutes regarding loose animals and refuse removal, but does not specify whether/how they will be enforced. The PIP needs to contain more detailed information regarding the methods for monitoring and managing feral animals on County lands and partnering perhaps with adjacent landowners. It may be of value to prioritize more intensified predator control efforts at Category 4 and 5 facilities, for example.</p>

Applicant	Section (of PIP) and/or Page (of KSHCP PDF)	Observation	Recommendation/Question
		<p>consider the use of other types of lighting.</p> <p>4. The PIP states that the County declined to adopt a county-wide or facility-wide lighting ordinance without providing justification for this decision or analysis to support their conclusions. Second, the statement that the County is investigating the possibility of adding advisory language to certain building and development permit forms does not go far enough.</p> <p>5. Table is missing headers. For Category 4, monitoring not frequent enough. For Category 5, timing is not frequent enough.</p>	<p>3. There should be a way to ensure that all portable floodlights for emergency uses are shielded. The PIP needs to provide details as to what these “other types of lighting” are.</p> <p>4. The County’s PIP should provide more detailed information on its analysis regarding development of a lighting ordinance, how it will identify future opportunities and mechanisms to address this topic. Even without an ordinance, the County should include permitting and planning requirements, not merely advisory suggestions as provided currently in the PIP. The County should include in their PIP their policy to ensure that new and existing permitted facilities implement seabird friendly lighting.</p> <p>5. Monitoring at Category 4 and 5 facilities should expand from 10’ radius to at least a 30’ radius of a likely sighting, particularly where there is landscaping or other structures.</p> <p>For Category 4 facilities, searching for fallout only in the morning will result in higher mortality and undetected birds. Therefore, the PIP must specify at time of use in addition to the first hour of the morning.</p>

Applicant	Section (of PIP) and/or Page (of KSHCP PDF)	Observation	Recommendation/Question
Hawai'i Dept. of Transportation – Harbors and Airports Divisions	<p>1. Lihue Airport avoidance and minimization Table 4, Page 842</p> <p>2. Predator Control Kauai Harbors Table 11, page 848 Nawiliwili Harbor and Pt. Allen Table 12, page 849, Lihue Airport Table 6, page 853</p>	<p>1. Airports table on avoidance and minimization-provide seabirds awareness training to staff lists April instead of August.</p> <p>2. These tables are sufficient in that they list information on contractors, costs, and time period for predator control. Other participants should do the same.</p>	<p>For Category 5 facilities, County should conduct ongoing monitoring during light use and after lights are off as written.</p> <p>1. Correct Table 4 to read August to match Harbors.</p> <p>2. Monitoring is improved with third party verification, as I have recommended for all PIPs. The DOT PIPs are therefore setting a good standard by including this information and costs.</p> <p>However, the PIP monitoring plan should make it clear that intensive monitoring will be implemented in areas containing vegetation/landscaping and various types of vehicles and movable equipment (e.g. rental car areas and parking lots as well as vehicles within the secured areas). Practices such as trimming vegetation will also help locate birds that have fallen or crawled under vegetation.</p> <p>In addition, random in-season verification monitoring should be included in the plan.</p>
Alexander & Baldwin	<p>1. Table 1(k), page 1083</p> <p>2. Take Monitoring, Item 7a (page 1152 Item 7b (page 1153)</p> <p>3. Item 2, Tables 11-13, Page 1199</p>	<p>1. Table 1(k), page 1083 states that a lighting plan for the Shops at Kukuiula is underway/planned and therefore is incomplete for this draft. The PIP contains a good list including many varied facilities and reasonable A&M for lights at each although some sites are not addressed completely and therefore the PIP does not meet KSHCP A&M standards or maximum extent practicable.</p> <p>For example, there are numerous unshielded and bright/string lights</p>	<p>1. Include a timeframe for completion of the pending lighting plan for the Shops at Kukuiula, Pt Allen Marine Center and any other locations where plans are pending.</p> <p>Predator monitoring and humane control methods need to be more explicitly defined and scheduled, particularly prior to and during the fallout season. Otherwise, seabirds that fallout at the intersection of Waialo Road and Aka Ula Street, for example, will be quickly dispatched by feral cats.</p>

