

ENDANGERED SPECIES RECOVERY COMMITTEE (ESRC) MEETING

April 25, 2019 MEETING MINUTES

Meeting Location: Department of Land and Natural Resources, Division of Forestry and Wildlife, 1151 Punchbowl Street, Honolulu, Hawai'i, 96813

MEMBERS: Scott Fretz (DLNR), Michelle Bogardus (USFWS), Jim Jacobi (USGS), Loyal Mehrhoff (At-Large), Kim Burnett (UH), Kawika Winter (At-Large), Lisa Spain (At-Large)

STAFF: **DOFAW:** James Cogswell, Afsheen Siddiqi, Glenn Metzler, Lauren Taylor, Stephanie Franklin, Susan Ching, Matthew Keir

DLNR: Linda Chow

OTHERS: Stephanie Nagai, Derek Risch, Laura Luther, Lesley Davidson, Reginald David, Chris Takeno, Christopher Todd, Lily Henning, Mitch Craig, George Akau, Darren Leblanc, John Vetter, Rachel Sprague

AGENDA

ITEM 1. [Call to order.](#)

SCOTT FRETZ: Good morning members. Looks like everybody is here today.

ITEM 2. [Announcements.](#)

FRETZ: Are there any announcements?

MICHELLE BOGARDUS: ESRC members will be receiving a notification later today on the wind PEIS that the Fish and Wildlife Service has been working on that addresses four of the projects that have come before the ESRC in the past. This includes the Auwahi and Kawaiiloa amendment, the new Pakini Nui HCP and the KWP II amendment. It will be published in the Federal Register tomorrow. So when you receive the notification you'll have the link to the document. It'll be open for a 45 day public comment period. I think the end date is June 10th. There will be three public meetings one on each island. I believe it is May 21, 22 and 23rd.

FRETZ: Any questions anybody?... alright. Is there any need to change the order? Does anyone have time constraints?

STEPHANIE FRANKLIN: I'm leaving early but I don't know how involved I am.

LAUREN TAYLOR: Stephanie from branch is leaving around 11:00am.

FRETZ: Did you want to move around agenda items because of that?

LAUREN TAYLOR: You may ask her questions on item six or seven possibly.

FRETZ: Okay. Are you guys ready to just do that if we just moved it up now? Is that okay with everybody?

MITCH CRAIG: It's fine. The review of KWP II logically would come before we talk about details of the mitigation, but it really isn't important.

FRETZ: So we can just bump six and seven up and then we'll return item 3 after that. Is that okay with everybody?

MITCH CRAIG: Sure.

FRETZ: All right. Anything else? Okay in that case, we're ready for item 6.

ITEM 6. [ESRC review of Kaheawa Wind Power II Wind Generation Facility HCP State Fiscal Year 2018 annual report](#)

FRETZ: Okay, and so this is to first review the annual report for KWP II and you guys are going to have a presentation on that to open it up. Right?

MITCH CRAIG: Yeah. Okay, everybody ready? I'll try to speak louder since I don't usually do that. First news is that I have a month left in my job. So Lily is here. She's the continuity for Terraform Power. And so I'll just leave it at that. So this is pretty much similar to the last one. Whatever it was a month or two ago. I'm just going to do very basic stuff. If you have any questions. Mitigation for nēnē and petrel are things we'll talk about later. So hold off on any of those questions. As far as the observed take, this year at KWPII there was no observed take in the search areas during search times. There's been three so far attributed to KWP II, and that comes to a total estimated take of 13 bats. At the bottom you can see just what the basic tiers are and what's permitted and obviously we're doing an amendment. Projected take right now for the 20-year permit period is 35. I think I've made a point in the past where with the Searcher Efficiency (SEEF) and Carcass Retention (CARE) trials and search interval etc. being relatively constant and not finding bats the estimated projected take goes down slowly, but surely. Essentially if no bats are found to the end of the period the estimated take will be pretty close to where it is right now. Obviously nothing going on with petrels and shearwaters yet or so far. So really nothing much to talk about with that. Obviously, we're doing mitigation for those at Makamaka'ole currently. Nēnē's observed take in 2018 is one adult and one Gosling. Total observed take is five adults one Gosling. The total estimated take is 14. We have are permitted for 30 right now. Our estimated take at this point in time is 40. Total permit period estimated take projected take is 40 and requested take is 44. That's what we're amending to. It's just the basic stuff for each of the categories for small, medium and large animals. SEEF for bats is as continues to be very high as a result of using dogs. The carcass retention overall for the year was 11 days. For bats, the proportion of the fatality distribution that we're actually searching is around 56%. With SEEF, CARE and search interval taken into account and the DWP then the detection probability is about 37.5%. That's the G-value if you remember from the evidence of absence. I just put it as percentage. It's usually reported as .375.

For Seabirds, essentially because SEEF and CARE is a 100%, as long as we measure it, the detection probability is very similar to the density weighted proportion of the search area, which makes sense. So similar thing for nēnē. I think this is the last slide. So this is how brief this is. Essentially, this is just putting together data that we have using the Wildlife Acoustics bat detectors since 2013. The general picture obviously is that there are bats detected in every month. The peak as everywhere else is in the late summer and early fall: August, September, October. So that pattern continues to exist and I think the last time someone had a question about the difference between this year's detection rate and the previous years and if I remember correctly it was it was pretty similar. There wasn't a noticeable change between to 2017 and 2018. Okay, so that's that. The next is to go on to the mitigation slides.

LISA SPAIN: Can I ask a question. Am I correct in thinking that in 2018 past July there are no detection?

MITCH CRAIG: Okay, so this is displayed on the calendar year. But the 2018 fiscal year ended in June, so there's no data there.

LOYAL MEHRHOFF: The bars are or not ordered sequentially?

MITCH CRAIG: Well, they should be. If there's a missing color there's no data for that. So for example, September there's information into 2014...

FRETZ: 2013 started in October. 2013 didn't start till October and 2018 ended in June

MITCH CRAIG: Right, thank you. That's when we started using the Wildlife Acoustics that was in October. Okay next. This is essentially an update on the two categories other than bats which I guess since I haven't mentioned that bat mitigation I should suggest something about that. I didn't put that in the past presentation. Currently, there still funding for the Kahikinui Forest Reserve Project. For some reason they weren't in they were not able to access the funding for the last year and a half. I came to understand that recently when asking for the report for this year. So since they didn't spend any of the money that they had from us this past year there's no report for KWP II mitigation. They do have access to whatever funding we have left. I don't know how much that is. So they are able to spend that money to continue with the Kahikinui Forest Reserve mitigation for tiers 1 and 2. Then as you know, the tier 3 mitigation for KWP II is the USGS research contract, which is ongoing. I believe that the portion that KWP II is funding will be finished funding this year. So essentially that means tier 3 mitigation will be complete for KWP II. At the current rate, I don't think that we will get into tier 4. KWP I will continue funding the USGS contract once the KWP II money is spent the \$950,000 for tier 3. Once KWP I's obligation is complete, the last \$150,000 will be spent from Kahuku. To complete the funding for the total contract. I think I've explained that before. So this is just a summary. KWP I provided funding of

\$264,000 to DOFAW between 2006 and 2008. The pen was built in 2011. The approximate cost including equipment such as an SUV and other things was a \$125,000. I found out in September that the management essentially was funded by the DOT emergency proclamation between 2012 and 2017. I don't know exactly when that funding ended. As far as I can understand, in 2017 and 2018 very little of the KWP I funding that remained, which is about \$135,000 out of the \$264,000. As far as I can tell, a small amount of money was spent during that time. So then we met in September and so we reviewed the situations with both the Pi'i Holo and Halekalā and concluded that the best immediate move would be to take the two people that are working at Pi'i Holo and move them to Haleakalā Ranch. So starting in October through February this year the remainder of the KWP II funding that had been provided for Pi'i Holo, which is about \$ 35,000 was actually put into the Haleakalā Ranch pen management. And that was for various reasons. One of them is that that's the two technicians were on the ground and working. Also, it seems that the Haleakalā Ranch pen which has historically been a better producer would be more expedient to put whatever technicians we had hired already contracted with state technicians to work at the place where we would get the best results. So that's a simple way to put it. So that money ran out in February. So by then we have about \$100,000 left from KWP I funding. Afsheen was very good at getting a contract going quickly. First we thought it was going to have to be through see CCRT. PCSU had informed everyone that they were no longer going to be the intermediary for that and then they decided I think sort of at the last moment that they would actually do that. And so we just went back to Contracting through PCSU you to do the DOFAW technicians. So now there are two technicians working at Haleakalā Ranch pen. That contract ends in June. No work at Pi'iholo that we're paying is being done. So there's about \$65,000 left after this June. We still have about 75 fledglings to produce for KWP I.

JIM JACOBI: It's a complex situation and you tried to explain it but I'm still confused. One of the things I am still not completely clear on is originally this project was going to fund the entire effort and now DOT has come in there and put some funding into building the structure and so forth.

MITCH CRAIG: No not for building the structure just in managing the pen.

JACOBI: What I am still confused on is how to parse out the what actually is a credit to KWP. That's where I'm confused.

MITCH CRAIG: Yeah. Well, that's theirs. It hasn't been discussed. So here we are. It has been discussed but not formally here.

FRETZ: There was a DOT component right from the beginning. I mean, I remember that because I was involved in that DOT part, so that didn't come along later.

BOGARDUS: For clarification, over the last several years the KWP I and KWP II annual reports have been working with Maui DOFAW to understand the productivity at those sites and reported it as such because your understanding was that the KWP I and II funding was funding that effort. So there's a gap in understanding in what was being funded through their funds versus any other funds whether it was HDOT or otherwise.

MEHRHOFF: And it's just math. So I mean it's partitioning it out.

JACOBI: Exactly but everybody just needs to be done so it's clear.

BOGARDUS: So any delay in mitigation value compounds their mitigation obligation.

MITCH CRAIG: The other argument is we constructed the pen. It's important to us to figure out how many fewer fledglings we have accumulated then what we thought we had accumulated.

JACOBI: So can we make it an action item to have that calculation done so it is clarified. And again, I agree with Loyal. It's a math calculation and it just needs to be done so it's very clear not only for this project. But also when the situation comes up with future projects.

MEHRHOFF: The hard question with me is going to be whether or not the DOT portion of that was done appropriately with respect to what your expectations were for KWP and how to wrangle that. But actual partitioning should be relatively easy. I think the question is going to be how you're going to deal with that aspect of it with the lag period.

BOGARDUS: I agree that that part of it is absolutely just a mathematics component. My bigger concern is that they were under the impression that their money was being spent and that they were being credited for the birds that were being produced out of that pen for that time period of years. They weren't aware that it wasn't their money that was being spent. So the annual reports for the last four years have a production that isn't. For any time lag and their mitigation success, their mitigation obligation increases with loss of productivity. So my point is that now based on a situation, based on the mathematics equation, they potentially have a higher mitigation obligation than they would have had they actually been doing it this whole time which they thought they had been. I don't know how to resolve because it was no fault of theirs.

MEHRHOFF: Yeah, I mean that's a hard question. But that's going to be who was in the right with DOT coming in. Should DOT have done that, yes or no, if the answer's no then DOT picks up the obligation. I think we should figure that out and use logic and what's fair.

FRETZ: I think I might've misspoke about the order of these two things and I think I was wrong about that. I do remember when the DOT money was coming in and we were looking at putting

the DOT money to that and we knew the HCP money was in that. I thought that it was all sorted out how it was supposed to go. It doesn't mean it all went the way it was supposed to go. It wasn't like it happened by accident and no one was aware. We were aware that these two monies were going in and needed to be coordinated with each other.

JACOBI: Was that a we being DOFAW or a we being the ESRC? I don't recall the discussion on it.

FRETZ: Yeah it was DOFAW.

JACOBI: Okay, the point I'd like to make is when you have a changed circumstance like that. It is important to bring it back to the ESRC so we're all on the same page on it.

FRETZ: Yeah, the DOT thing was supposed to supplement or be additive.

JACOBI: So just sorting it out I think is really important because I can see potentially us running into similar situations in the future and I just want to make sure that we have a precedent of wanting to get it solved sooner than later.

BOGARDUS: I think Afsheen dug into this right? Is there anything else the committee needs to know in order to help?

AFSHEEN SIDDIQI: So I dug into the finances of how the money was being spent. That's what Mitch has now. The coordination with DOT I'm not familiar with.

FRETZ: I can go back and look at my records and it would be a start to go back and see how we envisioned it working from the beginning and that'll help to piece it all together. I'm sure it can all be pieced together. I think the main thing is, like you said, is that there a lag time and if so, how do we compensate for that given that it wasn't the applicant's fault that there was a lag time.

JACOBI: Can I request that we have an agenda item in a future meeting to have an explanation and resolution to this?

MITCH CRAIG: As far as I can gather, it's pretty straightforward. As far as me and Afsheen can tell, about \$15,000 was spent from the time the pen was constructed to the time we started spending the money again in what essentially would be this year in March. So essentially no money was spent from KWP I between construction and March of 2019.

MEHRHOFF: But we know how much money DOT spent?

MITCH CRAIG: Yes, it's about \$550,000 I think it was.

FRETZ: So Jim, is it sufficient that it gets clarified by the next annual report?

JACOBI: I think it's fine. I just want to make sure that we have clear documentation of what the situation was and how it was resolved and how we're parsing things out in terms of credit. We need it as a matter of record. So I think by the next annual report would be fine.

BOGARDUS: I'd ask for the same to be true for the Kahikinui piece as well. We've been missing information from tier one and two.

FRETZ: The Kahuku one was going to DOFAW forestry? Is this one also going to DOFAW forestry?

MITCH CRAIG: All of the Kahuku \$150,000 and the tier one and two KWP II \$375,000 all went to the Kahikinui project. I think Kahuku funded fencing perhaps and KWP II has been funding reforestation and other things.

GLENN METZLER: Kahuku's funding went to build the fence.

FRETZ: Yeah, I remember that one and I thought we were good on that but wasn't aware of the \$375,000 and there was an issue with that.

MEHRHOFF: So we have two issues with the mitigation. One for the pen and the management and then the Kahuku ones?

MITCH CRAIG: No, it's still KWP II but it's for the bats.

MEHRHOFF: But there's not an issue with it?

MITCH CRAIG: At this point in time, for some reason they were not able to access funding that we had provided for a period of time. We've been getting annual reports that basically pulled out what part contributed to KWP II and then I asked for a report for this year. And finally I heard from Lance that they hadn't been able to access the funding.

FRETZ: I'll check on that.

MITCH CRAIG: But at this point he said they are able to so whatever they're doing they will continue to spend the money that we provided

FRETZ: It shouldn't be a problem because the work is ongoing and if it's reforestation, we're still doing reforestation.

JACOBI: It is important to document with reports and so that is an expectation.

MITCH CRAIG: Yeah, I'll leave it there. Okay, so then obviously the other thing is we're spending KWP II money. We have to parse out whatever the results were for this year between KWP II money being spent from October to February and KWP I money being spent from February to June. That's now the complicated issue.

BOGARDUS: Sorry I guess I have an overarching concern and I don't know if it's really for this committee to really try or not but we have a couple of projects like this where funding is either going through PCSU or the state. By no fault of the people involved and no ill-intent something is happening. And some of it is the PCSU fiscal system which we all know is extremely complicated and there's a lag time. Some of it is just being able to access the funds and the recording piece is cumbersome. I don't know how to close the gap on this but I'm seeing it pop up in probably five or six different mitigation projects across the state. I think at some point as we're getting new projects come in the door in front of this committee for permitting we're going to have to really evaluate whether or not we have confidence that things are going to happen the way that we thought they were going to happen when we made the decision to proceed with permit and license issuance. I bring it up just because maybe figuring this part out is just something that we need to deal with on a case by case basis. But as new things come in the door we should be talking about this.

JACOBI: I'd like to add there needs to be clarification as to whose shoulders that falls on for preparing or sorting those things out. Does it fall on the permittee or the staff of DOFAW or FWS who does it fall on? Because obviously it doesn't fall on the committee.

BOGARDUS: There's no ill intent. Everyone did an incredibly good job this isn't a blame or a fault. From a compliance stand point and having confidence in how this works and the adaptive management triggers that were identifying I think it's our due diligence that we know how this is going to play out over the course of the permit term.

