



Meeting Minutes
FBHCP Steering Committee meeting
5 December 2013
Tallahassee

Steering Committee members present: Danielle Irwin (DEP; Co-chair), Thomas Eason (FWC; Co-chair), Brett Moore (Humiston and Moore), Tamara Pigott (Lee County), Gary Appelson (STC), Julie Wraithmell (Audubon), Blair Witherington (FWC; phone)

Others present: Jennifer McGee, Tom Ostertag, Lisa Robertson, Brian Powell (phone), Sally Davenport, Kim Colstad, Bob Ernest, Niki Desjardin, Mike Flaxman, Kipp Frohlich, Carol Knox, Robbin Trindell, Rebecca Pfaller, Amy Knight, Elizabeth Fleming (phone), John Carlson (phone)

REVIEW OF PREVIOUS MEETING MINUTES

Comments

On page 14 of the 12Sept13 SC notes, Danielle wanted it documented that she did not initiate the terminology of ‘pulling back’, but was in fact responding to Julie’s comment that was “...and I’m a little concerned we’ve spent 5 years planning for all these species to be covered species and now there’s conversation about segregating out species, and that to me is a reversal.” It should read as “...conversation about pulling back...”.

STAFF UPDATES

Chapter Updates

JM We’ve been working on finalizing and reformatting Chapter 5 - Threats, now that we’ve done the reorganization. We were hoping to have it out for another round of peer review this week, but we got held up a little so we’re going to send it out before Christmas. We are anticipating that we’ll have edits back from our peer reviewers mid to late January, at which point we’ll start incorporating those comments. We should be able to have this chapter finalized and posted to the website before the February Steering Committee meeting.

Chapter 14 is Changed and Unforeseen Circumstances. We had sent that out for a second round of review, and we had discussed that at the last Steering Committee meeting in September. We did receive edits and comments back from several Steering Committee members, and those are in the process of being incorporated. We should have that finalized by the end of the year.

Chapter 10 – Minimization – was another chapter we’ve been focusing on. We did have a face to face meeting of the Work Group in Ocala after the last Steering Committee meeting. We went over all the minimization measures in the current existing draft that we have and are currently in the process of creating a list of BMPs to review to be added to that chapter. We understand there is also a parallel track with DEP and FWC coastal program and some of the BMPs that they’re creating, specifically related to beach raking and lighting issues. So we’re working on coordinating our Chapter 10 with that as well.

That’s all the updates I have for the chapters. We’ll talk a little bit more about upcoming chapters when I turn it over to Sally to talk about our year 7 scope of work. We did do a little bit of reorganization there in terms of what chapters we’re going to approach next.

- GA When will we be able to look at the Minimization chapter with all the BMPs?
- JM We’re still working on the BMPs, so that will most likely go out in the Spring.
- BM When you referred to coordination with DEP and lighting, is that referring to rule making that was underway before about lighting changes? Or just general BMPs for lighting?
- RT The idea is to make sure that there’s consistency between what is included in the HCP and the rule revisions.
- BM The reason I ask that question is the rule revision is a work in progress right now.
- BE And that has come up in Work Group meetings. We want to make sure that that parallel process is captured in this. It may lag a little bit and we may have to make revisions, but that’s the intent. And the BMPs are not just for lighting; they’re for everything, and they’ll be incorporated into the CCCL permit as terms and conditions.
- BM Yeah, I understand. I just remember a while ago there was discussion about specific lighting, and that’s kind of fallen off my radar.
- DI I can speak to that just a little. The CCCL rule making effort is still in its infancy; we don’t even have a notice of rule development issued yet. The lighting BMPs that were coordinated with FWC and DEP staff during last year’s effort pretty much got finalized, at least in the sense of this is what we want to incorporate in the rule. So they’re not being used at this point, but the intention is that they’d be adopted by reference in not just the CCCL rule but also the JCP rule. And that goes for the lighting BMPs as well as a separate set of BMPs for landscaping.

- GA I have a question about the lighting BMPs. Was that also trying to follow that self certification model that first Kat talked about and then Bob talked about at the last meeting in terms of permit processing?
- DI The concept for the BMPs for lighting is that if you agree to follow the lighting BMPs then you have a more expeditious review of your permit application, FWC is happy.
- GA So it's a good model for what we're trying to accomplish in the Minimization chapter here.
- DI It is a good model for what we're trying to accommodate here, but also for outreach to counties. And there's the hope that coastal counties, local ordinances will keep that up down the line. If they choose to vary from the BMPs, then they'll have a more detailed, thorough review.
- TE Any other questions on chapter updates?
- EF Where are these lighting BMPs found?
- DI They've not been published yet, because it is part of the rule development at this point.
- GA If I can clarify for Elizabeth, there was a rule making process a year and a half ago when it was out in the public, but that rule making process was put on hold so it's no longer out there for public review.
- DI But they will be available for review once we get into official rule making.
- TE Are there drafts or concept papers or outlines that someone like Elizabeth could get if they wanted to get up to speed on what's going on?
- DI Yes, there's a draft available. Elizabeth, would you like a copy of that?
- EF Yes I would.
- DI I will make sure to get one over to you.
- EF Thank you.
- TE Any other questions on the chapter updates?

Year 7 Scope of Work

- SD Basically the main changes in the Gantt chart are that we thought we'd move forward the minimization and mitigation measures. We're not quite where we thought we'd be with them at this point, but we're definitely making good progress and that will be the focus

going into year 7. I'd also like to point out that we're extending the Year 6 contract out through June of next year, simply because it did contain funding for mitigation, so in order to have enough time to use those funds allocated for mitigation, we're extending it out to June. Those are the main things. Are there any questions?

JM I just want to also point out that because we're still working on minimization and mitigation, adaptive management has been pushed back. It just makes more sense to have minimization and mitigation more finalized before really getting into adaptive management.

BE I'd just like to mention also on Chapter 14, did we get the comments back from all Steering Committee members?

JM We didn't get comments back from all Steering Committee members, but there were three Steering Committee members who sent comments, and two that said they either agreed with previous comments that had gone out or had no comments.