Applicant	Section (of PIP) and/or Page (of KSHCP PDF)	Observation	Recommendation/Question
		<p>currently in use at two main areas within the Kukuila Shopping Center. These are not within KSCHP guidelines. These exposed lights need to be shielded, full cutoff downward facing fixtures.</p> <p>Similarly, light improvement plans are pending for the 1(f) Pt. Allen Marine Center.</p> <p>Predator control methods are weak, particularly at Pt. Allen sites where the need is highest (e.g. cat colonies on property)</p> <p>2.</p> <p>7a Training is provided, but monitoring is not. The solar farm is close to several facilities such as KIUC's power plant, Chevron, and Pt. Allen. Birds may fallout on property despite the low risk of on-site lights.</p> <p>7b Says 1-2 "searches." Should this be "searchers"?</p> <p>3. Tables 11-13 are empty.</p>	<p>2.</p> <p>7a-A&B should monitor daily at solar farm. It is near the KIUC power plant, Chevron, and Pt. Allen, and birds may fall there. A&B should assess localized presence of cats and other loose predatory animals and take appropriate actions to remove them.</p> <p>7b-Correct typo to "searchers" if that is the intended meaning.</p> <p>For sites where predator control is deemed infeasible, if the results of monitoring show depredation of downed seabirds, adaptive management should trigger humane predator control actions.</p> <p>3. These tables should be completed.</p> <p>My general comments for most PIPs on ways to improve or verify self-monitoring apply. Staff training must really focus on how to search non-paved areas and under vehicles prior to use.</p>



November 3, 2019

Jim Cogswell
Hawaii Dept. of Land and Natural Resources
1151 Punchbowl Street, Room 325
Honolulu, HI 96813
dofaw.hcp@hawaii.gov

Katherine Mullett
Supervisor, Pacific Islands Office
U.S. Fish and Wildlife Service
300 Ala Moana Blvd., Room 3-122
Honolulu, HI 96850
Katherine_mullett@fws.gov

Re: Comments on Kauai Seabird Habitat Conservation Plan

Dear Mr. Cogswell, Ms. Mullett,

On behalf of the Center for Biological Diversity, and its 1.6 million members and supporters, we are writing in response to the Department of Land and Natural Resource's (DLNR) request for comments on the draft Kauai Seabird Habitat Conservation Plan (KSHCP). We fully join the comment letter submitted by Earthjustice on behalf of ourselves and other parties. However, we write separately to address additional concerns regarding the proposed mitigation for the KSHCP so that the errors made in the KSHCP are not considered or incorporated into any long-term habitat conservation program for KIUC. The Center commits at the outset that it will not litigate the deficiencies in the mitigation scheme for the KSHCP, but we believe that the problems contained in the proposal are too significant to go unaddressed.

Newell's Shearwaters and Hawaiian Petrels are at serious risk of extinction and both seabird species continue to decline. If the Service was not so institutionally paralyzed, and was instead capable of taking proactive action, then the Newell's Shearwater would already have been reclassified as endangered given its crashing population levels. A recent scientific study concluded that Newell's Shearwaters population has declined by 94% on Kauai and the Hawaiian Petrel has declined by 78% since 1993.¹ Given these declines on Kauai, it is vitally important that mitigation occur as expeditiously as possible and utilize proven conservation techniques with proven records of success.

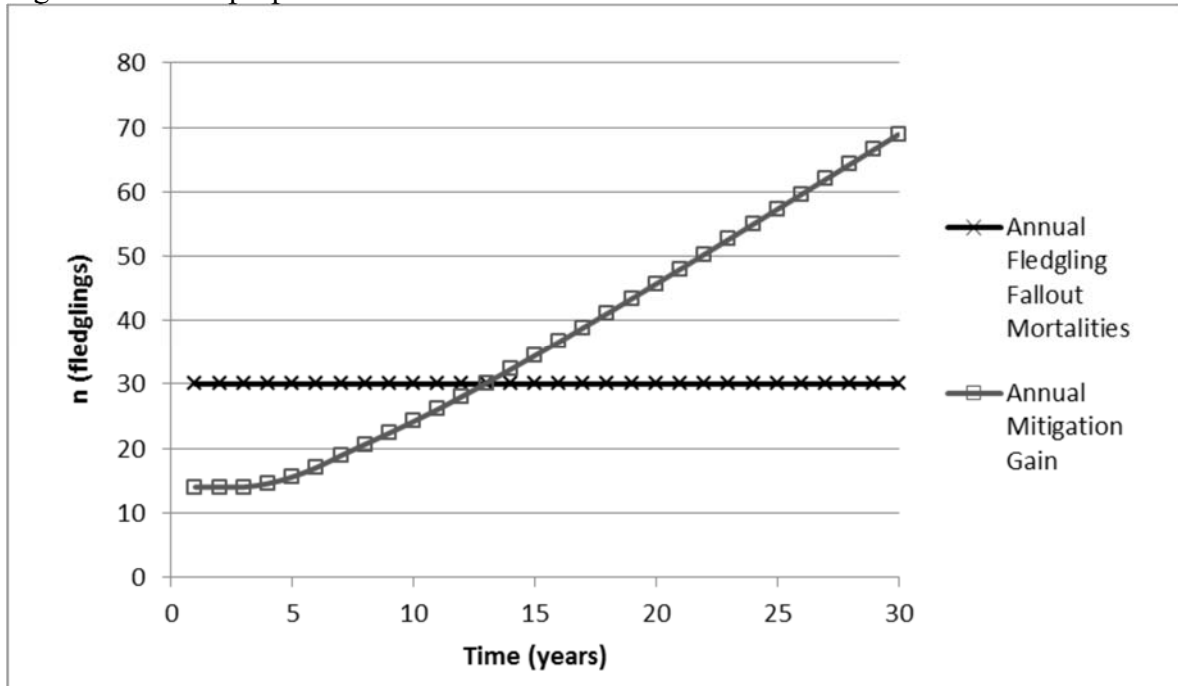
As stated in earlier conversations with FWS and DOFAW, the Center for Biological Diversity does not believe the proposed predator-proof colony is a cost-effective or even a conservation-effective mechanism to mitigate and offset take caused by the applicants. Fencing and protecting existing colonies — the true strongholds of the species — is a far better conservation approach than creating a new colony where these species do not naturally want to nest. The Center recognizes that the applicants believe this to be an important project, but we are concerned that the “coolness” factor of manipulating seabird populations has overridden considerations of more effective mitigation that is readily available.