MEHRHOFF: I was going to say the same things especially with the Kamehameha Schools issue with partitioning of mitigation credits that we ran into last year. So I do think that someone somewhere needs to look at how we're going to do the book keeping. That might help reduce the lapses quicker. I agree with you I'm not sure what the answer is.

MITCH CRAIG: I can tell you why it was a surprise to me. It's because I assumed we give the money and they do what they say they're going to do. I was not paying attention to what was

happening other than getting the results which were good? So two things that sort of brought all this to attention is the results at Haleakalā last year were not as good as they had been in the past and the reality of what it was costing to fund the Pi'iholo ranch pen. Perhaps you might consider it to be pretty slow witted but it occurred to me that the amount of money we provided for Haleakalā ten years ago... if we're spending \$80,000 to \$90,000 a year to do Pi'iholo there's no way it's going to be enough to cover an annual cost of all these years and so I didn't understand why someone didn't say we're out of money. So we've been we began to look into it carefully. So essentially what I'm saying is certainly part of the onus is on the permittee to follow and be well versed in what's happening. So it's a mutual thing. Part of the issue was just that I hadn't been looking into it more carefully.

JACOBI: Also given your statement at the beginning of your talk today in terms of your position. Is the baton being passed adequately? Maybe that's a question really more for your because it seems like Mitch has been very involved in all this and as his understanding on various things here. Just making sure that that is going to continue on.

LILY HENNING: We have fairly long transition period. At least a month.

MITCH CRAIG: Yes, absolutely. Whoever's taking it over is also very qualified and experienced.

LILY HENNING: I just want to say we appreciate... I've only been in this world for here for a couple of months. So I really have appreciate Mitch and his long history and education to these projects.

FRETZ: Mitch had a tremendously positive impact on these projects when he started. I t's been really helpful to us. The work that he did when he came in and things changed for the better and it's been a really good relationship.

JACOBI: Since we're patting Mitch on the back, it also goes beyond just simply the projects that he had been responsible for in terms of contributions in the broader sense.

BOGARDUS: I think we are where we are on wind because of his contributions.

FRETZ: It would be really good if a way that he's been doing things in terms of the technical aspects and reporting continues.

MITCH CRAIG: Yeah, I'm sure we'll be fine. So obviously the company is very professional and is looking into a way to do it that is appropriate. This is my tenth year, so it's also been a long time. Okay, so I went through the Safe Harbor Agreements, which is the best source of information. I tried to pull out some of the things that could help explain some of the variation. I

understand that it's not it's not easy to figure out what happens to goslings if you're not there every day, you know, you're there one time you see them in the next time you there they're gone. What exactly happened? So there are assumptions that are made. For fledglings, obviously that's a straightforward number and you can see that that number adds up to 50 fledglings to date from the Haleakalā Ranch pen. The mongoose and rats is just what's been caught so it's not really a trap effort. It's not really necessarily comparable other than just, you know, the absolute numbers of animals caught has some bearing on what happens to the gosling's, eggs and the fledglings. So in the reports, it's clear that you know predation is an issue throughout. So perhaps one of the most important things that we can do there is to step that up to make it far more intense. Obviously, that cost more than what we've been paying for it. As you know or don't know it's a remote place. If I were to guess to go from the DOFAW Office to the to the actual pen, it would probably takes a couple hours to get there and a couple hours to get back. So the time that technicians have to spend there on a daily basis is abbreviated because of the logistics of it. So it's difficult to get there. So intensifying the predator control is probably one way that we can get more out of these. I'll stop there. I'm going to go through Pi'iholo and then we can sort of talk about it more as nēnē mitigation for both sites.

Okay, so Pi'iholo Ranch pen. I think 2012 is when it was built but up until essentially February of 2017 DOFAW was managing the pen through whatever funding they had. We provided \$163,000. There was no set timeframe for what that money was going to produce. My idea and I think Stephanie's idea was that it could work for two years, but it was essentially really an experiment to see what it would take to manage the pen with two technicians. KWP II funds some supported state-appointed technicians. Part of the original MOU that we signed in 2016 included wild nesting predator control in West Maui. So the state decided not to pursue that part of the MOU. The best of my understanding which makes sense is there wasn't really enough money in that chunk of money to fund both the pen management and some wild nesting area predator control. I think that was reported a couple of years ago. And so then the focus has been strictly on just Pi'iholo Ranch pen. So obviously our funding for that started in February, which is two-thirds of the way through a nēnē nesting season. So in the first year no fledglings were produced from that funding. Last year, there were three produced. It has been and continues to be the bigger issue is cattle egret predation. Last year, the technicians did bring guns to attempt to shoot cattle egrets on site but they spook easily when the people arrived so they didn't have an opportunity to do that. As far as we understand, the cattle egrets roost on a separate private owners land. So the best way to control cattle egrets would be to go to the roosting site and shoot them in the trees, but that's complicated. Obviously, you can imagine we'd have to get permission and whatever else to do that. And I don't know if that's possible. I don't think DOFAW's investigated how difficult or easy that would be at this point? In general, perhaps it may not be resolvable which is one of the reasons why given circumstances we shifted to the two technicians from the Pi'iholo Ranch pen in October to work at the Haleakalā Ranch pen. The

production of Haleakalā has been on average noticeably higher and there's not a clear cattle egret predator issue. I believe there are cattle egrets but it's not the same situation.

WINTER: Mitch I have a question for Scott. Scott it seems like cattle egrets are a concern for multiple species that we are concerned with. Is there anything we can do as the ESRC to propel action on cattle egrets?

FRETZ: So maybe there's two parts of the questions. The regulatory side and the management side. On the management side, like Mitch said you, find the roost and you take them out at the roost and it's super effective. You can take out huge numbers of them, but you have to be able to get to that roost. So in practice it's not hard to do but it depends on where they are and what landowners are involved as to whether it's actually doable. So that's a challenge there, but the ability to do that exists and it's just a question of effort, funding and manpower.

WINTER: I forget if they're still protected under the Migratory Bird Treaty Act or not?

FRETZ: Yeah so we can ask Michelle. So under state law they're an injurious species and they're not protected. So you don't have a regulatory issue on the state side. On the Federal...

BOGARDUS: I can send the actual order out to everybody. So it allows State and Federal agencies to take out barn owls and cattle egrets if they're not considered MBTA for this. You need a depredation permit if you're a private individual but State and Federal agencies can and the order applies to them.

BOGARDUS: And we do and but it's just a question of directing the funding and the effort to do it and it needs to have the support.

WINTER: Can DOFAW staff be invited onto private land and take care of it?

FRETZ: Yes, so it can certainly be done in concept so if there's a willing landowner we can do it.

SPAIN: I would say there is community push back.

WINTER: I've seen that with Coqui frogs but that hasn't stopped it.

FRETZ: I'm sure Stephanie knows and DOFAW staff can look into a situation like that. I'm sure they have to some degree done enough of an assessment. If that was the one and only issue with Pi'iholo that would be one thing and so it'd be a yes or no is this going to fix it. It's never that simple, right? So you have any comments on this? You don't have to say who the landowners is but did you guys look into the landowner?

STEPHANIE FRANKLIN: We did look into it and stuff and getting onto that property and using firearms and stuff like that is not going to be an issue. But I don't think that's necessarily the only issue that's going on in Pi'iholo. But this breeding season has been a lot different between Pi'iholo and Haleakalā right now for 2019. I haven't done the full-on number crunching because we still have gosling's on the ground right now due to late nest but, it's completely backwards. Like Pi'iholo is blowing most of the nēnē production across all of Maui out of the water right now. At Pi'iholo Ranch you have these two technicians that were working five days a week for eight hours. They put in all this effort and they're starting to see the pay off now. It took a little bit where we were at and we had to get the site back up and running. That's where you go from like zero to the three. I think right now is when we're finally starting to see it at a place with more productivity. A big thing with these cattle egrets too is they're roosting over in the other ranch, but it matches up with the ranching practices that Pi'iholo is doing. So this year they haven't been doing very much cattle ranching at all. So there hasn't been cattle in the pasture where the pen is. We haven't seen a single cattle egret this entire nesting season, whereas last year they had cattle and cattle egrets were there all the time and we have all of this predation. So there's a lot of different factors in all of this.

FRETZ: So it seems like you need to be doing both or there needs to be a shared contribution to both that can then be portioned out. Right? It is getting managed right?

STEPHANIE FRANKLIN: Yes so now we're using DOFAW Civil Service.

FRETZ: So did I hear you right that it in principle you probably could go manage those cattle egrets?

STEPHANIE FRANKLIN: Yes, if we can get an access and the landowner is okay with everything we know on the property where they're at.

FRETZ: And it's a landowner that is likely to give that okay?

STEPHANIE FRANKLIN: Probably not. So the better thing, which Afsheen and I have kind of talked about it, we've talked more to Pi'iholo Ranch and their ranching practices because right now that might be the better thing. I mean this ranch, you know is still up for sale. It's still kind of in this weird disarray for the future. So they're big thing like right now is the money-making aspect of it. Last year the driving factor behind it was the cattle ranching to supplement the zip lines and stuff that was there. Then this year it's been more tourism and not as much as the ranching side. So maybe that could be a better way to go about it. Somehow work more with the ranching side of it and see if we can correspond the grazing and the cattle there maybe outside of the breeding season. We started that discussion. It came down to finances, you know, we're not

making money off the nēnē we're making money off the cattle. So that's kind of the tradeoff but I think there's a better relationship with that landowner to be able to do management than going to this outside entity.

JACOBI: That sort of brings up another question in terms of parsing out credits and so forth. Is DOFAW doing this with funding from this project to be able to do that?

MITCH CRAIG: Not this year.

JACOBI: Yeah, I'm just trying to figure out how to balance things in different ways and so forth. I mean if the DOFAW effort is leading to a greater productivity. How does that figure into the bigger picture in terms of what the obligations are on the permittee to be able to make that productivity happen?

FRETZ: Yeah instead of just saying well, they took their money and put it over there. Why can't you take the DOFAW money and their money and combine the total number of birds and then give them the proportions or something like that to be done.

MITCH CRAIG: This year was specifically an expedient decision. So there was two technicians hired. The time it takes to get a new contract going or different contracts is lengthy. And so for this particular point in time, the simplest way, at least according to the past results, was to move the two people. Because essentially each pen needs two people separately. At that point in time there was only two people that we were funding from either project. And so we made a decision to stop their effort at Pi'iholo and go to Haleakalā. Now we're here trying to figure out what to do and how to go forward.

JACOBI: I mean the question I was going to ask until Stephanie started talking about this year's productivity was are you abandoning the site in terms of what you're trying to do. But then, you know all of a sudden it seems like it's kicked into a different gear so that's what prompted my question in terms of what the cause is.

MITCH CRAIG: If it continued to have an egret issue and there was a high predation that was hard to control then yes, we would have abandoned it. But on this next slide is just what do we do at this point? And the options are essentially pretty straightforward. Haleakalā only, Haleakalā and Pi'iholo, Haleakalā expanded and Pi'iholo wild nesting and predator control. So essentially this is an update. It's not really something that we're asking for your input on how to proceed that's going to be for us to work out with the state. With petrels we are asking for more input. Okay, so this is Pi'iholo and that's just what I gleaned from the Safe Harbor Agreements using the same sort of criteria. You can see sort of the average. The dark green is the fledglings. The average is obviously lower than it was at Haleakalā but there's a different amount

of effort there compared to Halekalā. So they're not comparable in that way. This is just an attempt to try to put some information out that you can see. These are our options and it isn't really necessarily for you to say this one's good. This one's bad. So yeah, this is just the update. This is where we will work out with the state how to proceed.

JACOBI: With the next annual report we will have a report in terms of which direction you went in and what the result was.

MITCH CRAIG: Yeah, well except the next annual report is couple months away. So, you know what's happened this year. So there's not going to be anything new in this coming annual report other than the decisions we made. So that ends the nēnē presentation. Is there any additional questions?

MEHRHOFF: I have a question on your first topic which was your annual report.

FRETZ: But we did the annual report?

MITCH CRAIG: Yes we did and I wanted to get to the nēnē part because Stephanie needs to go.

FRETZ: But go ahead and ask your question.

MEHRHOFF: It was just a presentation question. So figure four in your report you're showing how you were finding bats and the other critters that you're doing mortality monitoring for. You were showing it and I think you were looking at 70 meters. Your graph only showed you went out to 50 meters.

MITCH CRAIG: The graph?

MEHRHOFF: In the report. So extend that out otherwise somebody who's annoying like me will look at that and go you did not go out far enough. The line could still be going up and you haven't checked. So add those extra 20 meters and I'm happy

MITCH CRAIG: I got it. So what it is you're saying is we are searching at 70 meters the distribution for bats stopped at 50 based on the Hull and Muir ballistics because...

MEHRHOFF: It stopped because you didn't find anything else and you just didn't extend out the cumulative graph.

MITCH CRAIG: Sorry that's actually at Kahuku we used the ballistics. For KWP we used the actual data.

MEHRHOFF: Right just extend that out and it makes it look like you know what you're doing.

MITCH CRAIG: I get what you're saying. It also points out that even when we were searching farther than that. We didn't find there were any bats out there. I think I got it. I'll tell whoever's going to write the next report to do that.

ITEM 7. Summary of Kaheawa Wind Power I and Kaheawa Wind Power II Nēnē and Seabird Existing and Future Mitigation: Presentation by TerraForm Power

MITCH CRAIG: So Makamaka'ole. So this is as brief summary as is possible for Makamaka'ole. September 2013 construction completed. And so the first season would be in 2014. So 2013 September is essentially the end of the 2013 breeding season. So there's nothing from 2013. So 2014, the first Bulwer's petrel was seen. In 2015, the first HAPE and NESH only in the B enclosure. In 2016, NESH primarily in B but we began to find them in A visiting burrows on the ground with cameras. No petrels were recorded on the ground. For very different reasons in 2016, in both enclosures, the calls went from being solely one species to being a mix of the two species. Although, there's no way for us to know whether that had anything to do with the petrels not showing up in 2016. I just put it out there. It's possible because we didn't know and because we didn't see petrels in 2016 because the calls were changed back to only petrels. We did see some petrels in 2017, but not very many compared to shearwaters. In 2017, three eggs were collected from burrows and none hatched. In 2018, no petrels were seen at all in the ground. There were still flying around but they weren't recorded in front of any burrows that we had cameras with. The cameras are essentially put in front of a burrow with toothpicks or some sign that a bird is visiting and then we promptly put a camera out and start recording activity. So it's possible that petrels were on the ground and could have been clearly on the ground elsewhere other than in front of the burrows. This is something we can talk about but we didn't record any as we have in past years. For the four NESH eggs from four burrows this year already we've found a Bulwer's petrel egg laid and cameras showed some pretty consistent activity from the Bulwer's petrel at this burrow. The Newell's shearwaters arrived I think it was the 10th of this month. That particular burrow in the previous years has had Bulwer's visiting this and shearwaters were seen visiting the same burrow and it occurred again. So now the shearwaters have essentially said this is my burrow and the petrels aren't visiting. If I remember correctly we did get a NESH egg from the same burrow that the Bulwer's petrel egg was laid. The only reason we're talking about Bulwer's petrel is that it's a sea bird and it's interested in nesting in our artificial enclosing.

FRETZ: What is attracting it there? Is it the calls of the other species?

MITCH CRAIG: Yes, I had no other answer to that.

FRETZ: Unless it's just completely random.

MITCH CRAIG: I mean obviously it has to be something like that. The other oddity is that Bulwer's petrel aren't really known to nest in the mountains. There are some possible suggestions that maybe it's not a Bulwer's Petrel.

BOGARDUS: Mitch can you remind us what the take is in theory is supposed to be mitigated through Makamaka'ole?

MITCH CRAIG: Yes, I think I have that's on a slide coming up.

WINTER: What that species listed there?

MITCH CRAIG: Some bird that's been considered extinct for a long time.

JACOBI: Is it a listed species?

MITCH CRAIG: Oh, well, I can't remember exactly because I don't always listen carefully, but it's in the same genus I think but it's not a *Bulwerii bulwerii*.

WINTER: Anybody in the audience have an idea?

MITCH CRAIG: Dr. Helen James, who is well known, when we first saw that there one of the first thing she said was oh, I wonder if that's not a Bulwer's Petrel, but actually a petrel that's historically been here.

JACOBI: She needs to look at the bones.