BE One of things that we're doing right now is moving adaptive management back, and as we develop the outline for that, one of the things that we're considering, one of the issues is the funding. We had that in the Changed and Unforeseen Circumstances chapter and we're considering moving that out of Chapter 14 into adaptive management.

JW On the Gantt chart – plan approval and implementation – I was just curious about the order of operations for the Service, reviewing the HCP and issuing the ITP but perhaps not having statutes in place yet and needing to have something there so that the Service sees that those statutes are implemented so that they have assurance of implementation. But, of course, the Legislature will need to see some shape and form to the ITP in order to agree to those statutes. I was just curious about the way that it's laid out here. It looks to me that line 143 shows Service review followed by issuance and then statute and rule changes. I was just curious if that was something that was outlined. I think you were planning on having a meeting with the Service after the last Steering Committee meeting, and I didn't know if that order of operations was an outcome from that meeting or just that it's difficult to represent that more sophisticated dance in a Gantt chart or what the story is.

JM It's really kind of more of the latter. That gets to the discussion we'll be having this afternoon, getting the attorneys' perspective on potential statutory changes and the direction with that.

JW So the way it's laid out here just reflects the lack of sophistication in the Gantt chart format, rather than this necessarily being the way that we're anticipating it to proceed?

BE This is that big conversation. There have been allowances in other HCPs for some type of schedule so that there may be certain things that you implement immediately, but then you expect to have certain legislative changes implemented by a date certain. Or do you

implement this thing incrementally? That's that big picture that we're all wrestling with right now.

- BM I couldn't agree more with Julie bringing that up. I've been bringing this up consistently in the past because a lot of this whole program needs to have changes that we'll discuss this afternoon. So I'll look forward to that presentation. We talked about this six months ago, about this being tossed out there a few years from now, because who really wants to deal with it, and I know there are a lot of opinions about it. But I think it's a very important element, and I'm glad that you pointed it out.
- TE Relative to where we want to be, are we on target? There are a lot of moving pieces, and it sounds like we're pushing things back. Are we behind where we wanted to be? On schedule? Ahead?
- SD I'd say we're slightly behind where we wanted to be on nailing down the minimization and mitigation measures, but I think we can catch up.
- BE I agree
- MF I concur.
- SD I think we can catch up in the next six months, and the remainder of the chapters will go fairly quickly.
- DI Line 104 – minimization measures, where you talk about developing a suite of options and delegating FDEP measures and county measures. My question is related to the involvement of county measures – how is this ITP that is the State of Florida's incorporate measures that the county will be taking?
- SD I think our overall goal is to bring the counties into this. Specifically, the counties we think will be interested in this and adopting some of their own implementation measures. Once we determine that, then they can be incorporated in the program.
- BE We had envisioned an incentive based program to get county participation with the carrot being that they'd get incidental take coverage for emergency permitting and some of those other things that they might engage in, or local coastal construction projects both within and outside of the CCCL. How you get those partnerships – we've talked about MOUs or MOAs – that's all still in the infancy stage. But you're right, you can't mandate that the county do anything, but you can certainly encourage them to do that. I think that for this to work, I think we agree that we'll need their participation to help with some of the monitoring and some of the other elements with perhaps some financial assistance through the fees that are generated through the program.
- MF It's a voluntary program, but once they opt in, they'll get coverage. So there is significant incentive there, and we haven't done the mitigation discussion yet but there's

long been intent to do something like a cost share program or something similar to provide yet another carrot.

TO If someone was needing an ITP and they didn't want to sign on to this, they'd still be on the hook to do their own HCP, so hopefully that'll be further incentive.

DI The comment you made, Tom, confuses me a little bit. If we have a statewide ITP for activities that the CCCL program will be issuing permit and potentially to the county as well, why wouldn't that activity be covered? Why would they have to get their own ITP?

BE A perfect example of that is Walton county. Under statute they were allowed to issue permits; they didn't need DEP permits and they authorized all that armoring to go in. that caused take, and the county had to stop what it was doing, prepare an HCP and seek and ITP. So emergency permitting is the main thing. But there may be others where you overlap what the county is authorizing and what the CCCL program authorizes. Parts of large developments could occur on areas outside of our HCP plan area, and there might be a way for them to plug into the FBHCP to get their incidental take coverage for those other areas outside the plan area.

TE But the intent would be for the vast majority of activities to be covered by the statewide ITP. What I'm hearing is that there may be unusual, emergency, other types of cases where there won't be coverage and that's where the county would still be responsible for getting federal incidental take coverage.

Plan for hiring economist

JM And before we go into year 8, we are also going to bring on an economist and an editor in year 7. The need for an economist has been a good part of the conversation and we have received recommendations from various work group members on bringing on an economist, specifically for help with mitigation measures. We wanted to get your thoughts on bringing on an economist and what qualifications we should look for.

BE The economist, in the big picture, they've got to help with the mitigation, how much the different mitigation options are going to cost, but also how much it'll cost to implement this program at the Department. And then fees. If this is going to be a fee based program where we charge a fee for each permit issued, how are those going to be calculated? And how is that money going to be escrowed? And all those things. I think it's going to be a really critical component to the HCP.

TE So I want to be clear, are you asking for guidance from the Steering Committee? Or just a discussion?

JM A little bit of both. With the needs that we have and what we're going to be using the economist for, we had talked about potentially two economists that have more of a natural resource background, but there's differences with qualifications. It's pretty broad

with the people that we have in mind right now. We haven't really set on this direction yet, so if there are any recommendations that you guys have for an economist.

DI What is the world of economists?

MF Essentially, there are 3 or 4 tasks. One is the administrative costs – what's it going to cost to have the plan internally implemented by DEP. The second one is cost to public, and so those are costs, for instance, to the developer for compliance. Third, that differentiates those are benefits that accrue, and people call them different things, such as ecosystem services. You tend to find economists with qualifications in one of those three groups, but not one with all three. So that's the current dilemma. For example, there's a group that does just municipal costs of programs, and they know how much police patrols cost, but they know nothing about any of the natural resource pieces that we're talking about. There's a great group at Stanford that focuses on coastal ecosystems services, and, for instance, the storm surge benefits provided by dunes, but they know nothing about administrative costs. In terms of process that's about as far as we've gotten. We're trying to come up with preliminary list, discuss it as a Work Group, call those folks to do interviews or talk to us to get a sense at that level who's got what certain capabilities. Some of the larger firms may have more capabilities, and some of the recommendations have done prior HCPs in Florida, some of them are more national. So there's a really big diversity of possibilities at this point.

