ENDANGERED SPECIES RECOVERY COMMITTEE (ESRC) MEETING

August 30, 2018 MEETING MINUTES

Meeting Location: Department of Land and Natural Resources, Division of Forestry and Wildlife,

1151 Punchbowl Street, Honolulu, HI 96813

MEMBERS: Scott Fretz (DLNR), Michelle Bogardus (USFWS), Kawika Winter (At-Large), Lisa

Spain (At-Large), Loyal Mehrhoff (At Large).

STAFF: DOFAW: Kate Cullison, Glenn Metzler

USFWS: Diane Sether

AGENDA

ITEM 1. 9:00 am Call to order.

ITEM 2. Announcements

Will be a break for lunch at a convenient time based on discussions.

ITEM 3. Request for Comments on the July 13, 2018 Draft Habitat Conservation Plan for the Pakini Nui Wind Energy Project; presentation by consultant SWCA (Amanda Ehrenkrantz)

Start - Pakini Nui presentation on revised draft HCP by Amanda Ehrenkrantz of SWCA.

Below questions and comments in the order discussed.

KWinter: Questions whether band-rumped storm petrel (BRSP) should not be a covered species because prime habitat present. Asks FWS opinion.

MBogardus: States that FWS agrees the likelihood of take of BRSP is low and not including as covered species. No burrows in the National Park have been found, only at PTA. There is very low acoustic and other detection of BRSP in the area and throughout Hawai'i Island. FWS comfortable that take of BRP is unlikely. On the ground monitoring since 2014 at the site has not found fatalities. There is legal precendent under ESA regarding likelihood of take.

LMehrhoff: Asks why no HCP to start with. Are the 3 bats that have been killed going to be offset.

AEhrenkrantz: Offset for 3 bats already killed is not a part of this process.

LMehrhoff: Concerned that this could also happen for BRSP if take occurred.

MBogardus: Cannot retroactively permit bats taken previously to permit issuance. It is a law enforcement issue.

SFretz: Conclusion is that no compensation may occur if take occurs when not permitted. Applicant could compensate voluntarily even though not legally required. Staff recommended that they include mitigation to compensate for take prior to

SFretz and KWinter: Request all survey data for seabirds relevant to this plan be provided to the committee.

LSpain: Has questions about what the state can legally do, e.g. monitoring, given that mitigation is proposed on federal land.

SFretz: State has general NPS MOU and also there is the MOU specific to this project. This should be sufficient to determine how compliance monitoring will be done.

LMehrhoff: Questions about whether there may be issues related to NPS also claiming benefits from mitigation under this project and suggests there be specific language clarifying how it would be partitioned.

MBogardus: Federal requirements on this are stringent but it is in their EIS.

MBogardus: Evidence of Absence at 80% probability that was used to request take indicate that the total requested bat take of bats includes the 3 bats already taken.

Now moving on using staff comment submittal as starting point.

SFretz: First issue is triggers for take. Not specific with regard to take rate.

AEhrenkrantz: Since the version reviewed additional language has been added with specific triggers based on take rate (compared to prior 4 years) added and specific actions once triggered.

LMehrhoff and MBogardus: Concern that language mentioned says "may" but thinks that "will" is required.

SFretz: Asks whether changes in search efficiency might be appropriate.

DSether (FWS): Clarifies that search efficiency needs to be considered separately.

MBogardus: Suggests due to short term of HCP that comparison of take rate for 2 prior years might be better than 4 years.

DSether: Concern is triggering using short time might happen if a bad year, i.e. false triggering.

LMehrhoff: Concerned what 4 years would actually be included. Also needs to be specific actions proposed if the permitted take is actually exceeded, what will be done to stop take until a new permit is obtained.

SFretz: How was take estimate made?

DSether: FWS are in agreement on the modeling and take estimate requested.

LMehrhoff and KWinter: Asking about the use of plastic bats for SEEF.