¹ Raine, A.F., N.D. Holmes, M. Travers, B. Cooper, and R.H. Day, 2017, *Declining population trends of Hawaiian Petrel and Newell's Shearwater on the island of Kauai, Hawaii, USA*, The Condor, 119(3):405-415.

According to the HCP, the maximum amount of anticipated take over 30 years is 900 lethal takes of Newell’s Shearwater and 1350 non-lethal takes — or a total of 2250 takes of Newell’s Shearwaters. Between the establishment of the Kahuama’a seabird preserve, feral cat control, and barn owl control, the anticipated compensatory mitigation funded by the applicants is anticipated to achieve a reproductive benefit of 1147 fledglings (and up to 1597 fledglings if the maximum reproductive output is achieved at Kahuama’a).

However, the anticipated reproductive benefits of the Kahuama’a preserve do not occur until nearly the end of the 30-year period covered by the HCP. According to the HCP itself, it is only in *year 27-30* that these combined strategies yield a “a net benefit to the ‘a’o population of 136 fledglings.”² That benefit would not occur until after the year 2050, and is not in any way compatible with the Endangered Species Act’s precautionary approach, in which species receive the benefit of the doubt with respect to their conservation.

Furthermore, we are highly skeptical regarding the underlying assumptions contained within Figure 4-1 in the proposed HCP:



While the Center appreciates that no model is perfect, this model appears to ignore fundamental biological concepts with respect to seabird biology. Seabirds do not have uniform productivity year to year, and do not have uniform reproductive output and fledging success rates even in areas where they are not threatened by human-caused impacts. As noted in the HCP itself, during studies of survival of SOS birds that were fitted with radio transmitters, 2014 appeared to be a low survival year due to “weather or climatic conditions affecting food availability (Raine et al. 2016, Raine et al. 2017, p. 21).”³ It is a fundamental fact that ocean and climate patterns —

² HCP at 39.

³ HCP at 31.

including short term phenomena like El Nino and La Nina, and long-term Pacific decadal oscillation⁴ — vary year to year, which can have significant impacts on marine food webs. This in turn impacts reproductive success of seabirds, and these rates of reproductive success vary significantly. Yet, the model contained within the HCP shows a consistent climb in Newell’s Shearwater reproduction without fail between year one and year 30 of the proposed project. The Center is unaware of any science that would support such a simplistic approach towards seabird reproductive success, and requests that the applicants address the limitations of this model.

Likewise, even though the HCP contemplates the possibility of vandalism to the predator-proof fence, as well as the possibility of “reinvansion” by non-native predators, there is no acknowledgment of the *impacts* if such actions could have. If a single cat were to successfully enter the colony — for example in year ten of the project — given the detection time, plus time needed to remove the cat, it is quite possible that there could be significant losses of adults or fledglings, thereby wiping out any or even all of the anticipated mitigation benefits. Thus, the anticipated conservative model benefits of 697 fledglings does not appear to be a conservative estimate for mitigation, but rather an overly optimistic and simplistic projection of possible mitigation benefits. When compounded with the normal delay in reproduction of seabirds given the age at first breeding, the first opportunity to detect and even consider addressing any unanticipated shortcomings of the mitigation project will not likely not even be recognized until a decade or so after the project’s commencement. We do not believe that a mitigation project that takes at least ten years to even learn of a problem with the mitigation is precautionary, or does not “give the benefit of the doubt to the species” as Congress intended.⁵

Accordingly, the Center recommends that *proven* mitigation be used to offset take. There are additional areas on Kauai where cats, barn owls, pigs and rats could be controlled, to the benefit of listed seabirds. Furthermore, there are areas where ungulate- and pig-proof fencing could be installed to the benefit of *existing* seabird colonies. Both of these proven conservation strategies would mitigate take in year one, not in year 27 of the HCP. If the proposed mitigation of feral cats in Kalalau Valley is expected to result in a “30% decrease feral cat predation” of listed species — at an estimated benefit of 300 fledglings — then why not triple that effort to achieve a higher decrease in feral cats in the valley? Simple math based on the HCP’s assumptions suggests a much higher return in terms of reproductive success for Newell’s Shearwaters.