DI When are you hoping to make a decision? Before the next Steering Committee meeting?

JM Maybe not before the next meeting, but within first few months of next year. We're also going to bring on an editor during that same timeframe. We had actually contacted an editor that had a lot of scientific editing background, and we were going to have them start with chapter 5, and this person also had a lot of experience outside of just scientific editing, but when we sent a sample for review they determined that it was too much for them to handle at that time. So we're kind of back to the beginning of finding an editor. That's something we talked about with both the editor and economist, whether one or two or however many we end up with is really briefing them with what we're expecting and what we need from them and making sure that they are aware of exactly what we're looking for and if they're capable of handling the volume of this HCP.

JW Do you have the ability to use multiple economists or to have separate smaller contracts so that you get more tailored product? Because when you look at it, the ecosystem services part in particular, if you don't have expertise in it, the quality of what you're going to get back is going to be pretty gross. On the other side, if you're looking for someone to dig into the process side of permitting, and being able to navigate those straits requires a certain familiarity with that.

JM And that's kind of where our discussions have been going, that maybe one economist is not going to be able to tackle all the specifics that we need them to. that's kind of where we were with that. maybe one economist won't be able to tackle all the things we need

them to accomplish. And that's why we wanted to present it to the Steering Committee to see if that was the consensus that we may need to bring on more than one.

- BM I like the way you characterized that, Mike, and I agree with you Julie. With regard to the benefits of the program, that would be important when trying to sell the program legislatively, but you don't want to sell a program you can implement because there's no way you can afford to do it, so I think that expertise should be brought in earlier, as far as the cost of the program. I agree it doesn't all have to be at the same time, but I do think it's really important to clarify really clearly the expertise you're looking for. I think you should try to break it into three different areas like Mike mentioned.
- TP I think saying 'economist' is a little like saying 'scientist.' You have to identify exactly what you're looking for, then seek out a person. I think basic calculation is one thing, but when you get into specific outcomes, you may be looking for more than one person.
- BP I appreciate the comments on this and the Steering Committee's concerns about making sure that we have the right individuals that will address our specific needs on this. I just wanted to say that there are a couple of different economic firms that specialize in doing this exact kind of analysis. They're used across country for HCPs similar to this. So we should have a good selection of folks to pick from.
- BW I'm really happy that we're considering both sides of the ledger in terms of how much the implementation of the plan will be and how much the cost would be if the plan were not implemented. I worry just a little bit about the differences in expertise needed and in difficulty in the each side of that ledger. For example, determining value of ecosystem services is not as straightforward as determining plan implementation. I think it's a really important cost to assess, but I worry it could get blown out of proportion and we might focus too much attention on that. I just wonder if we should give a little bit of thought to guiding that assessment so that it doesn't become too large and too controversial.
- TE I agree. When we were doing Perdido Key beach mice, we needed an analysis fast. We paid sixty thousand dollars for a relatively simple analysis around real estate and values and that type of thing. More recently, with the gopher tortoise revision to the management plan we did a pretty good economic analysis and that was tens of thousands of dollars as well. So I'm in agreement with what I'm hearing other Steering Committee members saying. Let's definitely think about individual pieces we need. Costs can get very exorbitant very quickly with this type of work, particularly if we're doing ecosystem evaluations. I would say keep it simple and we really need to nail down what we're looking for and not just let someone go hog wild. So from my perspective, yes we need economic and editorial expertise, and I would not think about *an* economist; I would think about specific tasks, and then if there are niche groups that can do all that, great, and if not, then I would look to getting the right expertise to answer the right questions.
- BE Just an anecdote – in Walton county we brought in an economist and what he did was he valued a natural beach and compared that with a beach that was highly developed with

seawalls and looked at the public use of the beach and how much the seawall devalued the use of the beach for beach visitors. We could take it down to a per foot basis, and we used that to justify fees that we were charging per foot for emergency armoring that was going in. Naturally, any amount that you charge people are going to complain about, but when we showed them how much that seawall devalued the beach experience for the public, they were getting a bargain. So it's a really critical component of this.

- DI I'm supportive of using an or multiple economists. I think it's very important to understand the cost to the public, the cost to the agency and the benefit to the environment. I know with the ecosystem services, especially with what I'm hearing here consistently about how much time it takes to come up with a good estimate, the first two estimates – the cost to the public and the cost to the agency – are going to be really important when we try to gain support in terms of the legislative changes that need to happen and finding issues. So if we had to phase those types of activities I would encourage you to focus earlier in the process on the cost to the public and the cost to the agency.
- TE I agree, and a recommendation would be for the Work Group to continue to discuss and come up with – and it doesn't have to be long – a game plan, an approach, a work plan and start coping out folks that Brian and others are talking about and either report back to us if there's enough time to do that and/or, as Danielle said, start moving forward on kind of the no-brainer ones and then come back to us with the tougher ones if they're not quite that obvious. But either way I would like, and I think other Steering Committee members would like to see what that game plan is sooner rather than later. So as soon as the Work Group can wrap your minds around it, I'm not going to put a due date on it, but just don't let it linger and linger.
- MF In the draft scope of work, which we haven't fully gone through yet, we're thinking in Q1 next year we'll start lining up our ducks in terms of the easy stuff and the costs. And particularly, we're interviewing and bringing people in that have done mitigation planning projects, which we plan to do as per prior precedents, and start asking about costs, for instance. And basically, process wise, if we interview and talk to people in January, somewhere in there we should have time to bring back some recommendations to the next Steering Committee meeting, and if we then do contracting after that, it would still fit with the work plan for next year anyway, which is basically to get most of the routine cost stuff, the bookkeeping internal stuff and then phasing in the simpler stuff to compute. And by the way, I've already computed parcel valuation stuff because it was simpler. But then it also gives us scope if we need to for next year's grant, if we need to write in more money for ecosystem services evaluations, which are the hard part.
- BE And we did explore using agency economists and that fell through.
- TE So definitely by the next Steering Committee meeting we'll have a briefing and a work plan approach. And again I would say if it's within budget and smaller and easier, don't

wait for that if we need to get going sooner, but it sounds like the timing would work fairly well. Are any of the Steering Committee members nervous with that approach?