MITCH CRAIG: So Fern is in that camp, he's like "this is odd". And so now we have an egg. We could probably do genetics with it if someone is inclined. This is just something I said last time. It's just essentially showing there's certain burrows that are being visited consecutively in consecutive years in enclosure A. A26 has been three years running. A43 has been two years and reasonable activity. This is essentially, is there a picture of a bird in front of or in that burrow in a month. So obviously 30 days in a month would be every day every night in that month there was a picture taken of a NESH in front of that burrow. For example, in the top right, in August of 2017, just about every night there was a picture of a NESH in front of or in A43.

JACOBI: So what's unique about those two burrows in terms of characteristics?

MITCH CRAIG: They're closest to the speakers. Very simple. So the other thing that I wanted to show here, other than we're getting consecutive interest in the same burrows, is that, especially in 2018, we're beginning to get other burrows being investigated. So there's some expansion more so than we would observe previously. Okay, and this is enclosure B. It's a little more complex because there are actually some HAPE in there that you can see top left at B22. There was HAPE observed in August and September of 2017 and not in 2018 or any year before that. The uluhe burrow, which is not a burrow, but it's a uluhe fern clump that's next to the speaker that both HAPE and NESH have shown interest in.

JACOBI: But it's a natural growth?

MITCH CRAIG: It's a natural area. And then again the bottom right one is just there's two burrows that are showing interest this past year that hadn't shown any interest. There was no interest in previous years. You can also see that the visitation is not quite as intense as is an A. B50, which is the Bulwer's petrel and NESH conflict zone, you can see this it's not intensely visited a monthly basis. Okay. So this year we hired an ecological consultant with much more people, brains and additional effort than what we had been doing. So obviously the substrate was considered an issue in the past that perhaps the small sharp Stones were breaking the eggs. So that's been manipulated and changed. More attention has been paid to specifically what kind of calls for each species are being broadcast at different times. Clearly when the nesting is going on, there's not a lot of calling going on. Birds are coming and going and not outside screaming and yelling until the juveniles come and then there's more activity right. So having a loop playing constantly every night is not exactly mimicking reality. So that's changed. One of the things that's come up, which makes sense is we've been focusing on the burrows. Although we certainly move around with doing one predator control within the enclosures we haven't formally looked elsewhere inside the enclosures or outside the enclosures to see if the birds are maybe nesting elsewhere. So that's something that we're going to pay attention to this year. And at least for this year, try to definitively show that there either is or isn't activity going on away from where we've been paying attention.

JACOBI: I mean that's always been a concern of mine in terms of attracting them into an area that is not necessarily predator controlled and how that fits into the bigger equation of take and mitigation.

MITCH CRAIG: Yep, so, I don't know that we necessarily want to discuss that. You know the area and how rugged it is away from the enclosures. So doing a thorough search even near to the enclosures is not a simple process.

JACOBI: At the same time, doing predator control outside of the fenced area is the challenge.

MITCH CRAIG: You're right, which we do predator control outside of the fence.

JACOBI: I know but it's how intensive that is as.

MITCH CRAIG: Right, and what point are we spending a lot of money to get nothing in results. It is costly enough to manage the enclosures successfully.

FRETZ: Is there a cost effective way to monitor outside the burrow with something like a camera that's on so you would detect birds coming down and visiting exploring.

MITCH CRAIG: I think that's possible. Perhaps the easiest way is to have people sitting there at night and looking to see what birds are doing. We have done that in the past and more intensely. And last year we were just doing it as sort of a monthly visit to see that there's actually still petrels flying around as there had been in the past. This year they will spend more time at night looking around to determine if they can actually see birds crashing into the uluhe as they do. To answer your question. I would assume some type of thermal imaging would be the way to do that.

BOGARDUS: Could you do a song meter or would it just be drowned out?

MITCH CRAIG: I think it would be it would be drowned out and there are still petrel flying around so you wouldn't necessarily that they're coming down or not.

JACOBI: Unless you could put a signature on the sound. What about using well trained detector dogs to help find places where birds come down.

MITCH CRAIG: I think it was either last year or the year before we did take Teresa's search dog out and searched in the enclosure and there was no detection other than the uluhe bunch. That was the only place that dog signaled that there was no simple seabird.

JACOBI: Even though you have your activity at your two other burrows.

MITCH CRAIG: Yeah it was some after the fact. So it was essentially looking for any kind of sign.

JACOBI: But I'm just thinking about in terms of outside the perimeter in terms of using that.

MITCH CRAIG: Those would be the perfect dogs to do that because they're well trained not to chase Birds.

JACOBI: It might be worth trying that just to get an idea in terms of is there any activity or attempted activity outside and then it would be fairly easy to tell whether those were depredated or not.

MITCH CRAIG: Yep. I would agree with that. I think that's something we can do. We also plan to do human searching for anything. Okay, and then more and more intense effort with owl control?

FRETZ: So in terms of adaptive management of this particular mitigation project, are you are you looking at your targets? Are you seeing if you're on target? Are you concerned that you're not on target and you're employing these as adaptive management I take it, I guess what I was asking was you had put they're exploring outside, but then you said it's so difficult to do so, that's why I was asking.

MITCH CRAIG: Yeah sure. That's something we will do. I'm just also pointing out that doing anything in the rugged areas is difficult. That's all I'm pointing up. Even for dogs. I don't know if that answers your question and that's a big question. But we will do that. It makes sense to me that we would include Maui Nui in that process because Jay and Fern are essentially are two people that are pointing that out as being something that we've been deficient with in the past. Jay believes wholeheartedly that if they're flying around there they're landing. So this is all sort of part of the bigger picture which is how do we proceed here when we're not on target with producing petrels. Their suggestions are, at least from what we're looking, the petrels are not being interested and/or are being crowded out by shearwaters. So the next steps are what do we have to do to satisfy everyone? We have done all that we can do because that's part of the terms of the HCP within reason. There are words in there that are also compromising words that we must do what we can in West Maui. If that's not possible then look into other options. Let's see. I guess we're almost let me just get through and we have never seen each other.

So let me just fly through this part. Michelle's question was how many do we have to mitigate for and so far we've only we've only found petrels at KWP 1. So no petrels at KWP II and no shearwaters at either site. Right now we have the permitted take for petrels and shearwaters KWP II and to some degree shearwaters at KWP I is high relative to what we're actually finding. So the first step once we get through this KWP 2 major amendment is to attempt to do a minor amendment to reduce the take permitted for the species that we're not finding on those two sites. This is in order to reduce the mitigation obligation that we have to meet. So that's just putting that out there and that's why I'm saying that there's no observed take. If you do an estimation now with the data we have a 20 year estimation is between a 1/2 to 1 bird, which is just the slop of not having perfect carcass trials or perfect SEEF trials over the years. There's a little bit of play there. By the end of 20 years, we estimate the take with the data that we have the number would be 0 or 0.25 as the estimated take.

MEHRHOFF: So what's the authorized take?

MITCH CRAIG: The authorized take for KWP I petrels is 22 is first tier and I think it's another 13. So it's 35 total for petrels for KWP I.

MEHRHOFF: So that's not one you'd be trying to reduce because that's actually higher than you were expecting.

MITCH CRAIG: At this point the projection is we will not exceed tier 1 for petrels at KWP I.

MEHRHOFF: I thought you said it was 22. You're already at 23.

MITCH CRAIG: So it's close. I'm getting you... it's conceivable that we could get into tier 2, but at this point it looks like it's pretty close to the tier 1 limit.

SPAIN: So it's actually 25.

MITCH CRAIG: Okay. I was looking at something we were looking at earlier and so it is 25. So it is less than that and that projection includes indirect take and it does not include lost productivity. So there is a small amount that gets added to that. Just considering the permitted take for KWP I petrels. We would have to produce 96 fledglings. That's includes the lost productivity. So it's about 83 for the estimated take and about 12 for the lost productivity. So the current scenario with KWP II petrels is the permitted take is 22 adults for tier 1 and that equates to 73 fledglings. We would like to amend that down as low as conceivably possible. Obviously, it can't be zero because there's still the potentially could you take there. If we amended it down to two adults, for example, that's seven fledglings we would have to produce to meet the minimum obligation. Essentially, for NESH. For both sites the tier one is four adults. We would amend those down as well.

MEHRHOFF: Thank you.

LILY HENNING: So just to sum it up. We understand we obviously have a significant obligation from KWP I for Petrel. The shearwaters issue is something we're trying to figure out the best path because we just don't have that take any other site.

JACOBI: When Makamaka'ole was proposed, especially in terms of putting a predator proof fence around the units and so forth, I mean, I remember the presentation talking about this models and the models just shot through the roof eventually in terms of the number of birds and forth. We all recognize a lifetime in terms of when you start getting traction on the ground and

actually something happening and so forth. What is your feeling in terms of where Makamaka'ole is right now? Will it ever jump into that curve or what point do you say it's not going to work or just hang on a little bit longer?

MITCH CRAIG: You're asking me? It's not working for petrels. We have not met our five-year goal of having two pairs total for both sites. I know you remember well, if we did take what we expected the modeling was going to be considerably beyond 20 years. It was going to take it 25 to 35 years to meet just the obligation for those two sites, right? So part of the discussion then is there's language in the HCP that says, if this doesn't work, first we have to demonstrate that at the place that we're doing the mitigation, we've done everything that anyone can think is reasonable to do there. And so that's part of the reason we will switch to different process this year in hopes of coming up with more information that can elucidate what to do. So that's another year there. With shearwaters, especially if we can amend those down some. It appears that it's inevitable that we'll start producing chicks there. Hopefully this year but they are already there and showing interest as they have in the past years? So it's just a matter of whether you know, it's something that we're not doing correctly or whether they just need time to get it right. Obviously, it costs between a \$100,000 to \$200,000 plus a year to manage that. So, other than that, let's assume we've met the criteria for that and I would love to know what that criteria is going to be according to everyone here. You know, the first step is at what point can we say that Makamaka'ole is not going to work for petrels. The next step is is there anywhere else in West Maui that is conceivable because that's part of the HCP language. If that's not possible East Maui is the next step. We know that Haleakalā exist. We have formally looked into that for the KWP II HCP. We talked to them and obviously there are plenty of birds up there that could use more predator control. So there's potential there. Then finally, as you all know, the Lanai project which we in order to manage the escalating lost productivity for petrels at KWP I, we put money into that project with the sole idea to bring our lost productivity fledglings down to zero. So that it doesn't keep adding exponentially to where you know, you take ten birds in 20 years and have to mitigate for 200-plus just because you're not mitigating in time, right? So and that's turned out to be, thanks to their great efforts, successful. For 3/4 of the money that we've spent there we've acquired I think 34 fledglings. To be straight forward it would take us a couple more years perhaps to meet all of our obligation if we went there versus doing something more at Makamaka'ole than starting another project in West Maui that we don't know what the results could be. Haleakalā is probably more assured. I think the results there you could probably consider in calculating to figure out what it would take and the money it would cost and how long would it take to do that? So that's essentially all I had to bring up. I don't know if there's any answers yet but clearly the language and HCP has a specific projection target. It also clearly uses the word reasonable and practical etc. It's not absolute that it works here until we've spent millions of dollars and we can leave. It's essentially up to you or everyone sitting here how those milestones are going to be met?

FRETZ: Okay, we'll see what kind of guidance we can give you on that. I understand you're asking for that. Do I understand that the idea would be if and when you did shift away from Makamaka'ole for Hawaiian petrel that you would stay but keep the work they're going until you hit it for NESH. Then with the amendment to the NESH you can project that you can hit that.

MITCH CRAIG: I think that's the current idea that it has potential. The other part of that is I think what Jay has told me is there's no identified burrows on Maui for NESH. There are certain places where they're heard, but no one has gone to the point. We funded alternate possibilities. So they did do acoustic detections in East Maui and certainly found that there are shearwaters flying around there. They're also in very rugged places. It doesn't necessarily mean that we could get what we need from there, it's possible but there's no identified projects on Maui for NESH.

BOGARDUS: I think we have created an incredible opportunity for NESH conservation on islands that have limited opportunities for NESH conservation. That's incredibly valuable. Whether it works as a mitigation project for HAPE is a problem or at least something we need to figure out. But I don't want to lose sight of the fact that this is incredible. When we think of NESH across the islands and the ability to do management actions for them on Maui this is a huge benefit for that species that we would not have had otherwise.

JACOBI: Part of the question that came up was is where they are sited is really the best area for encouraging birds that come as opposed to it's easier to build the fences there. I realized that the logistics aspects of it and also there is the potential constraint in terms of how far into the NAR to be able to go and so forth and those kinds of issues. I think those are things that would be good sort of step a little bit outside of that boundary and think about that in the broader context. Maybe there are some additional areas. Thinking more from a recovery or beyond the mitigation issue. They're trying to explore the possibilities that may be able to... again this could tag onto also. This seems to be a big core of the action that's going on driven by mitigation funds. There doesn't seem to be a lot of funds to be able to do that extra outside the box kind of thing. But you know those are some of the things to think about too in terms of are there better sites within the same basic vicinity that you can we could expand into. Again, I'm also thinking in terms of attracting birds into an area and they say well yeah, this is okay, but I'd like the neighborhood over here a lot better, you know, which has got more vegetation and 'uluhe, whatever it is, and then go over there and they get hit by predators there. Maybe trying to, again, build upon the efforts you've done here with some additional monitoring that either comes from mitigation or outside the mitigation box to try and look at other more suitable sites that you could think about going beyond here.

BOGARDUS: I agree with you, but realistically finding where that activity is is different than identifying whether or not you can manage it.

JACOBI: I understand.

BOGARDUS: I don't know where we want to go with this. I will just say that given the uncertainty and where they are right now in the process with sort of the compounding mitigation that's being moved forward...we may want to look at some sites that have some reasonable certainty that they have a management strategy already identified.

FRETZ: I think that's the relatively easy part if I understand you correctly. There's places in East Maui where you can go manage HAPE and it's been done successfully. The Haleakalā site, for example, is available to be done. Based on recent experience we can cost it out. To me the hard part is coming to that decision point. So the way the HCP reads, as Mitch said was, you reach a point where you've determined that it's just not feasible or practicable. To me, the reason I don't know if we're there is because I'm missing certain information. So what occurs to me is to say well, you know those guys that came here and presented this to us the first time were pretty enthusiastic about this. Steve Sawyer and David Ainly, right? And there's other people that do this kind of stuff like Jay, Andre and Pacific Rim. So there are people that we could query and say all right, what would it take? Now maybe we see what it takes and all their ideas, you know do this and do that and we look at it. We just say that's not practicable to think that this applicant is going to do all those things or maybe there's a set of them that do look compelling. To me that's how to approach this. It's to assemble additional technical biological information from people who have experience doing this and then seeing if we think that all make sense. It certainly is compelling that it looks like zero on the Hawaiian Petrel now, so it doesn't look good. It's just that I feel like we're missing the additional information of what could be done?

JACOBI: Are you calling for a seabird Workshop? Because I would be in favor of that.

FRETZ: Well, I'm talking about Consulting with experts. I don't know if I would call it a workshop.

JACOBI: I guess one of the things I see is we are in this together because we're not just looking at a compliance issue. I mean that's part of what FWS and the state does in terms of whether you're complying with what is there and so forth. But the main purpose of the ESRC is to provide biological input into solving the problems and you know, working and evaluating and helping to solve the problems and that's what we're here for. So this is essentially an adaptive management think tank and we all should be able to be willing to take advantage of that. It's not just those who sit on here, but the staff that goes underneath us and so forth. I think we've been pretty successful in at least getting thoughts together through the bat workshop and the bat efforts. We haven't solved anything completely as yet by any means there, but I think it's that same process of trying to get in there and look at what's happening how to tweak things and so forth. That's one of the main purposes I see in terms of the annual review is not to see whether it

be checked all the boxes or not it's is it working or what's not working? How do we tweak it? How do we bring in more detail ecological thought in terms of trying to meet the goals and so forth. So I think heading towards trying to bring the mines together in terms of a workshop would be potentially a very useful thing.

BOGARDUS: To be clear I think they have brought in Andre, Lyndsey but they have reached out to these people to asking for ideas about how to make this more effective. So that dialogue has been ongoing.

FRETZ: We don't need to reinvent the wheel. So if you've already done that and you can walk us through that that would be helpful too.