DSether and AEhrenkrantz: Plastic bats used because carcass removals high. Switched to rats when canines used.

KWinter: Questions carcass retention and whether there should be more effort to do predator control to improve carcass retention.

LMehrhoff: Questions why carcass retention not that low but SEEF showed very low retention of carcasses and so why plastic bats were used.

KWinter and SFretz: Search frequency is 1 week with canines but if most of carcasses taken quickly this could be a problem.

SFretz: If carcass retention is really low that will increase take projection and that might then result in take rates being so high as to trigger adaptive management. It may be up to the applicant to decide and in their best interest to do more predator control for higher carcass retention.

KWinter: Questions cumulative impacts statements that bats are more widespread than previously assumed. Questions that this seems to be concluded based on bats being taken at wind projects.

SFretz: Four factors (were actually only 3 in document) discussion does not seem to fit in take monitoring section. Suggests that it be deleted.

FWS: Indicates factors discussion language was something they provided and to be revised.

FernDuvall (DOFAW): BRSP seems to have low elevation and high elevation populations. Could check with museum for records from that area. Where do you want risk.

SFretz: Wants to follow up with staff on BRSP [Assume he means Afsheen Siddiqi]

KWinter and SFretz: Curtailment not in line with most recent outline of ESRC guidance proposed and discussed at the last ESRC meeting. This can be provided to applicant if they do not have.

LMehrhoff: Should be more explanation of LWSC logic. Why proposing a cutout of 5.5m/s if you don't think anything above 5 m/s provides benefit.

KWinter: Questioning about petrel mitigation and why not proposing predator control effort (mainly rats).

MBogardus: Explains that the level of effort required for the extensive and continued predator control would be too high for this mitigation. NPS does not want to start something they cannot continue.

SFretz: Biological goals and objectives are not specified.

General discussion: Fledgling numbers are a better measure of success.

MBogardus: That is very hard to do when only small numbers of take requested.

LMehrhoff: Important to consider that there are other partners for this work so clear partitioning is important. States there is some mischaracterization of NPS mission - they do have a restoration mission contrary to what is stated in HCP. Would things have been done anyway by NPS - needs to be clearly described as added benefit. Accrual of much of the benefit will not occur till after the 10-yr term.

SFretz: 90,000 plants put in over 1200 acres would not result in much coverage. Canopy cover, height, diversity, etc. no included as success criteria and are needed. Could theoretically only have scattered plants surviving and meet current proposed success criteria. Should work with staff to develop additional success criteria.

LMehrhoff: Questions how they will show bats produced. Need to show that restoration shows

SFretz: Increase in any bat activity is all that is required as success and not enough.

LMehrhoff: Interprets HCP to read that site will be decommissioned and not just extending or doing new HCP. Concerned that they may just want to extend and that is not what he interpreted the HCP said.

AEhrenkrantz: Says that is not what is intended. Intent is to get another power purchase agreement (PPA).

MBogardus: Indicates that too much uncertainty to know what will happen after current PPA.

SFretz: As currently written the applicant mitigation could fail and still meet current written success.

LMehrhoff: Could not replicate REA model calculations to determine mitigation requirements. Could not replicate their numbers.

LSpain: Not clear how or who bat monitoring would be done. NPS document says one thing and HCP main text another thing.

SFretz: Methods for monitoring bats and success criteria seem to minimal.

LMehrhoff and SFretz: Assumes going from unoccupied to occupied is what it currently proposes. He is ok with that as long as strong language for creating robust forest habitat. But does not think math adds up when only considering the term of 10 years and benefits required may take much longer.

SFretz: NPS is covering part of cost because they build the fence to keep out ungulates. Not sure how that should be incorporated.

LMehrhoff: Comment on rolling average times used for determining cutout and cutin.

AEhrenkrantz: Will add appendix on bat monitoring and will also add seabird.

Glenn Metzler (DOFAW): Acoustic monitoring should be done at wind project site.