The Work Group does a great job; you have my confidence and I don't feel the need to micromanage how you all are moving forward.

JM We very much appreciate your advice. And that's a good segue into the RFP for the year 8 grant and the new federal funding limits. They have not actually announced the new grant yet. We were told it would be announced as soon as they came back from the sequester, but we're still waiting on that, so it could be any day now. Generally we get 90 days to submit once it's announced, but if it is announced soon, then that may overlap with the holidays which means a shortened timeframe.

TO I have been told that they would adjust for a holiday overlap. I've also heard from Service employees that they've instituted a cap at \$750K. Do you have anything on that, Brian?

BP That would not be for year 7, but it would be for year 8. I've been trying to schedule a meeting with David Dell to have more direct conversation about all those changes.

DI Have we exceeded \$750K in any of our previous grants?

TO We've had grants over a million in the past.

RP Is that a cap on total project cost or federal share?

TO I believe federal share.

RP \$750K is about what we've received in federal share at least for the last couple of cycles.

TE So I want to make sure I follow. We're talking about we need to start preparing for a year 8 grant. There's going to be a cap, so we need to stay efficient with how we do it. Any other questions on year 8? And Brian, my understanding is that for HCPs of this size and complexity, 8-10 years is in the norm for how long it takes. And we're not stretching the Service's patience or willingness to fund us from your perspective. I know you can't guarantee that, but...

BP In a recent conversation with our regional HCP coordinator and our national HCP coordinator they recognize that this is an arduous process and that this is fairly common for this level of complexity. Have not heard any negative comments about the timeframe we're on.

TE Thank you. Any other questions on year 8 or the cap or anything related to that?

Year 7 scope of work

- SD Much of our work in year 7 will be chapter refinement and completion of the chapters that have not yet been drafted, and that always takes a large chunk of the budget because that's the putting the actual program together. We're also going to put some funds in there for Mike and Amy to work with the GIS model, incorporating the minimization and mitigation into that when we have it. And then we're also going to have in January another outreach WebEx. I've asked Mike if he would give a little bit of a presentation so that it can become real. He's actually done research and data for local government, and I think if they see some of this they'll see that we're addressing their county and we actually have data for your county. That way they'll see that we have made progress and we've looked at all the counties, not just lumping them into a large pool, and it will allow them to ask questions about Mike's data. We've also got refinement of the whole outreach plan to make it more meaningful to local government and then this afternoon we'll talk about the legislative component of outreach. And then we have the regular meetings. The WebEx meetings and the ability to call a special meeting has been really useful for us. And with that I'll take any questions.
- JM I just want to mention on the outreach component, for the legislative outreach, that is not something that we plan on doing immediately. That will come later on in the year. And the other outreach components that we're working on, the reason we're readdressing that now is because we're coming into the somewhat final stages of the plan development and once we have some of the minimization and mitigation more well defined, that will help us be able to answer some of the questions that we know that the people will have when we're doing the outreach.
- MF One other thing relative to the outreach is we have some inreach activities planned as well. So, for example, because we've put a lot of emphasis on minimization measures on a fairly fancy website that we'd like to see the program develop, we've got some time in there to talk to DEP to figure out what the current systems are and what is feasible to expect within that context. I had a meeting with Robbin yesterday on the same topic on sea turtles and FWC IT needs. So we're doing some of that kind of work as well, trying to figure out what would be a reasonable implementation path and that kind of technical inreach. And then we also scheduled to bring in people who have done big mitigation projects and ask them to speak to us about what went well, what went poorly, what to expect, what costs to expect. So in the same way that we approach the BMPs, where we got a lot of value by asking agency staff to come in and talk to us, we plan to do similarly with mitigation.
- TE Other questions on the year 7 scope of work? I have a few. The year 7 grant – the federal share is how much?
- JM About \$750K.
- TE Okay, so it's right at what we're thinking the cap will be for year 8. And then what's the match?

TO 25%

TE Okay, and when you say year 7, what do you mean?

MF Calendar year. 2014.

TE And so we're expecting a whole other year after that? And then another six months or a year after that?

JM Yes.

TE And then, Sally, did I hear you right that the focus in year 7 is getting the core chapters done?

SD Yes.

GA Who develops the BMPs? Is that an in-house thing within the agencies, or are you reaching out to consultants, for example?

LR We've had Work Group meetings where we brought in people from the CCCL program and, obviously, FWC is involved with it. So we've been coming up with some BMPs as a Work Group. Once we have that draft chapter put together, we'll present it to the Steering Committee and then it'll be available for public comment down the line. Jennifer, are we going to be reaching out to anyone else for that chapter?

JM I don't think we've set that yet, but it may be something to consider.

LR Does the Steering Committee feel we should reach out to any other groups in particular on this? Our approach currently has been to work on them as a Work Group and pull in individuals from the CCCL program and FWC.

MF We have scheduled in the Spring for the Science Committee to review the minimization measures.

JM Yeah, that's something we're still deciding, because some of the previous chapters they haven't all been reviewed by specific experts. The species accounts for chapter 5, that was really the first chapter that really needed species expert review. And that's something that we've talked about is developing a list of expert groups that are going to be needed for the peer review process because some of the upcoming chapters that we're going to be finalizing in the next year are going to need that expert review. If you guys had any suggestions on which ones you specifically thought definitely need an expert review process or specific groups to target.

GA Will there be a BMP on coastal armoring? Siting?