We are simply not convinced that pushing seabirds into areas that are suboptimal in terms of slope, vegetation, and current range is better than preserving existing seabird colonies where the seabirds want to be. The HCP states that the location for the seabird colony project was determined to be suitable through a personal communication with Lindsay Young.⁶ While Ms. Young is an outstanding biologist, that does not appear to be a rigorous, science-based approach of locating and siting a seabird mitigation proposal. Nor does it make it more likely that the Kahuama’a project will ultimately succeed. Notions of convenience, road access and cost are relevant to the mitigation approach chosen by the applicants. However, choosing a project that is feasible defeats the purpose if the project ultimately fails to create a net benefit.

⁴ See, e.g., Mantua, N. J., & Hare, S. R. (2002). *The Pacific decadal oscillation*. Journal of oceanography, 58(1), 35-44.

⁵ *Connor v. Burford*, 848 F.2d 1441 (9th Cir. 1988).

⁶ HCP at 24.

In 2015, the government of New Zealand proposed the ambitious goal of removing *all* predators from *all* of the New Zealand by 2050. In contrast, the Hawaii Dept. of Land and Natural Resources and the U.S. Fish and Wildlife Service have spent two decades developing an HCP that will result in a net benefit of 136 fledglings in a two-hectare reserve. At the current rate, given the lack of vision and ambition at the U.S. Fish and Wildlife Service, it is highly likely that all of Hawaii's seabirds will go extinct long before the Service takes any meaningful action to address the many threats to these species.

Ultimately, the continued decline of the Newell's Shearwater and Hawaiian Petrel has been caused by the many abject failures of the U.S. Fish and Wildlife Service to take any action whatsoever to help these imperiled seabird species. The lack of action by the agency are simply a disgrace and are shameful. As the Service contemplates addressing the threat of powerline collisions and other major threats to Hawaiian listed species, the Center will not tolerate further dismal failures by the Service.

Sincerely,

A handwritten signature in black ink, appearing to read "Brett Hartl", with a long horizontal flourish extending to the right.

Brett Hartl
Government Affairs Director
bhartl@biologicaldiversity.org



November 7, 2019

Via Email

Jim Cogswell
Department of Land and Natural Resources, State of Hawai'i
1151 Punchbowl Street, Room 325
Honolulu, Hawai'i 96813
james.m.cogswell@hawaii.gov
dofaw.hcp@hawaii.gov

Re: Comments on Kaua'i Seabird Habitat Conservation Plan – DRAFT August 2019

Dear Mr. Cogswell:

Earthjustice submits this letter on behalf of Hui Ho'omaluku i Ka 'Āina, Conservation Council for Hawai'i, Center for Biological Diversity, and American Bird Conservancy in response to the Department of Land and Natural Resources's (DLNR's) request for comments on the draft Kaua'i Seabird Habitat Conservation Plan, dated August 2019 (KSHCP). We incorporate by reference the comments submitted today by Andrea Erichsen and submit the following additional comments on the KSHCP and component Participant Inclusion Plans (PIPs).

We appreciate the tremendous amount of time and effort that have gone into developing the KSHCP and, ultimately, would like to see it move forward and succeed. As discussed in further detail below, we are unable to support the KSHCP in its current form due to several deficiencies that fail to ensure that Applicants will “minimize and mitigate” incidental take “to the maximum extent practicable.” 16 U.S.C. § 1539(a)(2)(B)(ii); Haw. Rev. Stat. § 195D-21(g)(1). This is particularly so for the regulatory agency Applicants—the County of Kaua'i and the Hawai'i Department of Transportation—which have broad authority over a wide range of properties, facilities, and infrastructure, and are responsible for a significant portion of take of Covered Seabirds throughout Kaua'i.