JACOBI: But I think the main thing is we still are running into places where the wheels are slipping and we're not getting traction in terms of certain kinds of things. It's just how do we kick that up a little bit more. We on the ESRC intersect with various of those projects through whether the Kaua'i Seabird Project or whatever else it is, but trying to connect the dots. Maybe that's happening behind the scenes, but maybe we're not part of that loop. It would be useful at least have that a little bit more tied up together.

MITCH CRAIG: Part of the problem is that all of these experts haven't attempted to do this? So they have experience and expertise but it's not the same thing as doing social attraction. So they offer their great expertise based on their experience in the wild and other things like burrow construction and substrate. One of the reasons we did the mixed calls came from Andre visiting them and hearing in the calls and saying well those don't quite sound like Maui Petrels.

JACOBI: Were these East or West Maui petrels?

MITCH CRAIG: I mean, I'm obviously making a little fun of it. He has the experience to be able to say but it doesn't sound quite like maybe what it should so, you know, we experimented with getting additional calls. Other than that, I don't know that anyone has any other techniques to deploy that are different than what we're doing. You could have variations on your techniques that could change. There's obviously searching areas where they could be nesting but we're not aware of which would be obviously really important. Those are good things.

FRETZ: Well, I guess I would ask it differently. I would say you see what's going on. Now. Here's the data. Could you implement this in a different way with confidence that it would be successful? And if so what we can do and how much would it cost?

MITCH CRAIG: We certainly put those simple questions out as a formal request to the various people we're talking about. Obviously, Jay and Fern have come back and clearly and said, you

know, the birds are nesting there because they're flying around. You just don't know where they are. So that's clearly something to check into with those two experts. Jay's not convinced that owls are an issue. Others say owls are the primary issue that you could be having. That could be the reason why they're not bringing birds to chicks because one of the parents has been predated. We don't know that. It's not easy to hunt owls at night. They're also very intelligent. You know great ideas to canvas.

FRETZ: Well, let's hear from the members about what you guys think about this because Mitch wants guidance on whether it's appropriate to discontinue the Hawaiian petrel work at this site. What is it you're asking now upon this year's work?

MITCH CRAIG: Well, we're undertaking this year's work. So nothing's changing necessarily. Obviously, you know, if the answer was yeah, we all see what you're doing and we agree that doesn't look promising. The HCP also says simultaneously.

FRETZ: Okay, so doing so you're going to employ those adaptive management things that you put up there for this season, which is now just starting. And you'll be back to the committee with whatever results are from that. So it would be helpful to hear what the other members think and see if we have a consensus on that.

BOGARDUS: Normally, I would completely agree with you but I think for Maui Nui as a whole we look at it as a group. In general, I think there's a good opportunity on Lanai and the petrel colony can use the help. The work that they're doing there is good. I wouldn't want to necessarily rule it out. Especially since they are able to manage it for predator control. One of the concerns I have with the upper pieces of Haleakalā is that some areas it's just predators and some areas it's just exclosure. It's also in the extreme upper reaches of the colony so the ability to do mitigation and get it to a higher success level is limited. So I think there are some environmental factors going on there.

WINTER: I agree with that but I'm just worried about precedence.

MITCH CRAIG: The precedence has been set already with that. We did Kahuku seabird mitigation on Kaua'i.

FRETZ: Notwithstanding any other precedence, this HCP clearly says you will mitigate on West Maui until such time as it's been determined it's simply not going to work. Then you will mitigate on East Maui in that case. I think it might say East Maui or Lanai. I am not sure if it's directly but it was clearly envisioned in this HCP that the work will be done on West Maui until it's clear that's not going to work.

BOGARDUS: I mean in terms of process. Maybe get through this season and maybe August/September we have a dedicated time frame where we review the stuff from 2019 and you compile some of the stuff from the experts about what the recommendations were and what recommendations we already implemented, what the results were, what more potentially could be done and what are the cost associated and then trying to answer that question practicability moving forward. Provide all that in a single presentation and that will help us evaluate thoughts.

MEHRHOFF: I think that's a fine idea. I'm happy with that. The red flag I see here is that when Scott outlined this is the way the HCP is written how do you get credit for already doing stuff on Lanai until that decision is made to give up on West Maui.

BOGARDUS: So that's the loss of productivity and that was under adaptive management so that was allowed under the HCP. So that part is okay.

MEHRHOFF: Not the second part?

BOGARDUS: The second part would have to be the determination by this committee and the agencies.

JACOBI: I remember when we were discussing this and I still feel the same way is that I think diverged at looking at the habitat. We're not so much looking at whether there's a dry connection between the habitats that they're potentially occupying. With my limited knowledge, there seems to be a real difference in terms of what habitats are being used on East versus West Maui and Lanai is much more similar to West Maui than it is to Haleakalā in terms of whether the birds are actually there. So I've always felt that the connection that direction was more reasonable than East and West Maui. I remember at one time there was even talk about trying to see whether through genetic testing or whatever that there was actually some value to thinking that way.

FRETZ: I thought some of that did get did it get done.

BOGARDUS: I was looking at it last night because there's a weird thing where Hawaii, Maui, Lānaʻi, Molokaʻi and extirpated birds from Oʻahu and the Kauaʻi birds are weird and completely off on their own.

FRETZ: I think the genetics didn't get done, but it was the timing of breeding or something that was similar.

BOGARDUS: Hey! You two back there.

RACHEL SPRAGUE: It was genetic testing but they didn't have any birds from West Maui.

MARIE VANZANDT: If you look at the phenology the West Maui birds are more closely related to the Lanai birds in timing than the East Maui birds.

BOGARDUS: So some insinuation that West Maui and Lanai were more of a group and East Maui is more of group with Hawaii Island and Kaua'i if off on its own.

JACOBI: Right, and again it's partly due to the habitat they're utilizing which was partly the mechanism that separated them which may lead to how they differentiate.

BOGARDUS: There was also a question about whether the petrels that are being taken at KWP I and II are Lanai birds or are those East Maui birds or West Maui birds.

JACOBI: You would think they'd be more West through the flyways.

FRETZ: Okay, so I want to make sure there's a path forward. So what has been suggested is that they continue the adaptive management that they've started on for this season and at the end of that come and report back to the committee and we will have this evaluation at that time. That will include though some information gathering in the meantime.

BOGARDUS: And some expert solicitation.

FRETZ: So we'll talk to the staff and see if they can organize that in some way and work with Mitch or Lily on how that gets done. What is your guys feeling about this? If they just asked us right now, well, we just think it's not going to work we should stop now. I mean is anybody convinced because that's not an option, right? You're already convinced that it's not going to work. So they might as well stop now. I'm trying to lay out the options. Is that an option for any of you guys.

WINTER: For me, I'm worried if that's making a statement that we give up on habitat
(inaudible)

FRETZ: Okay, so you're in the additional information. I am as well.

BOGARDUS: And then the additional information I'm going to add on to it. I think it was Fern at some point in the past who said maybe it's not a social attraction site and maybe it's a possibility for a translocation site. I don't know what the experts think about that these days but I would want to hear a little bit more about whether that's potential long-term. As part of that...what would the next steps be if you were trying to make it functional.

JACOBI: That's a really good point.

MEHRHOFF: I'm okay with saying it's probably not going to work for HAPE and looking for other things. But my thing with Lanai is just whether there are already things that as part of other agreements, for the owners on Lanai, whether or not we're going to get into another how do you partition benefits out.

BOGARDUS: No, not for petrels there are for others.

MEHRHOFF: I'm not comfortable yet making that statement because I still think that there was a complication there that hasn't been totally recognized; but, nevertheless that's my only concern with that one.

FRETZ: Anybody else want to chime in on that because it's looking like the consensus is that we stay the course for this season and we re-evaluate. We bring in information from experts and then we take a look at it. It sounds like there's also a consensus it's not looking good, but we want to get this additional information and one more season with the adaptive management.

BOGARDUS: Well they have to do this season anyway because of the NESH obligation right?

JACOBI: But with the Target that after this season, there's going to be a real strong evaluation in terms of where things are and where they could go.

BOGARDUS: If possible it would be good to do this in August and September so that there's enough logistical time laid out there so that they could redirect before the February beginning of the next seabird season.

MITCH CRAIG: The gist of what happens in the season is known by then.

FRETZ: I'd really like to have those guys come back that were here five years ago because man, did they take us through this? They were really good salesman.

MEHRHOFF: There's a lag time.

MITCH CRAIG: Right and it's based on the past experience, right?

MEHRHOFF: It's only like one or two nest off, right?

JACOBI: Yeah, but it's a question of how long is that going to be.

FRETZ: Well Hawaiian Petrel missed its target.

MITCH CRAIG: For shearwaters it's on target as far as the criteria goes. Also, it says in the HCP that we need to accomplish this within our permit term. So starting another project somewhere else and not knowing whether that's going to work or not is asking for it I think.

FRETZ: Well the telescope produced 35 birds in six years.

JACOBI: But they were handed to them. That's it easiest situation.

FRETZ: Well it's still there.

JACOBI: I'm not saying anything wrong. I'm just saying it's a different situation.

MITCH CRAIG: I think the idea of building another enclosure somewhere I think that would be a tough one. Predator control at other places is certainly done and feasible.

JACOBI: The other thing I would see tweaking potentially more is a little bit of vegetation management and restoration of more structure and so forth and that's going to be a challenge, where it overlaps with the NAR and so forth, but I think that's something that potentially I think has some promise.

MITCH CRAIG: And what if the bottom line is shearwaters are bullies and there's no way in hell any other birds can nest there? Then we can try and work and spend money only to find out that we should have quit a couple years ago.

FRETZ: Okay, so are we wrapping up your presentation part?

MITCH CRAIG: Yes.

BOGARDUS: Are you going to present on the Lānaʻi piece or just this?

MITCH CRAIG: No just the fact that it's, you know, they're doing a great job and it's one good place to produce fledglings.

MEHRHOFF: But we should make that decision if it comes back to us and as you talk about timelines with Michelle. Not schedule another meeting to talk about whether it goes to East Maui or Lānaʻi. That should be a part of the same decision I don't want to do it again.

MITCH CRAIG: One last thing having to do with Nēnē is, obviously, I mean it varies year to year and sounds like it's good at Piʻiholo. I didn't hear the numbers from Haleakalā. I don't know what they are. It's the same situation is you know at what point do we say? These are not going

to meet our needs and do we start doing predator control in Haleakalā for Nēnēs for example, or some other project? I don't know that we're at that point, but there are other options than doing mitigation in pens.

FRETZ: Yeah, I think you guys have got options. Of course, you can go work in Haleakalā or anywhere else. You should always be looking at your options. It seems to me like you have variability between these two sites and anything can happen in this site and anything can happen. So in principle, it seems to me you should be able to combine them. The two people combining them, in this case you and the state just split the benefits. I mean, maybe that wouldn't work. But it seems to me that's something worth looking at.

MITCH CRAIG: So an idea being hiring two technicians and they work at both places along with DOFAW and we figure out how much effort each made and split it at the end. Versus hiring four technicians at twice the cost and you know, basically getting all of the fledglings produced.

FRETZ: Well you can adapt if you want to and you'll get your credit faster. Yeah, I mean that's what that's worth looking at too.

MITCH CRAIG: That's right. It's a decision for us to make with the state.

FRETZ: Yeah, and maybe that's a better way to go. Maybe you can find a private contractor that can do it too. I mean the state is cumbersome. The idea is that for supposed to be benefits to the state but we all know how difficult it is to work with the state and maybe the challenges outweigh the benefits. I don't know if you can get a private contractor and those because it's private land. Okay, so if you guys are done then we're going to just check with the committee if they have any other comments, check for public comments and then take a break and move on.

MITCH CRAIG: Great.

FRETZ: Okay, any public comments on these two items...six and seven? Nope. All right. Thank you guys.

LILY HENNING: Are you looking for documentation on our bat mitigation? Would you like to see that and added to this presentation you know to send it out to the committee? I thought I had heard a comment at the beginning that this needed to be documented at some point.

JACOBI: Yes, at some point yes.

LILY HENNING: Okay, we will certainly add that.

JACOBI: We've always gone down sort of the line that nēnē are easy. But they're really not. Seabirds are little bit less complicated, bats are the hardest and we're struggling with all three of them to some degree. Again, I just want to sincerely give my appreciation to the contributions you've made Mitch to a lot of these issues.

FRETZ: Hey, thanks. Alright, we will come back at 11:20

ITEM 3. [Request to schedule a Hawaiian Hoary Bat Workshop](#)

FRETZ: Okay item 3. This a request to schedule a Hawaiian hoary bat workshop. So this came up at our last meeting. The committee had a discussion and the committee was in support of having a workshop, but I do recall we were talking about having workshops for different things. So I need to ask Glenn if he can remind us what we were going to cover in the workshop?

GLENN METZLER: Yeah there was a request by the committee at previous meetings to basically do another Bat Workshop. So we wanted to know if the committee wanted to schedule that now and set a time, who they might want to invite, who should be at that workshop, who should we contact

FRETZ: What is the objective of the workshop?

GLENN METZLER: Similar to the last one, to get an update on all the information we have on hoary bats with new research.

FRETZ: Oh, okay. Sorry. I'm asking because I can't remember because I know we had talked about two or three different things and we had decided to do a workshop on one of them. Was it to assemble all the latest research?

GLENN METZLER: That's what I thought it was because it was.

LAUREN TAYLOR: Because it was expressed at the reviews when we had brought the separate research projects. The updates said that it would be more helpful to have another workshop where it's all brought at once.

FRETZ: So I just want to make sure. I'm still not clear on exactly the topic and the objective of the workshop. Do you remember? No, can somebody pull up the notes?

UNKNOWN: Wasn't it updating the white paper?

FRETZ: No because that's the thing right? I remember we said no we don't want to do the stuff for updating the white paper because that's already in progress. That's why I'm asking this question because I know we had talked about...

BOGARDUS: Part of it was a redo of the modeling instruction thing. Going back to Evidence of Absence, right? Because we haven't done that a couple years and some of the newer committee members had wanted to dig into it and understand the model a little bit better.

JACOBI: But that wasn't so much the workshop. That was just a session for the ESRC.

BOGARDUS: So originally they talked about it as a session for us and then they talked about it as having it be a part of the workshop.

FRETZ: In the interest of time, can we ask Lauren to go back and review the notes. If you could do that, and we'll move on to another item?

LAUREN TAYLOR: I don't have the minutes for that finished yet.

MEHRHOFF: I remember we were talking about the timing of the guidance and this and we didn't want to say we were going to wait on the guidance until this happens. If the workshop happens and we have guidance out and something compels us to want to change the guidance then we would do that for a version three even though the time between two and three might not be very long. But if the data came out and that would be great and we would put it in there.

JACOBI: I thought a big part of the impetus for having a workshop was we have a lot of new information that we didn't have before both in terms of monitoring, population information, minimization and deterrents.

MEHRHOFF: We could get some of those researchers who are doing right some of the deterrents and some of the low wind speed curtailment stuff. Some of the population modeling stuff and get an idea from them for what we might have and where everybody could be seen and not just us.

WINTER: There was some discussion of blunt tools and sharp tools and getting everybody to understand what the sharpest methods are and getting everyone to follow those.

JACOBI: Right and also show everyone, here's what we know now. Even though it doesn't look like we're going to have any new mitigation funds to feel research. We still have some questions. Getting back to that outline that you have put together relative to the RFP and see where we stand in terms of what are the holes still and where might we want to go in terms of trying to go

there by whatever funding mechanism because it just helps us to get to where we want to get to. To me, I think that's one of the outcomes of this. It will potentially impact the guidance document and we need to figure out how the guidance document is going to continue to get periodically updated anyway.

BOGARDUS: I feel like I'm the squeaky wheel on the timing of some of this stuff. I apologize because the timing of the Guidance doc is coming too far behind the amendments that we are looking at right now. I do think there is value in doing this so that we can make sure that the guidance document is up to date and we are happy with it and it reflects the newest and most current information and includes what we expect to see. Because at this point we know of at least three or four projects that are likely to come in with new HCPs. So if we can at least get ourselves together and have that updated white paper to include all of that new information then that will both facilitate their development of HCPs that meet the State and Federal issuance criteria as well as facilitate our review of those projects.

FRETZ: We'll follow up to refine it.

BOGARDUS: I'll say we at least put it on our calendars for at least two days. Then we can figure out the agenda items and goals.