- BE The way that we've broken this down, remember we went through the threats and we segregated out the different elements. During any CCCL project you could have vehicles, there's the placement of permanent structures, again we went through all those things. And each of those subcategories has a set of BMPs. They're basically minimization measures; that's what BMPs are.
- GA The reason I asked about you all going in-house is BMPs for something like coastal armoring, I would assume, would need some input from the engineering community. Would that come all from in-house? I was just curious.
- BM I would like to see the draft BMPs and kind of get a sense of what's being developed in-house and then see. While there is certainly a lot of talent in-house, they might miss a few things that you may want people on the other side of the fence take a look at and help out with.
- BE We haven't really been looking at the engineering side of this other than possible siting. I don't think any of us envisioned that we'd change the way seawalls are constructed. We've been looking at siting.
- GA But how they're constructed is relative to where they're sited.
- BE Well, maybe, but we hadn't really focused on the engineering side; we haven't really been giving that a lot of thought.
- BM I think maybe after we look at some draft BMPs for all these different categories, then we'd be in a position to provide better input on that. And as far as what group do we recommend you go to, I'd like to look at a draft first then we can give you better direction.
- JM So should we present those at the February Steering Committee meeting?
- TE I think that would be very helpful.
- RT Our BMPs are not going to get into specific things like engineering design. I think DEP has very specific rules on siting of construction and coastal armoring, so I'm not sure it would be the place of the BMPs to get very specific on that issue. Or, if they're going to, that would need rule and legislative change.
- TE I think the challenge for most of us is we have a black box called BMPs, and we're not sure what's in there. And y'all have been working on them and have a better feel for them, so a briefing at the February Steering Committee meeting would be helpful. And even if you don't feel like they're fully cooked, just allow us to start getting a feel for what they are and what's going on and where y'all are.

- DI Do you have a draft of BMPs for siting? Even just something sketched out on a piece of paper?
- MF We have the work that Coastal Tech did on this. Basically there were simulations of the current rules on siting, including the set back, and I think Bob's characterization was good. We've mostly thought about siting and much less about sea walls, in particular, technology. I would say that even more generally. That's a general rough patch. If you get into talking to professionals about new lighting technology, we have not done that. We have mostly looked at existing rules, regulations and practices for storm technology on all of these topics, and if we want to push beyond that to what new options exist for seawalls, we have not done that.
- BM I think this is getting into one specific, not getting into the details of construction or actual engineering. Obviously, the siting is crucial. We could get hung up on trying to narrow it down to too tight of a review. But right now we don't really know where the Work Group is at with developing these draft BMPs. I think that'll help us a great deal.
- DI In terms of the year 7 scope of work will the economist's analysis be included in year 7?
- SD Yes. That was also a component of the task to look at economic factors.
- DI And then you mentioned the Science Committee will review the minimization measures. Who makes up the Science Committee?
- RT That's still in flux right now. The Committee members that we had, we founds were not able to give up the time we needed when we asked them for reviews. So that is something that is on the Work Group's list to come back to the Steering Committee and make recommendations for new members and a different composition.
- BE The Science Committee represents peer review. We've brought in outside experts, academics, but most have been from the agencies.
- TE Lisa, coming back to your original question, it's hard to give specific groups of people to review. If we're talking about a more scientific, technical review, assessment of anticipated take given that there are a lot of modeling in there, I think that would be good to make sure we're getting a good review of that. Beyond that, I'm making an assumption with all these things, particularly as we get into things that the public and other groups are going to be interested in, that we're outreaching and engaging lots of people. But there are always good ideas in places that we're not thinking about, and it's not going to be that the Work Group creates them and then the Steering Committee blesses them and then we roll on. I imagine there would be a lot of interactions in a lot of places. So, that's my general assumption and I would think that in that process we'd be covering anyone that I would specifically be thinking about.

LR And with the take model we did have a series of meetings with outside review, so we've been doing that. I didn't know if there were any specific concerns or groups in mind as far as BMPs, but I think at the next Steering Committee meeting we'll get some more feedback from the group.

TE Any other questions on this?

HABITAT AND INCIDENTAL TAKE MODELS

JM Before the lunch break, we're going to do a summary of the incidental take model review workshops that were held in October. We had several meetings – one with the beach mouse experts, one with shorebird experts and one with sea turtle experts. We had a lot of good input from all the experts and accomplished a lot in a short timeframe with those workshops. Amy and Mike will be presenting the summaries.

Habitat models

AK I'll just start off by saying we had really good participation and the three workshops we had in October were really following on the three we had about a year ago where the emphasis was on review of the habitat modeling and, to some degree, giving input on minimization. And these workshops were focused on following up on revisions to the habitat models that were recommended by the experts at that time and the incidental take modeling that Mike has done. So our agenda focused on the habitat portion first, and I'm going to give you an idea of what the experts saw visually and just let you know what our next steps have been since that meeting.

For our beach mouse workshop, most of our participants, we had agency people from FWC, DEP Recreation and Parks and Jack Stout from University of Central Florida, and they all came together in Gainesville. For the habitat, we started off talking about how we're defining habitat, because that was one of the things we did as a Work Group following our first round of meetings. For beach mice, the definitions are largely based on where beach mice have been observed or where there's other evidence of occupation of habitat, like the genetic exchange, and then to some degree also based on expert input. So if we didn't have good survey data, but the experts felt like the habitat was likely occupied, that was included in our mapped habitat. For beach mice habitat, much of the mapping was most straight forward for all of the species. We showed the experts visuals of the maps, the changes we had made. They made some comments about additional changes we needed to make. So at this stage we consider the beach mouse habitat to be final for the purposes of input into the incidental take model.

So I just wanted to show you a few visuals here so you have an idea of what it was the experts saw and what we've been talking about. So, this is habitat on the St. Joe peninsula area, and you can see the portion of dark green – that's within the plan area, and that would be part of the input for the incidental take calculation. And here's the close-up view to give you an idea of the level of detail that you can see in the habitat models.

For sea turtles we had about 15 participants for the sea turtle expert workshop. Our working definition for sea turtles is based on the marine turtle rule here that says marine turtles can nest along the entire coastline of the State. So we're including all sandy beaches in the State of Florida as habitat for sea turtles. And here you can see what that looks like on a statewide scale. We have also mapped outside the plan area, anticipating some use of that area in perhaps the mitigation aspect of planning.