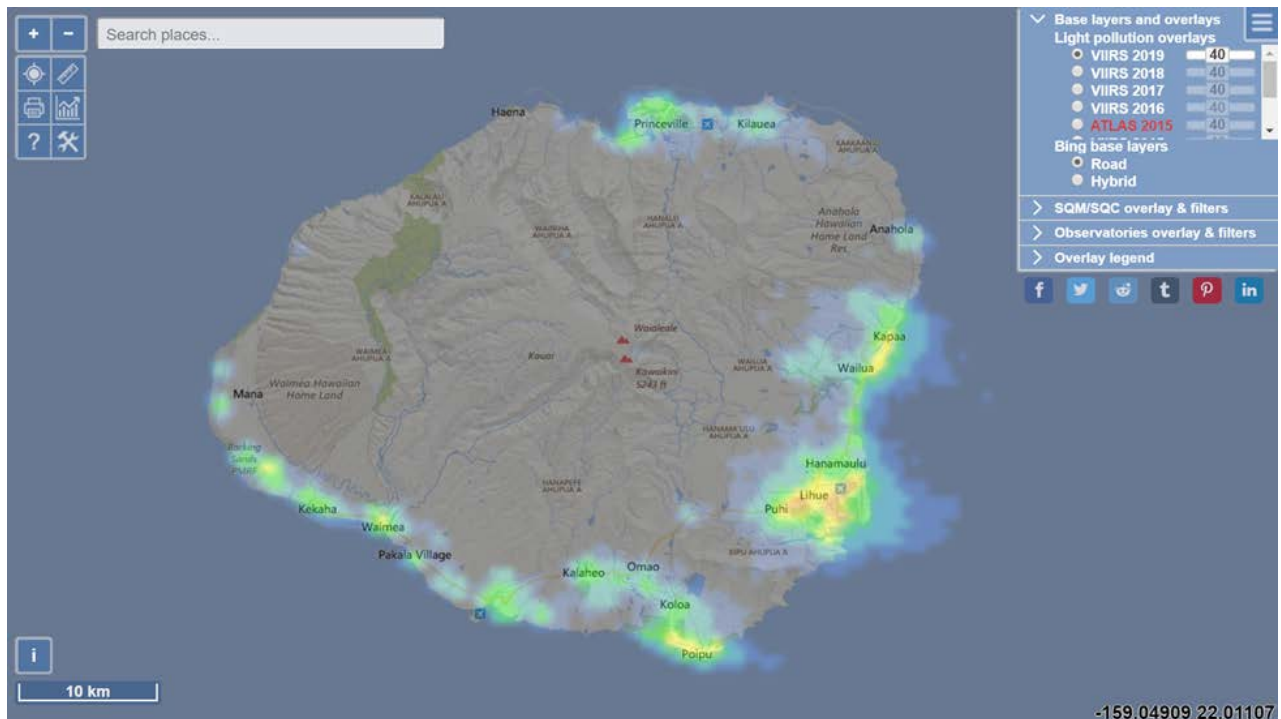
I. MINIMIZATION

A. Outdoor Lighting (KSHCP Section 5.3.1)

The KSHCP lacks meaningful standards to minimize lighting impacts on Covered Species. Although the KSHCP contains “Guidelines for Adjusting Lighting at Facilities,”¹ this menu of *options* is too vague and should instead include more specific *requirements* to minimize take.

¹ KSHCP at 44-45 & Appendix E.

The island of Kaua'i has become brighter over the past 20 years due to population growth, and also over the last few years due to the widespread adoption of light-emitting diode (LED) lights. The County has been replacing its older, yellow-colored, long-wavelength streetlight fixtures with LED fixtures that are whitish, emit a high amount of short-wavelength light, and are hotter (in terms of lumens). These sweeping changes have exacerbated nighttime lighting problems island-wide.



2019 Light Pollution Levels²

Shielding lights—without also controlling the color spectrum and power output—fails to minimize seabird attraction. For example, a shielded white, hot light can reflect off of white surfaces such as walls or cars and create a massive nighttime lighting problem.

² <https://www.lightpollutionmap.info/#zoom=10&lat=2518510&lon=-17754133&layers=B0TFFFFFFF>



Picture taken in 2018 by the Center for Biological Diversity

The KSHCP should, therefore, include mandatory outdoor lighting requirements that specify: (1) the required color spectrum — no greater than 2200 Kelvin (K) (for non-filtered LEDs) or a blue-light percentage of less than 2% (or the sum of energy between 400 and 500 nanometers divided by the sum of energy between 400 and 700 nanometers), (2) the maximum lumens – no greater than 1000 lumens for any individual exterior light, and (3) that full shielding and full cut-off are required. Should an Applicant need to install a specific light that does not meet these standards, the Applicant must be required to justify the specific need for this type of light. The goal for each Applicant's PIP should be to substantially reduce the overall brightness of their facilities, as measured by a high-quality light meter detector, and maintain these reductions for the life of the KSHCP.

The KSHCP should also require Applicants to implement a two-week dark skies period during which outdoor lighting is further restricted (*i.e.*, the maximum number of lights are shut off and non-essential activities are curtailed) to minimize to the extent practicable the take of Covered

Seabirds during the peak of fledging season, *i.e.*, during the 2- to 3-week period around the October new moon.