FRETZ: Okay, expect an update at the next ESRC meeting. In the meantime as you guys to develop it you can send updates out to the committee that say here's our topics. Here's our invitees that sort of thing that keeps the committee informed. Okay, are there any public comments on this item?

UNKNOWN AUDIENCE MEMBER: Yes. Could you just give a quick status update on where the bat task force is and where the interim bat guidance is and ultimately what you're projecting for revising the guidance.

FRETZ: Yes, but that's different than this topic. So the bat task force was appointed by this committee to revise the back guidance document. It has met, I think three or four times. It had returned to this committee with an interim report partway through that and requested the committee's concurrence on that set of things up to that point. That's all on the record than in the notes and so you can find that all written down. The bat task force meets again tomorrow to continue on that and expects to bring back either an interim report or a final report to the committee in the next two to three months. Probably at that meeting, there will be report that comes back that presumably includes a draft of the revised guidance. And at that point we'll ask for public comment on it. One of the things we committed to do along the way was make sure there was ample opportunity for the public to comment on that draft revised guidance as it is put together. Okay, anything else public comments?...No, okay.

ITEM 4. Request to schedule an ESRC meeting for review and recommendation on the Auwahi Wind Farm Final Habitat Conservation Plan (HCP) Amendment

FRETZ: Okay item four. This is a request to schedule a meeting for a Auwahi Wind Farm's final HCP amendment. So we want to schedule you guys on a date again. Now don't we have meetings scheduled already for July 25. So is there a reason why July 25 would not be the date. Are you looking for something different than that?

GLENN METZLER: Well one consideration is the Service just went out with their draft HCPs and they have the 45 day comment period and that ends June 7th. So one consideration is whether this committee wants to provide any input during that 45 day comment period.

FRETZ: But that wouldn't be a final HCP then right? It is still out for public comment on the federal side.

GLENN METZLER: It could just another round of comments on a draft HCP or the final.

MARIE VANZANDT: Can I clarify? So this is an attempt for Auwahi to align their HCP so that the Federal and the State side would have the same HCP. The federal timeline is very tight and the turnaround associated with the final PEIS document and the final HCP is within that June timeframe. So our goal is to come before you to come to a recommendation for that document.

FRETZ: Okay, so you want it to be before the end of the 45 day or shortly thereafter?

GLENN METZLER: Sorry shortly thereafter.

BOGARDUS: So part of our very lovely process is that we're trying to meet our deadlines under the DOI process for the Programmatic EIS. What that means is that basically by the end of the public comment period we have to have final HCP documents on the federal side to be able to write the final documents. Right? So by the end of the public comment period we have to have the Final HCP so that we can write the Final EIS and then move forward off of that. Okay, so we're asking applicants for the federal process to provide that there's an interest on the part of not just Auwahi but probably all of the applicants to ensure that what they're giving in those final documents is the same thing as what DOFAW would be looking for.

FRETZ: I think I understand. So you want to bring before the committee the draft or final that you feel is going to meet the federal issuance criteria that is going to be essentially the federal version. You want to bring that to this committee to see if the committee concurs with that and will recommend approval or amendment for that?

MARIE VANZANDT: Correct.

MEHRHOFF: You're one of four though. Are the other three wanting to do the same?

LAUREN TAYLOR: They haven't indicated yet.

GLENN METZLER: As I understand it, the Service cannot accept any comments or make changes after July 10.

BOGARDUS: I think it's even earlier than that. I could be wrong but I think for KWP II the committee has already given general approval? I could be wrong... on the amendment package? No, not yet?

FRETZ: It went out for public comment, but I don't think it came back to us again.

BOGARDUS: We want to circle back with them.

MEHRHOFF: Well both Auwahi and KWP II had brief and got some feedback. We haven't voted on it that I know of.

BOGARDUS: I haven't talked to the applicants. My general sense is that they all have a vested interest in trying to get to the point where the document they're moving through on Federal side is the same document that would moving forward on the DOFAW side. But, Auwahi is the only one that has specifically requested the timing of this review.

MEHRHOFF: But all four of them are being published tomorrow right?

BOGARDUS: For draft. That's the version that we got from them back in January which DOFAW has.

FRETZ: And so how did would it differ then? So let's say one of them does come back to the ESRC in June. The ESRC recommends certain changes. That means there's an opportunity on the federal side to then make those changes and it becomes one in the right one that moves forward through both processes. Now contrast with the other entity who let's say doesn't get it in... you finalize it... it eventually comes back to the State later. The State recommends changes in a similar fashion yet, now you have two different HCPs because yours didn't get changed. Is that what we're trying to avoid? But that's your intention.

BOGARDUS: That's what we're trying to avoid at the same time we are beholden to a timelines and there is no discretion on the part of the Service to not leave the timelines at this point.

FRETZ: Yeah, so we can't help it if the other three don't get theirs in in time, but if there's this one that wants to get theirs in then they get it in and the other three don't right?

MEHRHOFF: I do think it would be worth checking with the other three. Just because they didn't know they could ask doesn't necessarily mean we should say sorry.

BOGARDUS: My general sense is that they all would be okay with that, but we should check with them and make sure because we're going to have new drafts in our hands. I have no reason to believe that they wouldn't also be providing those new draft to DOFAW at the same time. They've been working on edits since January. The versions that were publishing tomorrow are the ones that all of us collectively had in January or three months ago. That's how long it takes to get from the time that we turn them in. Do you know what I mean? So the applicants have been making edits since January and edits will be incorporated in those drafts they have been making.

ALICIA OLLER: And Kawaihoa is interested in a similar schedule. Just wanted to add that.

BOGARDUS: So Kawaihoa, KWP II and Pakini Nui are here. I know KWP II would be. Lily had mentioned it yesterday. Pakini Nui I don't know.

FRETZ: So Auwahi what is your ideal date? So I can get dates from everyone.

MARIE VANZANDT: Lauren was going to work with you guys on setting up a doodle poll. It could be the second or third week of June. This would be for seeking a recommendation from the ESRC on our final HCP amendment.

LAUREN TAYLOR: They're requesting the week of June 10th onwards which will be after the public comment period ends?

BOGARDUS: Yes, public comment period ends on June 10th.

LAUREN TAYLOR: So all comments could be incorporated by that point.

FRETZ: So you guys will get a doodle poll on your availability for an ESRC meeting from June 10th to June 20th. You can expect one of the items to be on it a request to recommend approve disapprove or amend for a version of the Auwahi HCP that closely aligns with what the Federal process is prepared to send up. Makes sense.

MEHRHOFF: Just Auwahi?

BOGARDUS: And Kawaihoa too. Alicia you ok committing to that?

ALICIA OLLER: Yes, just as far as what the ultimate ask is.

JAAP EIJZENGA: Just a request that as soon as you internally have a day to figure it out. Can you loop in all of the other applicants to give them opportunity, even if they're not here, to represent whether or not they're interested or can or cannot make a meeting at that time.

FRETZ: All right. Does that make sense everybody? Any public comments on this?

MARIE VANZANDT: Yes one more item. So Auwahi will be providing that document to you 30 in advance of the ESRC meeting through the DOFAW staff.

FRETZ: Yeah, we definitely need that especially if there's going to be more than one.

MEHRHOFF: But that's going to be a revised document not the one that you did before?

MARIE VANZANDT: Correct. So a revised document that will be going over to Fish and Wildlife and DOFAW staff.

SPAIN: But can I ask a question? Because then we're going to be getting public comments through the Federal process up to June 10th? Okay so we're kind of going to be having two things fly at us. The collection of comments from the original draft from January but we're getting a draft 30 days in advance which is different from the draft that's in the Federal one.

BOGARDUS: Potentially yes. We're requesting that any changes they're making are flagged. So if there are any changes to the final versus what is handed to you 30 days in advance, it can easily be walked through quickly within a meeting and double checking...

FRETZ: Well we still might have to come back to the ESRC because if you're trying to make a concurrent HCP that is both Federal and State both and the ESRC recommends a particular version of that and then your public comment period closes and you receive public comments that lead you to make further changes to it...now, we have a different document that's not the same one the ESRC reviewed. I had assumed you guys are aware of that right? And you're wanting to take that chance?

MARIE VANZANDT: Yes.

BOGARDUS: I think just everyone is aware of that and conscious that that may well happen.

FRETZ: We weren't until Lisa brought it up. There were quite a lot of comments on several HCPs from the meeting. It was a couple meetings ago in which we didn't get through them all and we had the committee submit the rest of their comments in writing, right?

MARIE VANZANDT: We'll walk through those significant comments that you guys provided and how they were addressed in our presentation.

FRETZ: Okay. All right, does everybody understand everybody good? Okay anything else? No. All right, very good.

ITEM 5. [Approval of Minutes: July 17, 2018 ESRC Meeting; October 24, 2018 ESRC Meeting; January 24, 2019 ESRC Meeting; February 7, 2019 ESRC Site Visit; and February 15, 2019 ESRC Site Visit](#)

FRETZ: Okay, next is approval of a whole bunch of minutes. Then this is item 5. Does anybody have any comments on all these minutes? They were very detailed and long. Any comments any changes, you know about the October?

LAUREN TAYLOR: I do know the April minutes had an October date on them.

FRETZ: Yeah, that was a typo?

MEHRHOFF: I have no comments or changes other than some of them are pertinent for when we look at the guidance because we committed in the notes to do certain things just as a reminder.

FRETZ: Okay, yeah. I think I sent them to the bat task force for the guidance meeting and I had the same thought that you did. Okay any public comments on the notes?

LAUREN TAYLOR: I received public comments on the notes with some corrections on whose voice said what for the site visit at Auwahi. So that'll be a change. It would be for Maryland.

ITEM 8. [Nēnē Hazing Pilot Project: Presentation by USDA Wildlife Services](#)

FRETZ: All right, very good. Okay, so item 6 and 7 we did. So now we're moving on to the nēnē hazing project that is item 8. That's going to be a presentation from Craig.

CRAIG CLARK: I'm Craig Clark. I'm the state director for Hawaii Wildlife Services and we got a project coming up. Hopefully really soon. It's been a process, but one of the things that we wanted to do is... if you look at the way the runways are set up in Līhu'e Airport on Kaua'i.

There's a 18-hole golf course with man-made lagoons and island and perfect habitat for virtually all T & E birds that we've got. I can do it just like you would just use a mouse I can do for you. Yeah, so can see the runways right here and then the golf course in between the resort. So it's 880 acres, four active runways, two taxiways. We've got staff there that are doing wildlife hazard management at the airport. There are five full-time employees four specialists and a supervisor. That's just at the airport by itself to be able to make sure the birds are hazed away from the runway before planes arrive.

Normal Wildlife Services activities wildlife hazard management include habitat management recommendations, you know changing make sure there's no roosting trees nearby or attractants to draw the birds there. We do basic harassment. We do trapping and use pyrotechnics streamers and banners to get the birds moving. The National Wildlife Research Center is also working on different tools and strategies that we can use to maybe improve our management techniques. As a last resort we use lethal control to reduce the risk of aircraft strike. So the species of concern at most of the airports especially in Hawai'i include passerines month common mynas, manakins, Java sparrows, basically all introduced birds. We've also got migratory birds that show up especially the plovers in the Fall that show up. The juveniles are really a problem. We get a huge spike in aircraft strikes every when the plovers show up. We also have raptors that are a problem. The barn owls and the cattle egrets are less of a problem now since the depredation order was published and it opened up our avenues to be able to get rid of those birds a lot easier. Then we also have pūeo show up too. Then a special species of concern are the nēnē and the duck. Nēnē especially because of their body mass, flocking behavior and then site fidelity. They want to keep coming back to the same spot. So this gives you an idea of the birds that are dispersed compared to the strike percentage. This covers five years from 2011 to 2016. You can see that the mannequins dispersed to a great degree but you can also see that the plovers. Even though we're hazing in as much as we can. The juveniles are just stupid. They're not used to the aircraft. So what we're focusing on is the nēnē for this project. This shows up bird dispersal events over a 10-year period from 2005 to 2015. You can see that top bar is the nēnē or Hawaiian Goose. You can see the spike in 2011. These are dispersals not strikes.

MEHRHOFF: What's your definition of dispersal?

CRAIG CLARK: Moving the birds out. So hazing. So focusing now on the resort itself. They've got an 18-hole golf course and a man-made Lagoon. It's got to like eight different items on there including a restaurant hotel. They're focusing a lot on condominiums and they are trying to sell condos on the resort itself. But you can see the proximity of the resort and then the runway is right there. So historically they've nested virtually everywhere around the resort mostly around the lagoon area, but also up by the runway themselves just off to the side. So because of that spike in the population of the birds, they're doing really well. In fact, the resort itself was compelled through their HCP to improve the habitat and improve the bird's survival and the population which if you think about is not a grand idea with the runway right there. It would

have been better if they had focused that on some other area. But anyway the Governor declared a five-year proclamation that ended in April 16 that translocated 650 birds mostly to the Big Island, but some to Maui too. That was highly successful but as soon as the translocation project stopped then the bird started coming back. So in the 2016 and 2017 nesting season, they had 13 nests. In 2017 and 2018, had 14 nest and in 2018 to 2019 season there were 21 nest. This doesn't show all of them but this shows about 10 of where there were nesting. You can see that they like the islands and they like lagoon and the other 10, in addition to the 11 were also down in the same area. I think I first proposed this for years ago. Try to get going on this and use Border Collies at the resort to be able to haze the Nēnē specifically. I know that they've been used at the National Mall. They did a... I think it was a \$2.4 million revamp of the National Mall and the reflecting pool in front of the monument. So the Canada geese really like that. So they were coming in in such numbers that their fecal matter causing problems. So they started using Border collies there, very successfully, at the Washington Monument. They also Border Collies at different golf courses and a few airports then industrial parks too where you got a lot of buildings but they have a lot of parkland surrounding them. So that's the perfect spot for Canada geese too. So I proposed to be able to just haze the birds at the resort and have a wildlife biologist to make sure that there's data collected and analyzed for K9 handlers and Wildlife Specialists that work for me and then three more dogs. Then HDOT airports was the funding entity for this and we really appreciate that. So if we're hazing the birds one of the things we want to do is be able to show and prove success. So to be able to gauge success, we look at public safety and the number of birds that hazed and the direction that they become hazed. The success of the nēnē... if we can push them off that resort before they settle in and nest then if they settle somewhere else and go to somebody else's golf course or whatever or a natural resource area. That's fine. As long as they're away from that airport that's our goal. And then we also want to examine non-target effects. If we're hazing a goose and there's a stilt right next to me then they will be disturbed too but they won't be the focus of that. So to be able to get this project rolling, there are numerous hoops to jump through. We did a biological assessment. We gave that the Fish and Wildlife Service. They provided the biological opinion on the hazing process itself. We also did an Environmental Assessment that the public notice got finalized and we got a finding of no significant impact. So that took a while. And then we'd also be able to comply with Federal and State law. We've got Hawaii Protected Wildlife Permit for scientific research. So this is this is a pilot project that we want to be able to find out exactly what the birds are doing and how they're behaving and long-term success. So we've got a Fish and Wildlife Endangered Species Recovery permit, 10(a)(1)(A), and that just addresses the satellite tagging. The BA and BO cover the hazing aspect of it on the federal side. But the Hawaii state permit has hazing, banding, satellite tagging and monitoring. The recovery permit was just published on April 17th for a 30-day comment period so that would be over with on the 17th of May and we should be good to go then. This is the satellite that tracking that we're going to be using. We're buying ten of them. We were just going to do five but if we're really successful and we haze the birds away and they don't come back we don't get any more information. So I wanted to have ten so we can make

sure that we got birds that are still showing up and we can still collect some good data on this out. I don't think anybody's ever done this before that I'm aware of. Hazing has been done on Canada geese and other birds, but I don't think it's ever been done to this degree and on a T & E species. So I'm also going to put satellite tracking collars on the dogs that are being used. So we're using Border Collies. The collar on the left on that German Shepherd is what we'll use; It's it's a neoprene Pollock. These guys are all going to be swimmers too, all the Border Collies that were using, because we want to be able to direct them out to the islands because that's where some of the birds are. And so this is some of the data that we want to be able to collect. If you look on this, you know, I have date and time and location. The species is the number of birds; the band that they have is whether they're on land, water or on an island; the hazing tool that is being used at the time. Quinn is the name of one of the Border Collies that's coming and Quaid is the other one. The initial distance when they react to either the hazing tool or the observer and then there's also data we want to be able to collect on the FID, which is a flight initiation distance. So how close does the dog get to the nēnē before they take off and fly. I've got some video from the demonstration that we did last year and I brought the trainers out to the resort. So we did it right on site. So first, the nēnē focus and then they do start to do alarm calls and then as the dog gets close then they take off. What we discovered in the airport work that we've been doing, that most of these birds as soon as we pull up in our truck they'll take off. So I'm assuming that the way this is going to work as a flight initiation distance is going to be greater and greater and greater the more we work out there and the dogs are active. So that's the shot of one of the dogs. There's a video embedded in there if you can get at it.