General ESRC Discussion: Requirement for acoustic monitoring on site has not been fully discussed by bat subcommittee. Still needs discussion and to be worked out.

SFretz: Fatality searches, SEEF and CARE (carcass retention) - questions if there are standards. HCP says SEEF and CARE 10 per year and can be adjusted by working with staff.

AEhrenkrantz: Fatality searches 1 per week. Dog searches include all turbine searches in 1 day but if pedestrian then 2 days. 30 SEEF and CARE spread over 3 sizes of carcasses.

Glenn Metzler: Template for annual reporting has been developed by DOFAW and FWS staff and will be provided.

SFretz: Discussion in HCP on extension is confusing. Wants to be clear that extension requires Board of Land and Natural Resources approval.

SFretz: Does not understand why less curtailment is included as an option - does not seem relevant. Should be an alternative in between full shutdown at night and proposed curtailment. Required to do minimization to the maximum extent practicable so why not more curtailment analyzed. Would seem prudent to analyze impact on power production and revenue received with higher LWSC.

LMehrhoff: Agrees that higher curtailment speed should be included as an alternative.

SFretz: Downed wildlife protocol and/or what is in HCP needs to be clear that an injured bird or bat is a take just like a fatality.

Public Comments

Commenter 1: Were any non-federal or non-state lands considered for mitigation?

LMehrhoff: Since turbine site is on Kamehameha Schools land why is bat mitigation not considered on their land.

AEhrenkrantz: Does not know the history of why these other areas were not considered for mitigation.

ITEM 4. Request for Comments on the July 9, 2018 Draft Habitat Conservation Plan Amendment for Kaheawa Wind Power II; presentation by Terraform Power

MCraig gives brief update, as requested by DOFAW staff, to the ESRC on the recent changes to the HCP. Discussion summarized below.

MCraig: For the record, if find 6-7 more bats over the next 14 years, which would continue at the rate observed since we started implementing LWSC, then the projection is the same as we've been seeing.

And to repeat, as we make changes that reduce take, the estimate goes down, we've already seen at KWP2 the estimate going down about 1 bat per quarter since we haven't found any fatalities, and because the search conditions in the first few years (using humans instead of dogs) were so bad. Now with more data showing better SEEF values, we are getting much better projections. Also when the search area was larger it included areas of high grass and rock, which contributed to poor searcher efficiency. Now we search roads and pads, achieve higher searcher efficiency.

MBogardus: States that the group has been discussing how to address rho, since it tells you there is a difference but not the magnitude of that difference.

MCraig: If you believe that curtailment has an effect, and you increase curtailment, but then you don't adjust your take based on that curtailment, then that doesn't make sense. We should be able to decrease the take request based on some prediction of lower take even if only as small as 10%.

MCraig: Put curtailment studies in his appendix (made a matrix of the know literature). In his latest version he highlighted the only 3 studies where fatality rates were tested at 5.5 m/s and at 6.5 m/s, 2/3 shown no significant decrease in fatality with curtailment of 6.5 m/s

For nene, he calculated how many fledglings were needed for offset of the adults, by tier. Total of 71 fledglings needed for all three tiers. Piiholo will need to produce approx. 5 fledglings per year for the rest of the 14 years.

Success measures: tried to provide more specifics, such as a trigger based on annual fledglings produced at Piiholo, so that if we drop below that amount, trapping efforts will be increased, or an alternate site could be considered.