Some of the changes we made following the workshops from about a year ago. We got feedback that the habitat, our original definition said that the landward extent would stop at the vegetation line. But we needed to extend that boundary into the vegetation because there's evidence that some percentage – 10-15% – of turtles are nesting in the vegetation. And I think that was especially true on the southeast coast for green turtles. Anyway, it was the consensus of the group to do something to capture vegetation. So as part of that work we gathered GPS data from different regions of the State from the permit holder who were collecting that data and used that to determine what a buffer distance should be into the vegetation to capture at least 95% of those occurrences. So that's one of the revisions we made and that was approved by the experts at the meeting.

Some of the other things coming out of those meetings are recommendations for how we should revise our writing of the methods. So the methodology for the habitat mapping is going into Chapter 8. We sent a draft of that to the experts, along with draft Google Earth files of these habitat maps so that they could review all of this in detail. So some of the feedback was on making sure that we put enough detail in the plan to ensure that the habitat mapping is repeatable. And to some degree how we might map habitat in the future as we get better information through LIDAR data. And we're considering that that sort of description should be a part of adaptive management, where we think about future habitat mapping.

BM So is all that hatched area habitat?

AK Sorry, no. I don't have any legend on here.

BM When you bring up the map, if you could read what the legend is, that would probably be helpful.

AK Sorry about that. The green boundary is the habitat and the red hatch is the plan area for the HCP. So this is the CCCL line here and this is mean high water shoreline out here, and in that delineates the boundary of the plan area. So this is an example from Volusia County showing nest locations and how they're captured by the habitat.

The most complicated habitat that we're working on now is for shorebirds. Our habitat definition for non-breeding shorebirds is essentially the same as for sea turtles because we really don't have enough information to map for where we have non-breeding shorebirds, and they have the potential to be everywhere. So we are including habitat for

them throughout the State. But for breeding shorebirds, for solitary nesting and colonial nesting, which is how we've grouped these species, we are trying to map in the vicinity of known nest locations. What you're looking at here in the blue hatch is a representation of all the non-breeding shorebird habitat, and it does occur throughout the State. And the habitat for nesting shorebirds is a subset of this, and it gets essentially clipped by some distance around nest location. So you're seeing a buffer here that we discussed at the expert workshops what that distance should be. We went into those meetings with some assumptions that everyone was comfortable with the distances that we had made, but for solitary nesters, for example, the vicinity distance was based on a disturbance or flushing distance combined with a roving chick distance. And that gave us a buffer distance in this case of 820 meters.

We did something similar for colonial nesters, and the distances that we used have been in discussion ever since our last workshop. And the FWC shorebird people, especially Nancy Douglass, Alex Kropp and other people that work on the Florida Shorebird Database, have actively been doing analyses, piecing 2013 nest location data so that we can incorporate that data into those analyses to help us refine what these distances should be. We have not completely settled those distances yet. I'm happy to talk to you in more detail about where we are with that if you want, or I can come back to you after we've settled that out.

- BM You said you had a 820m buffer for solitary nesters. Are you saying that any activity within that zone can disturb the birds?
- JW The problem is with solitary nesters, the chicks are precocious and an hour after they hatch they're up and running around. In fact, they will move very far down the beach. So it's not like a colony site where they hatch and the chicks stay in that general area. Those precocious birds need more beach to be able to move. So I think Amy worked with the literature to figure out what the range was for those roving chicks.
- BE All we're doing is saying this is habitat. And then Mike is going to superimpose CCCL activities and see where those two intersect, and that's the take.
- MF And I have a slide upcoming that shows that, but we distinguish habitats, which have buffers, and human activities, which also have buffers. So it is a bit confusing that way.
- AK With these buffers, we're looking at a distance from the nest where we should be capturing habitat extent. So buffer, even though we use that as sort of a GIS mechanism, those buffers disappear after we've got our habitat map complete. They're just a mechanism for clipping an extent of habitat that is in the vicinity of those nest locations that makes sense biologically to include.
- KF So wouldn't this possibly change every year?

- AK Part of reason for being conservative with some of the distances is for that reason. We're also looking back at occurrence data, which is relatively good, from 2005 to 2012, so we have a lot of data and the experts think it's pretty complete and good for the colonial nesters, which tend to go back to the same places. They do acknowledge there are some gaps in solitary nesting – they're harder to find and less surveyed, especially on the east coast. But it is the best available data that we have and the databases are improving. And so that's why, at least in this case, we've gone ahead and included 2012 data, where with some of the other species we were really only looking previous to that. We have a lot of records for this, but you're right, there is a chance that we could miss something in the future.
- BE But that doesn't imply that there still won't be minimization measures in place for those sorts of thing. There will still be minimization measures in place for breeding and non-breeding shorebirds. You could have something occur in a new location that might be overlooked, but that's just going to be noise in the big picture. I mean, you don't want to purposely go out there and harm something, but there will still be perhaps requirements that you survey for shorebirds in advance of doing a project to make sure there aren't any there, even if it's not in a previously documented habitat.
- AK I think that's it for my presentation. I would like to acknowledge the amount of work and effort these experts have put into this project. It's really amazing. The sea turtle people at FWRI – Annie Meylan and her group – have thoroughly reviewed the sea turtle habitat. They've looked at it on aerial photos and sent back specific comments. The same thing with the shorebird people; they just put in an enormous effort and seem very willing to participate to get this right. We've been concerned about overusing our experts to some degree, and I still think we need to be careful about that, but they do see this as very important and have been excellent participants.

Incidental take models

- MF I wanted to go through where we were essentially before the incidental take method workshops, in part because I wasn't here for the last Steering Committee meeting. So I've got a couple of slides to bring you up to speed, and then I'll discuss what we've been doing since those workshops to refine things, and then a little tipping towards the future to give you a sense of where we're heading.