BOGARDUS: For those of you that are familiar with the Kaua'i Lagoons HCP, at the time that it came through the ESRC that field that's showing was covered in nēnē. Reggie do you remember how many birds were nesting on that field?

REGINLAD DAVID: There were probably 30 nest on that field.

BOGARDUS: You wouldn't have any opportunity to see that field without at least maybe 15 nēnē.

CRAIG CLARK: (Playing video) So that's the trainer and these are Kuykendall Border Collies from North Carolina. We just had one demonstration day on the resort. You hear the alarm calls before they fly. Replay it again. There's several. So they do all of this with voice commands. Another thing I had them do in the trainer was an emergency recall whistle which calls them back to sit at your feet. Well, this is one of the reasons I wanted three dogs. In fact, we may wind up having to have four because it's all daylight hours, you know weekends included, because of the planes are moving all the time. Then also, we think that they may also move during a full moon or maybe a week or so that they'll be comfortable flying in a full moon. And this is Quinn again. He doesn't see the goose yet, so he's just following the kayak to start with and once he gets

past the kayak he sees the geese that are the island. I wanted to make sure that all the dogs that we are buying and using to this and are all swimmers. I wanted to make sure that all the dogs we are buying and using for this are all swimmers. I don't have any really good footage of how the gallinules reacted but on one of the holes that we were at as the dogs were approaching there were gallinules hanging out and well before they got there they weren't upset or anything. They just wandered off into the water. And as soon as the dogs went past they came back out and started doing what they were doing before. You tell by the way these birds react that the dog is completely just focused on the nēnē. They don't want to hurt you these birds either. They don't want to bite them or anything and they don't bark. All they want to do is to be able to do is move those birds around and not hurt them.

BOGARDUS: I see on this there's a couple videos of them interacting with moorhen is there anyway, we can see one of those?

CRAIG CLARK: Unfortunately, I don't think we have good footage of that. But you can try to play it... You can't really see him there... They're just past the bridge on the right. But this is what I was talking about where they just wander off get out on the water and as soon as the dogs go past they come back up. Did you see any of the footage that Jonathan had?

BOGARDUS: No, I'm sure we have it but I haven't seen it.

CRAIG CLARK: And I actually have some discs with these videos on there. So if anybody wants them. Are there any questions?

SPAIN: Can I ask Reggie questions? Just a quick reminder, I know you gave us an update but I apologize for not re-reading the report that you gave us at the last meeting in March. But what are your HCP requirements for Nēnē?

REGINALD DAVID: So when this originally started we had an MOU. In that document we were basically supposed to enhance the habitat and create as many nēnē as we possibly could. Obviously, that was a little more successful than we expected and we got well over 750 nēnē on the property. By the time the HCP was finished, that was taken out of the actual HCP and we were to manage and protect but to remove any enhancement that we had made and improve the habitat where we could and basically try to make the place as unsavory to nēnē as possible. But it's a safe place. We have a massive predator control program. We run 30 to 50 traps and it's very safe for the birds.

BOGARDUS: They weren't purposefully allowed to take nēnē but they were supposed to make the habitat less attractive to nēnē. In their mitigation for the nēnē that they were taking from the resort activities occurred off-site. So nēnē mitigation was not occurring on the property under the

HCP. However, the mitigation options to offset the take of the water birds from the resort activities are occurring on the resort site through the predator control and the other measures that I can't remember. But all the measures that they were doing on site to promote water birds. So there is a line between what they were doing for nēnē and where the mitigation was occurring under the HCP versus the waterbird measures and the on-site conservation.

REGINALD DAVID: Basically, in the last 5 years the waterbird production on the property has sky rocketed. I've been working on and off on the property for twenty something years. We never have stilts or coots nesting there. Last year we had something like 60 gallinule nest on the property. We do maintain one area that the nēnē don't like for sort of a nursery for the other waterbird species. But that part of the property has been taken out of the golf course and been turned into a hiking, running, biking and exercise area where grasses are pretty tall and the nēnē are not there. So in the last five or six years the nēnē used to nest on the entire property but now have moved to nest around islands or around the edges of the lagoons. It's changed significantly from 7 years ago.

CRAIG CLARK: For us, it's called 12A. It's the legal document that private property owner signs that allows my staff to be on the property. So waiting on that to be signed off and as soon as we get that in place, I've got two employees that have already signed on we've got two dogs that are picked out and have already gone through the rabies screening. It's a hard to get an animal out here. And so we'll see you in two of my staff to North Carolina to the training facility. They'll get paired with the dog and will train for two weeks and they'll come back to Kaua'i. They'll get about a five day window for the dogs to be able to acclimate to the new kennel and the island what's going on. Then the trainers from North Carolina will come out to the property and then tune up the dogs and handlers on-site for two weeks. Our handlers will have a full month of training with their dogs. The dogs have been trained already. They're ready to go.

SPAIN: So just kind of following up, if in the event this project led to a take of a nēnē who does it fall on? The landowner?

CRAIG CLARK: Depends on whose actions. If it's our staff, if we have a bird that goes out in front of the car and get hit that's us.

FRETZ: Hazing a bird is take.

MEHRHOFF: How much lethal take are you expecting?

CRAIG CLARK: The dogs don't want to take these birds.

MEHRHOFF: So how about the birds that disperse out to a place that has predators?

CRAIG CLARK: You mean offsite? I don't know we don't have enough staff to cover that area. I mean we'll figure out the ones that are satellite tagged.

MEHRHOFF: So you're not expecting any lethal take at all?

CRAIG CLARK: Not on our end.

MEHRHOFF: No moorhens going out in front of car or anything?

CRAIG CLARK: I can't guarantee it but gallinules are pretty stupid so I can't guarantee that either.

MEHRHOFF: What's the duration of this project?

CRAIG CLARK: Well right now it's a one-year pilot project that I'm assuming that if it's successful the airport is already earmarked another year of funding.

MEHRHOFF: So then at what point does it no longer become a research recovery project that needs to have an HCP or something?

CRAIG CLARK: Oh HDOT has started an HCP to cover this. I don't know where it is but I know they signed the letter of intent is that what it's called?

GLENN METZLER: They submitted an application.

CRAIG CLARK: So I am guessing that after the first year we should have some pretty good information. What we planned on doing is late June early July the satellite tags should be built by the end of next month. And so late June early July we should be able to start 10 tagging birds so that we can see them as they start showing up for the next season. We wanted to do it this year it just took too long to get everything put together in time for this last season.

FRETZ: Is DOFAW banding the birds out there?

CRAIG CLARK: I don't think they are but we're going to be working with Thomas on-site.

REGINALD DAVID: They are. At this juncture the state is banding again and we plan on a big push the last six months to try and band as many of the unbanded birds on the property as possible. So we're getting there.

CRAIG CLARK: And then we also have planned to... you know, where the holding pens were during the translocation is airport property and the fences are still up and Thomas Ka'iakapu and his bunch still have containers there with some stuff and we've arranged to be able for us to put a container there. We're going to build up another pen for domestic geese so that if we don't have Nēnē on the property to be able to haze we want to be able to keep the dogs tuned up with domestic geese.

FRETS: So the idea is that they're hazed so frequently that they choose not to breed there or it's impossible for them to breed right? In terms of the tools to keep the population down for the airport safety purposes...do you think that this will do it or do you think that some will still end up nesting there. So your goal is that this is 100% effective?

CRAIG CLARK: Yeah, right. And at this point I assume it's going to be effective that by watching the birds reaction and the dogs working in the demonstration. Also I flew to their training facility and saw them there too. I was really impressed and I think it's going to be successful. The only problem we may have is if the bird manages to get on the property and we don't see them in time and they go ahead and nest then they're off limits. We've got a hundred foot buffer zone around them and we'll leave them alone until they finish nesting and fledge.

FRETZ: Those ones that fledge there will probably become even harder.

CRAIG CLARK: Yeah they'll probably want to come back. I really wanted to be able to get this thing rolling soon as the proclamation was over so we got a head start on it. Just too much bureaucracy.

FRETZ: And then the other question about the banding is it would be really good to know where these birds go. It's impractical to really follow the bird to see where it goes.

CRAIG CLARK: Will the one's the satellite tags we'll know.

FRETZ: Oh how many you going to tag?

CRAIG CLARK: Ten.

FRETZ: So that will help. The other thing I was going to say is that DOFAW does nēnē surveys around the island, I think twice a year. So they spot birds with bands all the time. So if you've got the banding records of the ones that you're hazing off and then they're able to document where they are and especially if they bred somewhere else... and then they made a successful Nest somewhere else... that really is going to inform the success of this project because it means you're not just indefinitely hazing persistent birds, but you're relocating them.

CRAIG CLARK: My staff at the airport are hazing birds all the time. So they will be in coordination with each other so that we don't wind up hazing birds off the property when the planes coming in. We want to be able to time all this so that we're hazing them in their direction we want and make sure that we're not increasing them with the aircraft risk. So they'll be tied together.

FRETZ: I think we brought this up at the last meeting when you guys were talking that it might require an amendment to your HCP in terms of the covered take right?

BOGARDUS: So we looked at it on the federal side and decided there wasn't a need for an amendment. We just put a letter in the file of any take associated with this project would not be counted against their project. Right now, there's no anticipation that anything going on with this project would affect the mitigation status of the Kaua'i Lagoons HCP. That was the determination that we made when we did that biological opinion. Whether the state makes that same determination is up to DOFAW, but there is interaction there with the same birds that are being mitigated under the HCP versus what's potentially within the action area of this action.

FRETZ: Yeah, I remember the HCP had language that anticipated something like this and said cooperate with HDOT on stuff. But I was wondering if the non-target take of the other waterbirds would also be covered.

BOGARDUS: So there's conservation measures that they have to implement that keep them away from breeding waterbirds. Then monitoring on site that Reggie and El are doing in the form where those breeding birds are so they can stay away from it. Then if they do inadvertently harass or have anything happened to one of the on targets they're supposed to cease all operations and then call the resort and us so that we can figure out how to proceed. So there is pretty strict conservation measures in there that avoid the possibility of, not fully avoid, but likely avoid the possibility of birds getting harassed to the point where they would have nest failure, loss of dependent young or any mortality of the adults themselves. So that's a way it's set up anyway.

FRETZ: Well, I mean, I know that they have way over mitigated for all of those birds already. So if they did have to do an amendment, it doesn't seem like it should be that complicated.

BOGARDUS: And if this turns into more than just a pilot project then it may well warrant more of that. I wasn't part of that assessment. Did you guys talk about if it turned into a long term action whether or not anything further was necessary?

DARREN LEBLANC: No because that was more related to HDOT developed an HCP for their long term actions.

FRETZ: No, you're right because HDOT is going to get an HCP.

BOGARDUS: They kind of said that nine years ago. In fact, I think it said that HDOT was going to have a finalized HCP before the end of the proclamation.

FRETZ: Well, I'm pretty sure that they do need an HCP to do this kind of thing. That's just my interpretation.

CRAIG CLARK: Any other questions?

GLENN METZLER: Instead of dogs would drones work?

CRAIG CLARK: I wouldn't want anything else flying in the air. They've used falcons in other places and other places they've used drones. The other thing is, you know, some of our hazing techniques we can't use on the resort because we don't want to negatively impact the golfers experience. So pyros are off the plate. But we can use will use motorized remote control boat on the lagoon. We also use a motorized remote control car. We just use physical bodies with humans in vehicles we'll have mules on property. But most of it is going to be focused on the dogs. I think that is going to be most effective.

FRETZ: There's other questions.

JAMES COGSWELL: Not a question but more of a comment. Nēnē are an issue on this particular resort at this moment but nēnē populations are increasing Kaua'i wide and hopefully statewide in the very near future. Hopefully, an experiment like this will be able to inform us a lot of future management possibilities statewide which is important to know.

CRAIG CLARK: Wake Island has just contacted me. They want they want me to supply a financial plan to supply one full-time employee on Wake and two Border Collies to try to help them with their problems. They get 160,000 sooty terns that show up. You know, it's three square miles of land and 700 miles. And so they don't have many choices. But if you've been to wake the lower part of the Lagoon is where the runway is and then there's a small island to the West of it ... then there's Peel Island that's North and it's far enough away from the runway that this is where we want to push all those birds that we can. So I think Border Collies at some of these airports, especially in the tropics is going to work out. Pacific Missile Range facility is also talking about us using Border Collies over there. Because they have nēnē that show up right next to the runway and want to nest.

FRETZ: Were there other questions?

UNKNOWN: Craig has DOFAW issued its 195D Scientific Research Permit? Yes? Okay can we get a copy of that? Great...okay

FRETZ: Are there any public comments on this item?

WINTER: Can I ask a question before we move on. In our last meeting, one of the researchers was talking about using a drone to monitor bats. The more I thought about it the more I thought it was a really bad idea because of pueo and other things. I'm not sure if we actually approved anything?

JACOBI: We didn't it was just brought up as an idea.

BOGARDUS: They still need to do a proof of concept.

MEHRHOFF: Yeah I thought it was a good idea. What were your concerns about it?

WINTER: Well just birds flying into it like pueo and seabirds. We had bird strikes in Miloli'i. People were flying drones.

MEHRHOFF: I'd be really surprised about pueo.

BOGARDUS: We have recommendations about drone use on the Big Island for 'Io because we know 'Io will attack them. I don't know if we have any interactions with pueo but that doesn't mean it won't happen. I don't know.

WINTER: No there's interactions with seabirds.

FRETZ: Was it because the seabird struck it because it didn't see it or was it interested in it?

WINTER: Koa'e kea can be known to dive bomb drones. I just have concerns and wanted to make sure we didn't approve anything.

FRETZ: I thought we said yeah go for it.

WINTER: I thought we said yeah go for the proposal not go ahead and survey with drones.

ALICIA OLLER: I thought we approved the proof of concept idea for WEST.

MEHRHOFF: I don't think there was any requirement we say yes, or no, they were going to use existing funds right?

FRETZ: What kind of permits does a person need to do that. I mean, I know you need to be in a pilot right? You have to have the certification.

JACOBI: For any kind of commercial business you have to have a certain set of rules. If you're doing it as an amateur that's one thing but they wouldn't be doing it.

FRETZ: Do they have a Wildlife Permit from us as it is for the bat acoustics?

JACOBI: For the research yes. But the other thing is there is a real restriction at flying drones at night anyway. So I mean there's some hurdles.

WINTER: It's just endless cycle of killing something endangered but they didn't have an HCP to deal with it so it's just a freebie. So I'd like to avoid that as much as possible.

JACOBI: Absolutely.

FRETZ: Someone does have an HCP before that research already to kill probably those same birds and bats.

WINTER: So it counts for that tier?

FRETZ: No because it's not a covered activity.

WINTER: So we're in a loop hole area that I'm not sore comfortable with.

GLENN METZLER: I can go ahead and check with Joel Thompson about that and see what his plans are.

FRETZ: Yeah check in with him and make sure there's some kind of consideration done.

WINTER: It would be nice to make an informed decision on some kind of something.

FRETZ: Yeah. I think we gave a positive response to proceed with planning, but I'm not sure anybody took that to be like they're going to be flying drones this month. So let's do a follow up with them and ask them to write up. What do you want to do about this? This is still an unknown no matter what, right?

WINTER: I'd like to see a proposal I guess of the research and monitoring.

FRETZ: Let's start with that. So ask them to submit a brief project proposal and then so that we can take a look at that. Because it seems to me like you're never going to know until you do it. Alright, so we're going to look at a proposal and then we're going to decide.

MEHRHOFF: I'm feeling more flexible. From my perspective just say apply for all the laws involved with flight and then look at what you might impact as far T & E species go.

FRETZ: Well you're going to know it right because the drones going to go down.

BOGARDUS: Can we just put out a statement saying please apply with all applicable laws associated with drones especially if it's at night as well as coordinate with staff about potential risks with operating in and around native species. ESRC meetings are only every couple months right?