Moreover, we strongly object to the assertion in the KSCHP that “[a]pproximately 50% of the total downed birds recovered by [Save Our Seabirds] are not attributable to any specific, consistent, or known source of light attraction. For this portion of light attraction impact, there is no identifiable entity to apply for take authorization.”³ The County has broad authority and responsibility to regulate outdoor lighting across the island and, therefore, is responsible for incidental take caused by inadequate regulation of outdoor lighting. The County, therefore, should in its PIP commit to adopting outdoor lighting standards as well as outdoor lighting zoning ordinances for new and existing structures. Relatedly, the County should hire a full-time employee to: (1) conduct lighting audits during the non-seabird season (December through March), (2) conduct education and outreach training sessions during the early seabird season (March through August), and (3) conduct nighttime island-wide patrols for problematic lighting that has recently come online during the peak seabird fallout season (September through November). In other words, this employee’s position would be to ensure that the County makes continuous progress over time to reduce problematic lights, rather than backsliding whenever a new building is built, or a light bulb is replaced.

For example, when the new Ross Store opened on Kaua’i several years ago, no one flagged for that business that the seaward-facing lights it had installed just two blocks from the ocean would harm seabirds. Simple education to the owners of that store could have immediately alleviated another bad exterior lighting situation, but there was simply no one available to do so. If the County had an employee whose job was to educate businesses, then this could have been avoided.

Likewise, in October of 2017, there was a large concert at the Cabana Bar and Grill in Po’ipū on October 20th (the date of the new moon). The concert had set up five horizontal floodlights to illuminate the parking areas. These floodlights could be seen for miles around. Within minutes of arriving there, staff from the Center for Biological Diversity observed several Newell’s shearwaters circling these lights. This particular concert event illustrates that, without dedicated staff paid by the County to address seabird lighting, the Newell’s shearwaters will continue declining towards extinction.

³ KSHCP at 36.



Floodlights at Po'ipū Concert on new moon of October 2017

B. Outdoor Lighting (PIPs)

Given the conservation decline in the species, and the impact of artificial light on adult birds, there is an urgent need for each Applicant to take immediate action to minimize light hazards at each site to the maximum extent possible, with special attention to the highest risk areas (*i.e.*, those with the greatest light footprint). For each site, priority should be given to removal, replacement, shielding or modification of light fixtures that are known to pose the greatest risk to over-flying seabirds (*i.e.*, documented attraction/collision). Prior to each breeding season, Applicants should ensure staff are trained on how to respond to and rescue downed birds and follow the appropriate reporting protocols.

C. Predator Control (KSHCP Section 5.3.2)

The KSHCP's requirements for predator control are too simplistic and vague. Although the KSHCP requires that Applicants prohibit loose, free-roaming animals, and conduct a trapping

and removal program,⁴ the KSHCP should include more specific standards for predator control, especially in light of the fact that many of the PIPs lack adequate details or commitments to control predators. For example, the County's PIP lacks any commitments to control feral cats, which is unacceptable.⁵

In addition to requiring that trapped and removed feral cats and dogs "not be returned to the facility even if neutered," the KSHCP should additionally prohibit these predators from being released anywhere on Kaua'i or any other Hawaiian island that has nesting seabirds. These trapped predators should either be humanely euthanized or be placed in permanent facilities where they cannot harm wildlife and will be treated humanely. We are cognizant that costs for "no-kill" options may be substantial particularly in relation to the limited conservation benefit derived from this humane alternative. Furthermore, we are very concerned regarding the requirement that trapped animals be brought to the Kaua'i Humane Society, since it is currently charging high fees to accept feral animals, which effectively makes this option impracticable. The KSHCP should include an alternative that would allow for feral animals to be humanely put down.

II. METHODS FOR DETERMINING TAKE (KSHCP SECTION 6.2.2.1)

For the purposes of estimating unobserved lethal take as part of the incidental take authorization process, the KSHCP requires Applicants to assume that only half (50%) of the seabirds that fallout are actually found and turned in to Save Our Seabirds.⁶ However, Applicants have the option of demonstrating that their searcher efficiency rate is greater than 50% to justify lowering their projections for unobserved lethal take.⁷

Some of the Applicants', in their PIPs, have deviated from the 50% searcher efficiency rate without providing adequate data to justify these deviations. These Applicants, *i.e.*, Norwegian Cruise Lines (100%), Princeville Resort Hotel (90%), and Sheraton (90%), should provide data to support these search efficiency rates, which appear unreasonably high.

⁴ *Id.* at 46.

⁵ County of Kaua'i PIP at 12, Table 5.

⁶ KSHCP at 62.