Tier3 bat mitigation success: research only, 19 bats=\$950k; this will fund only part of the USGS/PIERC proposed research. We had already agreed that the tasks and activities need to be completed as the success metrics. When we first entered into the contract, the take request was almost twice what it is now. From RFP approved proposals, we chose USGS proposal was \$1.83million. At the time, the tier 3 proposal from KWP2 was going to cover most of it (1.7 mil), remaining \$132k to come from KWP1. Now the take request has dropped, and there's not enough to cover the contract from Tier 3 funding (at \$50k/bat). So I am suggesting that all 3 of the sites I manage could combined pay for the USGS contract and the HT Harvey contract. KWP has 1.5 Million still obligated for the additional 30bats, HT Harvey is 750k, leaving another 750k that could be spent on research, and that amount could go towards the obligated USGS contract. 950+750k =1.6 mil. So we are proposing to combine the remaining KWP1 mitigation with the KWP2 tier 3 mitigation and the remaining \$232k could come from Kahuku (whose 2nd Tier equals 8 bats). There are 8 bats in KWP2 tier 4 but we may never need to mitigate for those considering the actual rate of bat take in the past 4 years at KWP2.

In summary: total contracts signed: 1.832mil USGS, 750k HT Harvey = \$2.58million needed to fund approved proposals

KWP2 new tier 3 (19 bats): \$950k (USGS) + KWP1 (30 bats): \$750k (HTHarvey), \$750k (USGS) + Kahuku tier 2 (portion of 8bats): \$132 = \$2.58mil (with Kahuku still requiring mitigation for 5.3 bats).

LMehrhoff: Worried about the research projects that will NOT be funded . We should be open to reprioritizing projects.

SFretz: When we did this, we envisioned a situation where one project couldn't completely fund an entire project and we asked staff to show on a table how the costs will be split out between projects.

LMehrhoff: But this means that other projects that were anticipated are not actually going to get done. We looked at projects that we felt could speed up the permit issuance.

MBogardus: at the time the take request was 80, this was the best fit of project, now it is not the best fit. Now in order to get it done, we will have other projects contributing. If concerned, we could go back to USGS to see if they can scale down the size of the project to better meet the mitigation needed

SFretz: I would rather go back to the table, keep everything as awarded, and make sure that everything gets funded.

LMehrhoff: I worry about the lost opportunities of other projects.

MBogardus: for today, we can say that we are ok in theory with this project funding a portion of the cost as long as the overall project gets done.

SFretz: I want to see the table updated. What are the real outcomes of combining these projects.

LMehrhoff: I have questions about how this affects the choices and prioritization. Is this the project we still want? Is this going to give us the best bang for the buck, and the most benefit to bats on the ground?

MBogardus: I totally agree. But of all the projects that came through, it happens that this one was considered the most important.

SFretz: I support getting the approved projects done, and then move down the table to the others and get them done.

LMehrhoff: I think we should be open to re-prioritizing projects to see if there are some that can be done quicker, sooner, and get us to the goal of on the ground mitigation.

MCraig: To remind everyone, this HCP is not approved yet, but me and my company in good faith signed a contract based on the committee's ranking and approved proposals.

SFretz: Asks that they cite ESRC guidance as part of the Tier 4 bat mitigation success criteria.

SFretz: Regarding mitigation proximity to wind farms, we have heard a variety of opinions,

KWinter: Concerned that these projects shouldn't be located adjacent to a windfarm.

MCraig: Shows triggers, adaptive management, funding.

Presentation complete: SFretz asking LMehrhoff for comments because he is leaving.

LMehrhoff: States that he really appreciated the revision which addressed a lot of the concerns we had. It added a lot of clarifications that we asked for. But on the LWSC, looking at only 3 studies is misleading, because when you look at all of them to me I think it's clear from the literature that there's an improvement from LWSC to 6.5. How to quantify the difference between 5.5 and 6.5 is a challenge. I would have assumed a 55% instead of 70% reduction with the initial switch. On the impacts, you talk about a 1% increase in bats, but see the Frick data. And also assume a stable population for your analysis (not increasing)... Suggest hard actions associated with your triggers, and also examine the impact of going to a 20 minute rolling average which might both increase efficiency and decrease take. And address the desire for a land-based component.

MCraig: I also examined the difference in activity (from the detectors) that we see at differing wind speeds m/sec. So if you add another m/sec it may potentially only decrease take by 10%.