The general incidental take methods and strategy have been consistent for a year now. The overall strategy, as Amy and Bob mentioned, is basically a spatial overlay. If you imagine the yellow blobs being buffers around human activities and the purple ones being habitat management units. There were three topics related to incidental take that we discussed in the second half of the workshops. The first was regrouping and refactoring of activity groups. We started off the process with some work that Bob and others had done early on, in which a lot of activities were termed coastal construction, and basically we split that out a little bit. And then we talked about the appropriateness of different buffer distances for particular activities for a species group. We reviewed some

of the literature that Coastal Tech helped on a lilt review with, and asked for their professional judgment and experience. And then we also talked about methods overall.

The good news is I think we're on sound footing for beach mice and shorebirds. I think Amy mentioned the one asterisk, which is the nesting shorebirds. So Amy has finalized the beach mouse habitat, and the method adjustments we've made cover most of the comments that the species experts gave us. That involved some adjustments to disturbance buffer sizes, and I'll go through those in a minutes. The bad news relative to project timetable overall is sea turtle lighting continues to be the single hardest thing on this project. There was a lack of science consensus on application of any buffering method for sea turtle lighting, and the review meeting suggested some alternative approaches which we're now developing and testing.

We were somewhat uncomfortable looking at historic DEP records about CCCL activities, because they were only giving us point locations and not very accurate point locations. But it's almost impossible to measure 30,000 historic activities, so the solution to that dilemma was stratified sampling. Coastal Tech did the digitizing, and they digitized roughly 700 activities that could be seen from the air on small, medium and large parcels, both residential and commercial across the state.

The take home message on the left is basically we saw very large variations in size, which is not all that unexpected when you think about Florida. We found that there was a strong and statistically significant correlation between parcel size and these building sizes. So that was an important, kind of easy win, because the State of Florida does not map footprints of buildings, for instance, but they map parcels. But we know parcel size statewide, so we can infer with some reliability the likely building size. We also looked at setbacks and those do not correlate statistically with parcel size.

The take home relative to that footprint work is basically parcel size matters. Going forward we're hoping to develop methods whereby DEP could record proposed activity footprints, not just the permit center points. And, in fact, I talked to Robbin and her staff yesterday about some of that that'll need to go forward. It is quite possible to have permit submission on a website that allows people to show the activity footprint that they're proposing. We'll work with DEP to see if that's feasible relative to implementation. The expert review on this has been basically good, fine, it's statistically significant, use it. There's one caveat to that, and it comes up when you talk about regrouping coastal construction activities for incidental take simulation purposes. The obvious parts were agreed to, which were separate out new development from redevelopment and to separate out multi-family and commercial from single family residential. The asterisk there is that building height turned out to be quite significant in our discussion with the sea turtle experts. And that's slightly uncomfortable because building height is not measured uniformly in Florida, so we have to get at it by a correlation, and that correlation is not as good as the prediction of the footprint size. But right now that's our intent, to keep moving forward using a correlation until we can get better data on actual building height.

This is the second piece of work that occurred actually before the last Steering Committee meeting, just to bring everyone up to speed. For completeness and to get ahead of the sea level rise/climate change debate stuff, we incorporated the IPCC 2014 numbers for sea level rise, since by the time this will be implemented that will be the current report. Those numbers are roughly a third higher than the 2007 estimates, because they are taking into account glacial ice melt, whereas the prior ones didn't.

The take home message when intersecting sea level rise with various habitats is that you get between 5-9% loss directly from sea level rise in a 25 year period. Depending on how you want to call that, that's a marginal difference within 25 years under moderate sea level rise. It becomes a little bit more significant under high sea level rise. And again that's very sensitive to the fact that it's non-linear over time. So after 25 years it will indeed get a lot more serious.

BE Is that for all habitat? Or just for sea turtles?

MF We ran it for all habitats.

GA But it is beach loss is what you're talking about; nine percent from the mean high tide line landward.

MF Well I don't want to say 'beach' because it's all habitat as mapped, although for sea turtles it is basically beach. And then for colonial nesting shorebirds it's beach specific.

GA But it would be when the habitat is on the actual beach.

MF Yes. And so this is inundation modeling only, to be clear also. So it does take into account tidal data, so it does take into account tides, but it's a simple bathtub model other than that. It doesn't take into account changes to currents or storm surge or anything more dynamic.

After the workshop we went back and did a number of things, a couple of which I will report to you on. We went back and looked at other HCPs for golden bullets for GIS methods and precedents. We didn't find too many, but we did find some useful technical stuff. What I mostly wanted to show you is we found an important new set of literature on human dimensions on beach use. And, as I mentioned earlier, we kind of came an approximate estimate or proxy for building height until we can find a better source.

The main thing I wanted to report on human disturbance on beaches is after a year of searching I stumbled across a reference to this paper. I emailed the researcher who's in Australia, and five minutes later I had an answer. Basically, she's done the largest study I've found in the world of how humans use beaches. It is done in northwest Australia and it's done in a national park, but their national parks there are almost the size of our states – it's 150km long anyway. It has 321 access points, and what they did is they had

graduate students 16 days a month for a full year GPSing with laser range finders everybody that was doing anything on a beach. So it gives us data that we just didn't have from anywhere else, but I knew it had to exist because there's literature about transportation and otherwise about how far people walk, but I'd never found it for beaches.

So based on a sample size of thousands here, the median distance that people walked from an access point was 100m, and the 95% or two standard deviation rule would give you about 200m. So not surprisingly, like other things, human behavior falls off non-linearly with walking distance. There are other data in here about beach use or boating use and other activities, but the key one for us is this pedestrian data.

Amy and I had talked about this in a lot of the original conversations, but in GIS we have to use a hard edge buffer, and that's a really difficult thing when you bring it to science experts because nobody wants to give you a number on which side of which it's completely habitat and protected and the other side isn't habitat and not protected. So what we've done is basically agree to use the 95% rule across the board now for both the human side and species habitat. So if you have a roving chick that gets a little bit outside of that, we still have a standard way of drawing that line. And the same goes for a walkabout guy that wants to hike 10km on the beach; yes, that occurs. At that point, then, it kind of means that if you have 5% x 5% or 0.025%, basically there is some threshold at which we're ignoring the impact and calling it insignificant. That hasn't been reviewed by the experts yet, but that's our current proposal.