⁷ *Id.*

III. MONITORING

A. Compliance Monitoring (KSHCP Section 6.8.1)

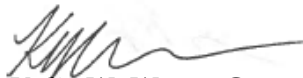
It appears that the KSHCP proposes to monitor compliance with minimization and mitigation actions annually, with the *potential* for follow up site visits to validate compliance.⁸ Annual compliance monitoring based on predictable, annually submitted reports, would be inadequate for ensuring compliance with minimization and mitigation measures and limits the ability for mid-season course correction. The KSHCP should specify that this annual review occur *pre-fallout season* (March-May) and include unscheduled, third-party compliance monitoring during peak fallout season to better ensure that minimization and mitigation measures are properly implemented.

B. Take Monitoring (KSHCP Section 6.8.3)

The KSHCP appears to include two options for monitoring take: (1) self-monitoring, and (2) DLNR monitoring, which “requires Participant funding & DLNR consultation”⁹; however, the KSHCP lacks any detail on what DLNR take monitoring would entail or how much it would cost. Moreover, given the choice, all Applicants have selected self-monitoring. Self-monitoring would be ill-advised and inadequate given Applicants’ and their employees’ inherent bias to under-report take. The KSHCP should instead require that take monitoring be conducted by a third-party, and possibly provide a DLNR or other government agency option for take monitoring.

Mahalo for the opportunity to provide these comments. Should you wish to discuss these comments, please do not hesitate to contact the undersigned or David L. Henkin at (808) 599-2436, kwager@earthjustice.org, or dhenkin@earthjustice.org.

Sincerely,



Kylie W. Wager Cruz

cc:

jade.butay@hawaii.gov

wtrugillo@kauai.gov

paul.toner@marriott.com

fcowell@kauaicoffee.com

⁸ *Id.* at 74.

⁹ *See, e.g.,* KIUC PIP, at 18.

Jim Cogswell

Department of Land and Natural Resources, State of Hawai'i

November 7, 2019

Page 8

geimerb@starwood.com

dfarkas@ncl.com

joseph.kanekua@sheraton.com

pconry@harveyecology.com

davidr003@hawaii.rr.com



The power of human connections®

November 7, 2019

Via Email Only

Mr. Jim Cogswell
Ms. Katherine Cullison
Department of Land and Natural Resources
1151 Punchbowl Street Room 325
Honolulu, Hawaii, 96813

Subject: Comments on Draft Kaua'i Seabird Habitat Conservation Plan (KSHCP)

Dear Mr. Cogswell:

I want to begin by saying how pleased we are that the Department has reached the point where it has been able to release the draft KSHCP. We fully understand the effort that has been required to achieve that and to structure a plan that is manageable for potential participants. You and the many others who have contributed to the plan are to be congratulated.

The agencies have been working on the KSHCP for a great many years. At the time KIUC's Short-Term HCP (KIUC STHCP) was approved and our Incidental Take Permit issued in 2011 the agencies held the position that it would shortly be superseded by coverage under the KSHCP, as the KSHCP was to encompass all forms of take on Kaua'i, and they made KIUC's eventual participation in the KSHCP mandatory. That changed in late 2015 when the agencies unilaterally, and over the strong objections of KIUC, "split" the conservation effort into two pieces: (1) the very small, light attraction only piece that is the subject of the KSHCP, and (2) the much larger KIUC line-collision and light attraction piece that is the subject of KIUC's ongoing Long-Term HCP (LTHCP) effort.

As soon as we were informed that we could not participate in the KSHCP, we started pursuing our own LTHCP and permits in parallel with the efforts of the KSHCP team. Because the seabird species that are the focus of the KSHCP and KIUC's LTHCP are the same, we have continued to be vitally interested in the methods and results of the analyses that are presented in the KSHCP. Accordingly, both we and our consultants, including HT Harvey and Associates, have read it closely. Our principal purpose has been to ensure that analyses in the two HCPs, which were once one, are consistent in terms of the biological information they rely upon for crafting and analyzing their respective, complimentary, conservation programs for the covered seabird species.

Based on our reading of the draft document, we believe that there are several fundamental issues that must be resolved before the KSHCP is finalized. Those are enumerated below.

Need for Consistency Regarding Covered Seabird Species Baseline

The KSHCP does not appear to be using the current population size and trend estimates being discussed between DOFAW and KIUC in the drafting of the KIUC LTHCP and present in the scientific literature. KIUC and its consultants believe that it is imperative that these two HCPs be based on the same "best

available” scientific information if the needs of the species are to be met. Specifically, the KSHCP is using an estimate of “Year 1” population of 18,720 NESH (a conservative estimate), which is lower than the most recent at-sea “minimum” estimates for Kaua‘i of about 24,310. It also states that the populations have been dropping dramatically (roughly 6% to 13% annually) and that the decline is expected to continue, which conflicts with recent reports that the populations have not declined since roughly 2009.