LMehrhoff: There is sometimes a different nacelle wind speed reading from that from the met tower.

SFretz: To follow up on LMehrhoff point regarding land acquisition, the conditions that we are recommending for land to serve this purpose are hard to find, so obtaining the land in that category is going to be difficult. So there should perhaps be a backup plan if land can't be located. Such as putting the money into a place it can be held in a trust, that would provide a guarantee without the applicant on the hook for identifying a project.

SFretz: The way you laid this out makes me think that a tier 3,4 structure is now ok. It's tied to the triggers and the actions. I can see real incentive here, and that staying within tier 3 is achievable with effort.

MBogardus: At Piiholo, is there an existing agreement with the ranch? I want to see an agreement to avoid a problematic situation.

SFretz: The SHA expired, they sought an extension, not done. We have a right of entry but not an MOU. Other than Piiholo, I have concerns with the biology and the benefits. Since we've had predators get in. I like that your success criteria is the fledglings, but it would be good if you could show the history of the past 10 years so that the reader can see how likely it really is that you can produce 6 per year. And maybe staff can work with you to find a better place. We are working on an acquisition of land that would be super for nene. Maybe by the end of this calendar year we will have that land as an option.

MBogardus: For the purposes of getting this HCP done, maybe just say Piiholo for now, but write in the option to switch sites as recommended under adaptive management.

SFretz: Show Piiholo, the data, and why some other option might be better at some point. And putting it on public (not private) land has a lot of benefit.

MCraig: What about the idea of wild population enhancement (instead of pens). 2-3 years ago NRAG said there were a lot of other places to do work. Are we going to keep increasing birds in enclosures?

SFretz: Predators have gone and wiped out a year's worth of fledglings (at a West Maui site). There's a pack of wild dogs that have been there for a while. And because of inherent constraints at the state, maybe DOFAW staff is not the way to go, maybe explore a private contractor.

MBogardus: Again, I am nervous about putting in different strategies, we need to move forward with this process.

SFretz: Maybe just add some language to allow flexibility.

KWinter: Once again wondering why Band Rumped Storm Petrel isn't addressed.

MBogardus: Agencies agreed that the risk was not enough to not warrant a permit. again, it's a matter of what is "likely".

SFretz: This habitat is very different from south point. This one has been monitored for years, and there hasn't been a take of BRSP in 10 years, so it's not really likely.

KWinter: Also is there a correlation between density of wind farms and attractiveness to bats?

MCraig: States there is some indication that leeward is more attractive than windward. With regard to density, KW will try to find out more info.

LSpain: Nene stood out for me as a bigger concern throughout this document. Activities to minimize bat use can create nene habitat.

SFretz: We want to keep controlling the trees on the road, they are a very bad fire hazard.

SFretz: On pg 17, demography, you cite a population of 1100 or less being stable with a certain take...

The Frick paper looked at what it would take to keep the population from going extinct. So I added 1% a year, and then tried to figure out, given the expected take (220?) over time, what does the starting population need to be? So that at the end of the time you have more bats than you took at the beginning?

SFretz: Provide more info about the assumptions, and the explanation for the values you put in there.

There is an editorial in Ch5 page 110 that questions why the bat is even listed, I don't think the HCP is an appropriate place for inserting an opinion piece. This is a regulatory document. Please remove.

MCraig: In the scoping process, people were citing the Menard guess of 100-1000, but it's made up not based on anything. So while the bats are listed, it's because we don't know. Not because we know they are endangered. We should not assume something that we don't know.

SFretz: That's a fine thing to say, but it should not be said here. This is a compliance document.

LSpain: Also on page 110, the FWS language referring to the 4 factors, but only 3 are listed. (FWS provided that language, it has since been addressed).

Public Comments

Fern Duvall asked about take detection and search area. MCraig explains the portion of the search area that is considered the "searchable area".