SPAIN: I mean my understanding was it was a way for us to finally consider being able to figure out if it's one bat flying around or 10.

FRETZ: If it works. It's even bigger than that and you can get estimate populations.

BOGARDUS: To me it's just all about location. Like if we can stay away from cliffs and areas with seabirds. O'ahu is not likely to have listed seabirds flying around.

FRETZ: Well, I like Kawika's idea of asking them to submit a proposal. Then we got something to look at and we can comment on it and do best management practices.

WINTER: I think we have enough evidence that we can do some due diligence here. I been following those regulations for drones and T&E species do not come up in those. If we're not going to think about then who is?

JAMES COGSWELL: I have one comment. Maybe if they would expand their research to include a drone they would need to amend their research permit with the State and in that we could put special provisions that if a drone would go down for any reason they cease and desist. Then investigate that with us as to what brought that thing down, should be easy to find feathers or claw marks and then go from there. I think that would be the way that I will do it correctly from my point of view. That would address your concern if it does happen.

WINTER: Generally yes. I don't know that our drone went down from a tropic bird strike but it disappeared in the air where we couldn't recover it. We adjusted how we were using drones after that point. It wasn't in the regulations.

SPAIN: But WEST has a research permit from DOFAW.

JAMES COGSWELL: So we would have to prevent it.

WINTER: Okay thank you.

FRETZ: So we're all done with that. All right, let's take a five-minute break and we'll come back for Abutilon.

ITEM 9. Request for ESRC recommendation on the achievement of the Short-term Success Criteria required in the *Abutilon menziesii* at Kapolei, State of Hawaii Department of Transportation HCP: Presentation by DOFAW, O'ahu Branch

FRETZ: So let's come to order. Kim had to leave early. So we're down to the 6. This is to deal with item nine. This issue has been before the committee before and I think this is an outstanding question that we're trying to get a resolution on. So I want to make sure that we get there today so we don't keep coming back to this.

GLENN METZLER: I can give a little introduction. So this HCP has what we're calling short-term success criteria and long-term success criteria. There was an area reserved that we call the Contingency Reserve Area and it's where some of the original plants are located. That had to stay in place and could not be removed until the short-term success criteria was established. It's what they called the wild site. In other words, the whole concept of the mitigation was to create three separate sites that were successful to mitigate for all the plants that were taken. So for one of these sites, the short term success criteria had to be met in order for this Contingency Reserve Area to be taken. So that's what we're trying to decide is whether that short term success criteria was met at at least one of the mitigation sites.

FRETZ: So is this literally in black and white somewhere? Are we clear on what the HCP says and you can pull that up so we can look at that. Okay good, because I know that was one of the things that hung us up the last time.

GLENN METZLER: So this is nothing about the long-term success criteria and whether the HCP is overall successful. This about this one specific thing and one of the reasons is because some parties, HART and DHHL have expressed interest in obtaining this Contingency Reserve Area so they want to take that site if they can.

FRETZ: The whole thing? And kill all the plants that are on it?

GLENN METZLER: Well DHHL only wanted a part of it but HART said they might want all of it as an option for the rail project.

FRETZ: So I just wanted to clarify take as remove it...

JACOBI: And the last of the remaining wild population.

SUSAN CHING: All right, so this is part of the presentation I did in March, but I added the review slide just for Legal Counsel's benefit and the HART party for whoever's interested. So it covers a 20 year time frame for development and the end of the HCP is July 31st of 2021. The ITL is issued to DOT / East Kapolei of Development Partners is what the original HCP said which currently involves HART, DHHL and UH West O'ahu and whoever else. So I'm here because it was implemented by DLNR/DOFAW and this is the summary of the funds that were given and the status that we're at currently. We expect the funds that support this project to run until December of this year. So it will finish earlier than the time frame for the HCP because of the funds. So as Glenn was saying, this is straight from the HCP that the contingency reserve site was created for this purpose, which temporarily protects part of the original wild plants, which is cluster C from development until the short-term success criteria are met at one wild site. It's 23 acres currently. It was only supposed to be 18. They were saying they would like to take all the way up to 18, but now they want all of it and they'd like us to make a decision.

FRETZ: So does the holder of this license... have they met the criteria to now take the Contingency Reserve?

SUSAN CHING: I believe that the holder DOTDOT has not made any comment or been present at any meetings.

BOGARDUS: So I'm hearing two totally different issues. One is a question of whether or not DOTDOT has met their obligations of criteria at their site so they can potentially relinquish this site right? But wouldn't DHHL, if they were going to do something to this site, need their own HCP for their own actions under state law for the take of those plants?

SUSAN CHING: They bought into the HCP by providing a portion of funding as well as HART.

JACOBI: But are they signatory to that?

LAUREN TAYLOR: They're one of the covered parties right?

GLENN METZLER: That doesn't even matter. I mean if this criteria is met this site can be taken by anybody.

FRETZ: Yeah, because Glenn's point is being made because for the covered area this was a part of it all. So regardless of who owned it at the time it did become covered and DHHL approved that they either entered into it directly as a party or they concurred that their land was included.

GLENN METZLER: We did ask DOT to attend this meeting. The last person that was a contact has apparently left DOT.

CHRIS TAKENO: I know nothing about this project. I have been asking and nobody is responding. That's why I wanted to ask who was the contact?

GLENN METZLER: Darell Young.

SUSAN CHING: Okay sorry... I put this on last time that the Honouliuli site had potentially met the criteria for three years, but I'm now stating that as a question because I think you guys need to make that determination. So the entire parcel is currently in process of being signed over to DHHL. It's at Land Division and it is DLNR property. I think... I'm going to leave that up to Glenn as to where exactly it is, but they do not own it at this current time. So this is a status update of all of what we're calling wild sites, but they're actually reintroduction sites. Let me go forward to show the actual success criteria. This comes from the document... Measurable short-term success criteria I believe is the first row that we are supposed to be determining if it happened. So first at least 25% of the full complement of lineages must survive for two years, which that has definitely been met. Then number two, during the first five years after each wild population is established there must be... A) Recruitment of seedlings that survived through the dry season B) Seed production by at least 25% of the full complement. So my question is does it have to happen within the first five years because we've already passed that long ago. We're on 18 or something. So does this statement caveat it that we've already missed the ball on making the mark. So that did not happen within the first five years. So I'm not sure if we could ever meet the success the minimum success criteria.

JACOBI: I think there's two parts there. Just meeting the short-term success criteria for the contingency reserve but then the question is what are the consequences of not meeting the long-term success criteria and so forth. I think we're focusing on a penny when we should be looking at a million dollars. I mean, you know, it's a different issue.

FRETZ: Everything is purchased one penny at a time. So I want to make sure we do this one before we open that other can of worms because we've been going around and round and I think we have an opportunity to make a recommendation on this. So during the first five years, each wild population... meaning each and every?

SUSAN CHING: The CRA item said it only had to be one of them. This was the caveat for the reason the CRA was created. It said temporarily protects the colony at only one wild site.

FRETZ: So the short term at once. So you need one wild population in which the first five years there was recruitment of seedlings that survived through the dry season. Did that happen with anyone in its first five years?

SUSAN CHING: I don't believe it happened at any one of them during the first five years.

FRETZ: Not one single one of the wild populations within the first five years had recruitment of seedlings that survived through the dry season?... No? Okay.

GLENN METZLER: Is there also a question of how you define established? Because when is the point of establishment?

JACOBI: When you say this is my site that I'm going to start working on.

SUSAN CHING: So there was some language previous to this in the thing that said something about after irrigation had ceased. It's in the measurable long-term success.

FRETZ: So the second part is "and" right? it's not an "or"? and seed production by at least 25% of full complement has that happened in any one?

SUSAN CHING: Yes. So at least 25% of all the plants that have been put out have been mature and have produced seeds.

MEHRHOFF: At the Fish and Wildlife Service site?

SUSAN CHING: Yes.

JACOBI: And that happened first five years?

SUSAN CHING: Yeah, they become mature pretty quickly.

FRETZ: Okay, how do you read the word established? As a biologist or botanist who's doing this restoration work and your job is to go out there and establish a population.

SUSAN CHING: I would read it as not needing irrigation.

FRETZ: Okay, not needing irrigation. So you meaning it could go you could be working on it and planting these plants out there for years and years and years and you're watering and watering and watering them for 10 years and you stop watering them then from that point on within five years, it would need to be recruiting through the dry season.

SUSAN CHING: Yes.

FRETZ: Did that happen in any one?

SUSAN CHING: I don't believe so. So this data was not collected in the way that you're asking that question.

FRETZ: Okay but you're giving a ton of leeway by allowing the whole time they were being watered didn't even count as being yet establish.

SUSAN CHING: Yeah, in my mind that would be more gardening. So yeah, I wouldn't consider anything fully established unless it was stopped watering and it would be like a wild condition.

FRETZ: Okay and none of the population has met that either?

MEHRHOFF: The population is established when you plant them, but that doesn't mean that it's a viable population.

FRETZ: I mean, we're trying to understand the latter of what's written as well as the intent.

SUSAN CHING: I guess. I'm not sure. Yeah, let me back pedal and just say that the data was not collected in the way that that question is being asked. when it was truly a site. The Honouliuli site was established in 2002, 2003 and 2004. The water was cut off I believe in 2011 and currently we are in 2019 and there are a 143 matures and 79 of them came from on-site recruits. I don't know if this happened within the first five years. This is the data that I have.

JACOBI: So does the data that we have show that we met the criteria? If you don't have the data, then it doesn't show that it met the criteria.

FRETZ: Do you have the data at some point? With more than five years down the road?

SUSAN CHING: This is the type of data that I have which is the number of mature individuals and the number of seedlings that germinated that year. I do not have it tracked through time on those particular seedlings.

MEHRHOFF: But you also need to know how many of the original lineage produced seed.

SUSAN CHING: Yes and I don't. Well, they all produce seed once they're mature.

MEHRHOFF: Well but they didn't all mature did they? You didn't get 100% survival?

SUSAN CHING: No we didn't but we monitored the percentage of the original genetics through time and I don't have it on here, but the percentages are all above 50%. So all of the sites have more than 50% of the original genetics and they all have matured.

FRETZ: Can you go back to the language again there?

WINTER: Can you say that again?

SUSAN CHING: More than 50% of the original population was around 80 individuals and all of the wild reintroduction sites have more than 50% representation of those each.

WINTER: Cumulative?

JACOBI: There were 87 different individuals and each site had at least 50 of those lineages introduced into the sites.

SUSAN CHING: But there were some individuals that were lost over time that they don't have.

JACOBI: Right and you have new ones now too.

FRETZ: So one established site. There has to be recruitment of seedlings that survived through the dry season but it doesn't say how many. So it could just be two seedlings survive through the dry season. That's not the case for any of those?

SUSAN CHING: I mean, I would assume that it might be for the Honouliuli site.

JACOBI: Do we have data to show that?

SUSAN CHING: I have the data that said... in this year this many seedlings came about and then I don't know that those particular seedlings are the matures that we....

FRETZ: That survived through the dry season.

SUSAN CHING: Yes.

FRETZ: And that's the only one that would be potentially?

SUSAN CHING: Yeah, there were 13 seedlings at Diamond Head.

WINTER: Susan, is there a cheap and relatively quick way to do a genetic study to see if these plants match up with this since we don't have the actual numbers?

SUSAN CHING: It's possible but it's not cheap and we don't have any money left.

FRETZ: As a botanist, do you think the criteria has been met?

SUSAN CHING: I think that it's probable... It's probable that there was a recruitment of seedlings, plural more than one, that survived through a dry season within the first five years after irrigation have ceased.

FRETZ: But you don't have the data to show that?

JACOBI: Right because it's called measurable short-term criteria.

FRETZ: Thanks I understand.

JACOBI: And we realize that you inherited this.

SUSAN CHING: Thank you for reiterating that. This is not my data yes. Let's get that on record every time.

(laughter)

FRETZ: So staff is asking the committee what you guys think. Is there a consensus on this? I presume they're going to talk to the AG. The AG is here so you could talk to her yourselves too today if you want to about this.

LINDA CHOW: This predates my time too. Go talk to Paul.

JACOBI: Well in terms of the language and the measurable criteria and what it says. I appreciate Susan saying you'll probably maybe kind of met it. Are we talking the same appropriate language there in terms of how would a legal person interpret that?

LINDA CHOW: Well I can't read the language from back here (laughter). I mean we have to take a look at it and I've known about this project for a long time not very closely but I think there are questions whether or not it has met its criteria.

FRETZ: So would it be reasonable then if the ESRC can give its opinion and then staff kind of follow up with you to consult on it.

JACOBI: But where does the burden lie in terms of showing that it meets the criteria? Is it on the permittee to say that we have met it through the evidence that shows it or is it on the ESRC to look at it and decide? I'm just trying to understand in terms of whose responsibility is it?

FRETZ: Yeah, that's what I was about to say a minute ago. Same question. Right? So we're asking the botanist what do you think, but is the burden on the applicant to say here's the evidence show that, this has been met therefore, I can take the contingency reserve.

LINDA CHOW: Generally, that would be the case. But, again this is a very different type of HCP. My understanding is that it's one of the first ones to be done. The implementing entity is the state, I think for this HCP, which makes it difficult. Also, the fact that they allowed other people to sort of buy into it which, I don't see any authorization for that in HCP law. I don't know why it happened that way. So it's a historical anomaly so we'll have to look into it better. Generally, you're correct it would be on the permittee to show that the success criteria has been met.

FRETZ: Okay, so that shows that kind of shifts the way the question is being asked potentially right? Or it may shift the way you look at it. It's like do you think this has been met or are you being asked do you think that the applicant has shown that this has been met? It's easier to answer the second one, I think. We can give our opinion on that...if we want to limit the opinion to that.

GLENN METZLER: It's an item of interpretation. It says during the first five years after. Does that mean it has to be every five consecutive years that there has to be seedling recruitment?

JACOBI: Having been involved, this HCP is one of the first ones that the committee worked on and we're just sort of getting our feet wet. Ultimately, we were looking at short-term criteria as a measure that there's progress being made towards meeting the long-term goals. In other words, this was sort of a blueprint showing that it's actually happening and going in the right direction. So if we come down to the real technicality in terms of you know, it is 1 plus 1 equals 2 or how many years or whatever it is, then I think we're really dealing with the wrong issue. The real issue is whether progress is being made towards meeting those long-term criteria, which is the bigger question in the room. Particularly, if we come down to the end of this project - is this

project going to meet it. Is it going to be successful or not? So this was intended to be a step showing that there actually was progress being made as opposed to just a checkoff mark.

MEHRHOFF: That is the checkoff mark.

JACOBI: It is the check off mark...I realize...the intent behind it. But again, I'm not clear in seeing if we can check that mark.

WINTER: Are you saying that we didn't check out the first mark but we are meeting the longer term goal?

JACOBI: No, I'm not saying that at all. That's a bigger question.

FRETZ: I think that Jim's perspective being involved in this all the way back there is important. Are you saying when that was written that this idea about watering wasn't even part of it. It was the first five years meaning from 2000 to 2005.

SUSAN CHING: This is a long document and this is on page 79 but it does talk about once irrigation is ceased.

JACOBI: There was recognition that everything wasn't going to start the first year after this HCP was finalized. We knew there was going to have to be exploration and trying to come up with best sites and that took some time to do anyway. But again the short term were intended to be a reasonable measure that actual progress was being made towards that end goal. And because progress is being made there that that contingency reserve was no longer as essential as we thought at first. So this is just really focusing on that question right now.

WINTER: So Jim, are you saying that in the absence of data to answer 2A that we should default towards assessing the long-term goal?

JACOBI: Well those are two different questions.

WINTER: Well it's almost like 2A is not answerable.

JACOBI: Well 2A is answerable. I think we don't have the data that says it has been shown that this is the case. I think it's pretty clear.

MERHOFF: (Referring to graph) And so when was your irrigation turned off?

SUSAN CHING: Around 2011, I believe.

MEHRHOFF: This is the plot?

SUSAN CHING: So those two events are not the same seedlings. This is just a single count of germinated seedlings I believe from the data. Then this is also another plot in time of seedlings from that year.

JACOBI: It's a snapshot of how many were counted at the time.

MEHRHOFF: So there's none these years?

SUSAN CHING: Correct, there's a ghost year of 2013 which is missing. I don't have data for 2013.