Despite the population declines outlined in the draft KSHCP that are expected to continue, applicants have been instructed to assume that their light attraction take will remain constant over the requested 30-year permit term. The KSHCP should update its population status and trend descriptions to be consistent with the best scientific information that is now available. In the process, the authors of the KSHCP should evaluate if this information affects light attraction take by the KSHCP applicants over the proposed permit term. Because it is critically important to the success of the overall seabird conservation strategy, the KSHCP should not be finalized until these fundamental population and take issues are resolved and are consistent with those being considered by the agencies for the KIUC LTHCP.

SOS Program and Benefits

As you know, KIUC recognizes and strongly support the role and value that the Save Our Shearwaters (SOS) Program plays in recovering and rehabilitating downed seabirds. We have been a staunch supporter and the principal source of funds for the SOS Program for the past 15 years (over \$1,000,000 since 2015 alone) and anticipate continuing our support so long as we receive appropriate credit for the biological benefit that results from that support. As such, KIUC believes the 88% credit that the KSHCP assigns for live birds that are turned into the SOS Program is fully justified and are pleased that the agencies have reached this conclusion.

Having said that, we must also say that the draft KSHCP report does not adequately describe the SOS Program or characterize the essential role that KIUC plays in it. For example, the first paragraph of Section 4.1.3 on page 30 of the document incorrectly states: “*The SOS is a nonprofit that collects, treats, and releases all native Hawaiian wildlife as well as grounded birds on Kaua‘i.*” In fact, the SOS program has been largely funded by KIUC for the past 15 years, and without KIUC’s very substantial ongoing support this extraordinary program would almost certainly not exist. For the past decade most of the day-to-day work has been performed admirably by the staff of the Kaua‘i Humane Society under contract to KIUC, and we believe that the report should be revised to more accurately describe the Cooperative’s long involvement and ongoing support for SOS. The plan should also acknowledge that KIUC will continue to receive mitigation credit in proportion to the birds handled by the SOS Program.

Section 6.11.8 states: “*The SOS program is the anticipated means to achieve the KSHCP objective of recovering, rehabilitating and releasing all downed birds found at Participant facilities (see Section 5.3.4).*” Section 6.11 of the Draft KSHCP discusses what would occur if KIUC funding did not continue and the SOS Program were no longer available. It states:

Planned Response if SOS Program is no Longer Available: The KSHCP intends to rehabilitate and release downed seabirds that are recovered by Participants via the SOS Program. The SOS Program provides expertise, cost effective rehabilitation, established aid stations and more. However, the KSHCP provides for the contingency that the SOS Program may not be available for the life of the program by collecting funds adequate to provide the required services (rehabilitation and release of downed seabirds) independent of the continued existence of the SOS Program. If necessary, the Participants would use a certified veterinarian to handle and rehabilitate downed seabirds from the Participants’ premises. Each Participant would be responsible for arranging for the required services for its downed seabirds. The KSHCP funds would not be necessary to meet this contingency.

KIUC believes that the ability to successfully operate the SOS Program, even if for the KSHCP participants alone, is beyond the abilities of "individual veterinarians" that are proffered as an alternative to the existing, KIUC-funded/Kaua'i Humane Society-operated program. To the best of its knowledge, individual veterinarians do not have the knowledge or facilities that are needed to achieve the 88% minimization. Hence, it is essential that the State commit to operating the program if the existing sponsorship arrangements ended. For reasons fully explained in the Draft KSHCP, the SOS Program is far too central to the conservation efforts for the covered species to be allowed to founder.

Applicant Self-Monitoring

KIUC supports the KSHCP's use of applicant self-monitoring and applicant generated searcher-efficiency data for determining facility take requests and for monitoring annual take once the HCP is implemented. So long as applicants use qualified personnel and agency-approved monitoring protocols for the surveys, KIUC does not believe that there is a need to have DOFAW or a common third-party conduct Searcher Efficiency (SEEF) and Carcass Removal (CARE) trials. If this remains a concern, a potential approach would be for DOFAW to conduct random SEEF and CARE trials at select applicants on a periodic schedule (e.g., every five years) to assure itself that the results it is receiving are accurate.

Lighting Standards

KIUC believes that the approach that the KSHCP takes regarding lighting standards is an appropriate one. Allowing applicants to identify the lighting that they believe they need and explain why their selection of fixtures represents the best available technology given their operational needs and financial capacities is a thoughtful approach. Attempting to impose specific island-wide standards for light color, intensity, and other attributes is not practical given the scientific uncertainty that exists concerning this topic. KIUC has employed all the approaches outlined in Section 5.3.1 at its facilities and believes its actions have minimized their light attraction potential.

Please call me if you have any questions or concerns.

Very truly yours,



Carey Koide
T&D Manager

cc (via electronic mail):

Kasia Mullett, USFWS
David Moser, Ebbin Moser + Skaggs
Paul Conry, HT Harvey & Associates
Jim Hayes, Planning Solutions Inc.