MEHRHOFF: When was this established?

SUSAN CHING: The first plants were put in the ground I believe in 2002, but the reports began in 2005. So that's when I had the data.

MEHRHOFF: From a technical perspective it didn't meet it either way you want to look at it.

JACOBI: But that's also just account. It's not a question of the ones that survive the dry season.

MEHRHOFF: But when it's zero nothing could have survived. That's why I just went with the zeros. Zero is zero and it's not going to make a difference. That's a very poor set of criteria.

WINTER: I mean you can count the difference in mature individuals as survivorship between years. We can extrapolate.

SUSAN CHING: But mature plants were out planted over time from our nursery.

SPAIN: So they weren't even off of irrigation necessarily for five years because if you've been out planted.

SUSAN CHING: I guess technically yeah, that's true. I just meant from like a pure numbers standpoint. Like one year it'll say 73 and the next year it'll say 72 but then it goes back up to 81 and there's been out planting in that time frame.

FRETZ: All right, members would it would it be accurate to say that the applicant has not shown that the short-term criteria have been met.

SPAIN, WINTER, JACOBI: Yes.

MEHRHOFF: It is, I'll make the caveat that it's a technicality in my mind. What's written down there didn't meet the criteria from what I can tell.

FRETZ: DOT is welcome to come any time and present any information to the committee that would support those criteria being met. We're just saying is now that we see and understand in detail what the language of the HCP was and we go look to see whether that language is met; we have not received the information that would support that it's been met. Doesn't mean it doesn't exist. It can be brought at a later time.

MEHRHOFF: I thought the refuge site was actually producing seedlings?

SUSAN CHING: It is producing seedlings yes.

MEHRHOFF: But that's showing us zeros.

SUSAN CHING: So yep, there's large periods of time where no seedlings are being produced anywhere. In the reports I tried to address that. It really needs a specific season, especially when you're not in irrigation that you have the right conditions for those seedlings to establish or like germinate and not have cotyledons and become mature. Yes, we believe we can go out there and see that there are plants that are from regeneration. I don't know if it was in that five-year time frame, but in the long run, yes, we're getting plants that can replace original planted plants.

MEHRHOFF: You just don't know whether the seedlings survived during that dry period?

SUSAN CHING: If we counted during the five-year time frame I don't have that information, but there are plants that have begun on site and become mature and are still currently alive without irrigation.

JACOBI: I think there's another management step here to go through that's quite important. It's not just the watering it's also the weeding. The weeding is something that occurs fairly regularly from talking to Greg. So I mean again, on one hand we can look at the short-term snapshot criteria and so forth. In the longer term my concern is the bigger issue in terms of if this HCP ends when it's supposed to end and has the mitigation been successful or not. And again, it's been a long time since I read it in terms of what the consequences of not are... does that mean the end of it? But my bigger concern is if the watering is stopped that's one thing but if the weeding stops, there's no way the seedlings are going to survive. So we can have a nice cosmetic thing

that after a short period of time we can check the box, but it doesn't solve the problem in terms of the long-term potential for replacing the take that occurred.

SUSAN CHING: Yeah, I think that it just reflects the length of time the HCP was written for and the amount of funding that it started with. And the amount of project cost that incurred over the years; Like \$1.1 million dollars is the original cost with I think \$50,000 from HART and like a \$100,000 from DHHL or something like that. It doesn't get you to 2021 when you have to build a greenhouse and buy vehicles. Well, there was one used vehicle that broke down then you had to get a new vehicle and then there's propagation supplies and there's personnel to pay for. If you break it down it's about \$55,000 a year and that doesn't even cover like one person's salary with fringe. So there's been a lot of additional costs. So the HCP does have something like once it's finished if it doesn't do this and that then there will be like three to five more years' worth of monitoring.

JACOBI: By DOT?

SUSAN CHING: I guess it says under the funds provided but there are no funds that's going to last that long.

JACOBI: Well, the thing that really concerns me about this is it's a bigger issue in terms of the precedent that potentially could be set in terms of other projects. We didn't have enough money to do what we needed to do. And so, you know, we come to the end and that's the end. That's all there is to it. I don't feel comfortable with that.

BOGARDUS: I've always had a problem with that. If this was Kaua'i Lagoons or any of the windfarms that came in and said they didn't accomplish what we said we would but hey we're out of money so it's all good. We would never be okay with that. Part of this is it's the very first HCP that's been done and we didn't know much then on how to write that into the documents. It's an incredibly hard situation. Ultimately, it should be on them to meet the success criteria regardless of what the cost was.

JACOBI: The other concern is it's been very frustrating that the only reports we've gotten...we had a hiatus where we weren't getting any reports on this project for quite some time. It took some pushing to get that back on the table again, but except for the very first meetings. We haven't had the permittee in the room at all. It's a bad precedent because the permittee is the one ultimately responsible for accomplishing what needs to be done. I realize you're in the room right now.

CHRIS TAKENO: I'll take a look but it's been interesting.

JACOBI: So anyway, those are a couple of things but my biggest concern is ecologically it doesn't look like we're on track to be able to offset the take that has occurred.

BOGARDUS: At the very least if they are proposing to take out the site I would want to see DOT, DHHL or whoever holds the permit in the room actually explaining what were they planning on doing.

FRETZ: You asked for our opinion and we gave it. What we're saying is we haven't seen that and if DOT wants to present it they can. On the other part about the HCP not accomplishing objectives, one of the questions I had is whether or not this particular HCP was written in such a way that the money placed a limit on the mitigation and I think that's something that should be taken up with the AG and you guys go read it carefully and see if you think that's the case. If it is then it kind of establishes that it did because it spent that money.

BOGARDUS: I think that's how it was set up under the Section 7 Consultation because this was a federal nexus under the Fish and Wildlife Service but I don't know the State HCP well enough to say how it was stated in there.

FRETZ: Yeah, if you guys can go and read it and see what you think and then consult with the AG on it because if not, then it does mean that the HCP has not met its goals and there's consequences. There's a couple things that are provided in the law for an HCP that is not working. It's not in compliance. Civil suits are possible or the Board can revoke an HCP for non-compliance. Same thing though you have to ask the AG if she can say that that situation it's applicable here. Are they in non-compliance that you know the way that those parts of the law envision non-compliance?

JACOBI: I think the other thing too is even if it were written in the way that may define the end of the HCP regardless of the long-term outcome the fate of the contingency reserve still seems to hinge up on this criteria here. Again, we don't have evidence to show that it needs it. Because of the way it was written there's no follow-up after the money is out it would not mean that the contingency reserve would then revert. At least the way I see it. And so if nothing else, I think that's an issue that still is pending and that would not be resolved by the termination of the HCP

BOGARDUS: Susan you mentioned you had thoughts on the site. Before we end I kind of want to hear what those are.

SUSAN CHING: It's an odd site. Part of it was the last wild site of the plants. It's an important thing to look at, you know, the area's been heavily developed. This is a species that was there and lives in places where we want humans to live now. I get this question all the time as someone that works on a lot of endangered species...can't we just pick it up and move it. Like plants were

weed whacked at Kealia trail can't we just move them over? Well, they were here first and this is their habitat and given the biology of Hawaiian plants, they like it where they like it. It's not easy to pick them up and move them as we seen by the lack of success at the reintroduction sites. Over this long period, it's really not easy to have somebody who works on this the whole time and didn't see very little success. So I think it's an important point to make about that site.

JACOBI: I think also, even though it was an informal site visit we had two very credible restoration people come out and look at that as well as all the other sites on the trip about a year and a half ago. They made their on-site recommendations as well as somewhat written recommendations to in terms of the potential for this site in terms of what the proper kind of restoration approach for it to actually become viable. I wish we could talk about that 20 years ago quite frankly. So there still is hope even though it looks like a desperate situation. I think that there really is potential for something to happen there. How that fits in with the bigger land use plans and so forth is a whole issue altogether, but in terms of ecological potential it's not a give up site far as I'm concerned.

SUSAN CHING: Correct, the HCP goes through a lot of the history of it because the area was all cane and it was burned regularly as cane and then these 87 plants showed up and they were you know, right in the middle of that and so it shows a resiliency of the species in an area that you know didn't really seem like it had a whole lot of potential; It does talk about how you know, there was nothing and then there were more surveys and then they were found and they were surprised, basically.

JACOBI: That being said it really doesn't exist anywhere else on the island except one location and that's a very limited number of individuals, naturally.

WINTER: To answer Scott's question it seems to me that their HCP is not in compliance. If that is true then what is our action as the ESRC.

FRETZ: I think all we can do is provide advice to staff. It's the Department's responsibility or if there's a private party that wants to file a civil suit. We don't have any role in that. So I don't think we have a particular...

JACOBI: But I thought we did have an obligation to communicate to the Board in terms of whether the ESRC perspective on the subject was working or not in terms of meeting the ecological and mitigation goals. Then it's the Board's purview to decide what to do.

WINTER: So we take a vote and if the ESRC votes that it's not in compliance then we report that to the Board.

JACOBI: Yes, and we've done that once before.

FRETZ: I'm trying to remember what it says in 195D (25) under the ESRC's roles and responsibilities and so I think that there's nothing in it that says recommend to the board as to whether any HCP should be revoked. Where it talks about that an HCP could be revoked it says the Board may revoke. Now, it also says the ESRC is advisory to the Department and the Board on matters broadly so you could make the recommendation to the Board that an HCP be revoked. The board doesn't need that to revoke. So back to what I said, I think our goal here is to provide advice to the Department and the staff. If you think strongly it should be revoked then you we can provide that recommendation to the Board.

WINTER: And that's one step beyond what I'm comfortable doing right now. What I'm seeing is that HCP is not in compliance. I think the Board needs to be aware of that. I'm inclined to make a motion that we vote to communicate to the Board that this HCP is not in compliance.

LINDA CHOW: No, it's not on the agenda.

WINTER: Oh.

FRETZ: Besides, I think you need to back up a second. Before we make that determination, I think we need to go back to this dollar figure issue and make sure that because the HCP might have placed that dollar cap on the mitigation such that given the 1.1 million it's in compliance.

MEHRHOFF: I would agree. I think there's two questions. One is whether it's in compliance or not. I don't think we can answer that today. The other one is was the success criteria for releasing the CRA met. I think we can comment on that; based upon the data we have it doesn't appear that the success criteria have been met for release of the CRA but, I'm not sure we can say whether or not HCP is or is not in compliance.

WINTER: Can we vote on that aspect?

FRETZ: Yes, we will on that. I'm hearing that the committee wants to follow up and take all prudent actions given that the HCP might not be meeting its goals or out of compliance. It's just that I think the first step to do that is to ask the staff to go back and see if the AG concurs with them that it is in fact out of compliance or not meeting its goals.

WINTER: As long as we're moving towards resolution. Does that mean it'll come back to the next meeting too (aimed at Susan Ching) ?

FRETZ: That's the first step because that the technical question of first let's see if staff and the AG believe that it is. Okay now on the other thing, yes, we will vote on what they asked us to make an opinion on.

WINTER: Do you need the motion?

FRETZ: Who can tell me what the motion is?

JACOBI: Well the motion is a question here.

FRETZ: So the motion is does the committee concur that the applicant has not shown that the short-term criteria.

LINDA CHOW: You have to take it off the agenda

FRETZ: "Recommendation on the achievement". Well, I wanted to frame it in terms of whether the applicant...

JACOBI: Has achieved the short-term great success criteria. That's the question.

WINTER: Can we say that by the recommendation by the state the HCP has not met the short-term success criteria?

JACOBI: Can you just make it simple and say "Has the short-term success criteria required in the *Abutilon menziesii* at Kapolei been achieved?"

FRETZ: The thing that's tripping me up on the agenda item is it's a request for a recommendation and I don't think we're giving a recommendation. We're giving an opinion.

WINTER: No but who's doing the recommendation us or Susan?

FRETZ: Us.

BOGARDUS: Are we recommending to staff or are we recommending to the permittee?

JACOBI: Both, I'd say both. I think the answers goint to be the same no matter what.

MEHRHOFF: The ESRC was asked by DLNR to make a recommendation...

JACOBI: As to whether the short-term criteria has been met.

WINTER: Can I make a motion that our response to that question is no?

JACOBI: If the question is has it been met and the motion is yay or nay and if it's yay then we all agree that it has been met. If it's nay it's no. That's the clearest.

FRETZ: Well, it's just that my issue is that there's a difference between the ESRC declaring that it has not been met and the ESRC declaring that it has not been presented data to substantiate that it has been met. I would prefer to move along the lines of the latter. Is there a second? Would you like to discuss it?

MEHRHOFF: I just want to make sure that you're getting it verbatim regardless. So would you just restate that a little bit more loudly.

FRETZ: So the motion on the table is whether the ESRSC concurs that data has not been provided to it today to establish that the short-term criteria has been met.

JACOBI: So a positive response means no. Yes means no and no means yes.

FRETZ: Yes means you concur that it has not been met. That the data has not been provided.

MEHRHOFF: I'll second that.

FRETZ: Okay all in favor? Is there anyone opposed? Would you like to discuss it?

JACOBI: I would like it a simple yes or no.

FRETZ: Well, I can do that. I can withdraw this motion. If you're more comfortable just saying that you believe it has not been met then we can put that motion forward. It's a different motion was my only point.

JACOBI: To me it's a little bit less confusing.

MEHRHOFF: It's the same to me either way I can deal with double negatives.

LINDA CHOW: The other option is to defer this agenda item until staff comes back with another condition.

FRETZ: We keep deferring this and it needs to get done.

JACOBI: For a discussion point, I think is extremely important because there is a strong request for what's on the table in terms of taking that entire area which would result in taking whatever *Abutilon* plants are on the site. And so that's the issue that's on the table right now as far as I can see.

WINTER: But we don't have a request. We're being told that there might be request.

LINDA CHOW: You're being asked about the short-term success criteria but is that really on the table as to whether or not that CRA can be released or not. Wouldn't that be the long-term success that that's dependent on?

JACOBI: Not the way it's written. It's by the short-term and that's why this is an important issue.

FRETZ: Would you guys like to see if there are any public comments? That might help you think about this.

LINDA CHOW: Well you're required to take public comments before you vote.

FRETZ: Are there any public comments? There are none.

MATTHEW KEIR: I support Susan.

FRETZ: Well one of us is fine with just saying that the short-term criteria has not been met. I've suggested that you temper it by saying that you have not seen the data to show that it's been met because of the missing data and unknowns is why I'm concerned about that.

BOGARDUS: Based on the information available to the ESRC the short-term criteria has not been met.

FRETZ: That works.

GLENN METZLER: Basically though that means DOFAW has to decide okay there is no more data so end of story it's not been met.

MEHRHOFF: Technically, if don't have any data except that one graph then you haven't met it. Now whether you can make the case that if you have good recruitment in three of the five years that should be biologically adequate. I think you could potentially make that case but that's not what the criteria would say. They say five years and I read that as being consecutive.

JACOBI: Most importantly that is a trigger for the fate of the contingency reserve...that short-term criteria.

FRETZ: Okay are you all okay with stating is that way?

BOGARDUS: Okay so based on the information available to the ESRC the short-term success criteria has not been met.

JACOBI: Yes, I like that.

FRETZ: Okay so moved.

JACOBI: I second.

FRETZ: All in favor?

FRETZ, JACOBI, MEHRHOFF, BOGARDUS, SPAIN and WINTER: Aye

FRETZ: That's what you guys wanted right? One way or the other.

JACOBI: Does DOT have any comments?

CHRIS TAKENO: I will after I do more research.

JACOBI: But I think it's important to recognize them and perhaps you can help take the message back to DOT because it is really important for them to be part of this discussion, and we're not trying to exclude them.

CHRIS TAKENO: No, no, I understand. Let me tell you it's been very interesting. When I saw this on the agenda I asked about it. I told them what project this was based on so it was kind of interesting. And then Darrel Young changed out. I'll figure out who these people are and talk until I find somebody.

JACOBI: The importance of this one is that it's all but taking the entire existing wild population on the island. That's a pretty significant event.

CHRIS TAKENO: I don't know anything about that property that's way beyond me.

FRETZ: Okay, are there any last comments?

WINTER: Is the next meeting on the calendar yet?

LAUREN TAYLOR: It's on July 25th and we'll be sending out a doodle poll.

ITEM 10. *Adjournment*

FRETZ: All right, we're adjourned.