The other thing I did after the workshop was to kind of define a new conceptual model for how we categorize disturbance simulations, because this has proven very difficult to talk about. The first thing is kind of semantic, but it's also legal, which is to distinguish what we're calling direct effects versus what we're calling indirect effects. And to do so based on the 'but for' clause of regulated activities. So essentially for the purposes of the Beaches HCP, when I say direct impact I'm talking about impacts of things that are explicitly regulated by DEP. I've looked at other HCPs and how they've handled that and they have kind of a similar approach, so it makes sense to be really explicit about that. And then the other distinction that's important, and will be much more important as we get into minimization, is this permanent or transitory effects. And so most of the effects that we're talking about now are the permitted effects, and we did those first. The activities such as construction specific activities or things done out of season all need to be captured somewhere in our conceptual model and so this was the cleanest way I could come up with of doing it.

So that leaves us with direct permanent incidental take as kind of the simpler category to compute, and we can do that now uniformly across all the species groups because we have the construction footprints. We don't, however, have those for everything so we have a fallback where we just use the minimum mapping size of our land cover for things that are too small or we couldn't see from the air. And then for the indirect effects that are permanent, we've gravitated toward using what I call generalized disturbance zones.

These are directly tied to the pedestrian data that I just showed you. So for public access, commercial and multi-family, we're using the 200m distance buffer as the default. And for private access situations like single family residential we're using 100m default, or the median value. So we're kind of using 100m and two standard deviations across the board, and with the asterisk that if things are too small to map we have to give them some size so it's one pixel in our database.

Transitory activities we talked more about in the Work Group, but the implementation and review of that is going to occur now in the spring. For now we're just using full weights of everything, so we're taking everything permanently, so we're overestimating for the numbers that'll turn in this month. But the intent is to basically discount for time. So impacts will have the same as their permanent equivalent, except for habitat recovery time, for instance vegetation recovery after replanting. And then the second thing, which in minimization in particular will become important, is if activities are predicted to occur in season then we'll assume full impact, and if they occur out of season then there's no impact. And that's adjusted by region within the state using the same methods that are used in the statutes.

Briefly, I wanted to mention a couple of forward looking things. One is in thinking about how we're going to simulate minimization going forward, we came up with two major cases. They're a little confusing because they look similar in a way on the ground, but conceptually they're quite different. So I'm calling them habitat-based minimization versus activity-based minimization. So this is kind of new relative to what we've thought through in discussing those measures, but in terms of simulating them I need to know whether it's on Amy's side of the fence or my side of the fence. If the minimization activity is reducing the level of stress coming off of the human side, fine. Like you've made something limited access that was public access. On the other hand, if it's changing the habitat, for instance fencing habitat, then it's actually accounted for by simulating that habitat as being protected. So given those two buffers that we're using, one is applied to one and the other is applied to the other. I'm doing both on my side in the computing, but the conceptually they're basically different in that way. And that took me a while to get through in my head.

One other thing we tried and didn't get a lot of results from but I wanted to show you because it might recur is we tried a simulation method for looking at the influence of building setback on take. So we used classic suitability mapping in GIS from a developer's perspective and from the habitat perspective to look at where buildings might occur on sites. We basically simulated un-minimized development that went the closest seaward allowed by law and the parcel structure. And then we simulated minimized sites, basically trying to get to the extent practicable question. So you still build your hotel or house on the site but you put it as far back as practicable. So we simulated those being pushed back to the edge of the parcel. The jitter there comes from the 15m minimum pixel size, which jitters a little bit when you have small parcels. But despite this being what I thought would be a good idea, it actually didn't have a lot of influence on the incidental take numbers. And that really comes about for three reasons. One is

the scale of the take buffers relative to the scale of the parcels. So on the coast you just have a lot of small parcels, and so moving back a few feet when you have 100m buffer doesn't really get you much. And then there's a lot of influence of historic take going on. So in here the washed out gray is actually historic take and the dark parcels are historically built. The light purple is the impact disturbance buffer of 100m and then the hashed is habitat. So the intersection of the hash and purple is new incidental take. The intersection of hash on gray is historic incidental take. We didn't go much further on this one because the results were not showing that it was a great direction to go, but for instance on solitary nesting birds and single-family houses and just those activities that cause 100m of take, we went from 411 to 404 acres of take. So a lot of elaborate effort and not much result, I'm afraid. And then for beach mice we actually got worse, because the algorithm was a little naïve in pushing development inland and, of course, beach mice aren't very happy if you push development inland. We could've revised that part but we decided not to go forward with that approach.

In terms of simulating minimization, the conclusion is methods which reduce incidental take by protecting the habitat directly are likely to be more effective than setback strategies. We also got some feedback from Gene and others that for regulatory and implementation points of view the setback stuff is really difficult. So there are other reasons to think about this, but for future simulation of minimization measures we're going to proceed on the basis I mentioned earlier that we're going to count habitat as protected if the mitigation measures apply to it. And also we'll take into account the transient effects based on seasons. Sea turtle lighting is an exception to this and almost all things, so I want to end up by talking about that briefly.

There are three fundamental problems that remain in developing the scientifically-credible incidental take estimates for lighting impacts. The first one is that the experimental lab data is too limited to apply at landscape scale, and the existing landscape lighting surveys are not quantitatively precise. So although we do have lighting surveys, we don't have yet quantitative lighting surveys. The second issue is fundamental to our method, which is that simple 2D buffers don't provide a good approximation of the biological mechanism that is thought to underpin this, with the brightest light and the lowest horizon being that mechanism and that you just can never get that well from a 2D buffer. The third one is that disorientation data or other biological response variables at the landscape scale have not been processed and compared to measured beach lighting. There have been a number of attempts to do this and everybody that's tried tells me it's really hard.

But fortunately we can go a long way with physical lighting and just showing that light is hitting the beach as opposed to proving that it's causing a significant impact on the species, because under HCP our burden of proof is a little lighter than the full response mechanism or dose response. But these graphics are intended to show that the way that we started thinking about the problem, which is that it's really a 3D problem, and attempts to reduce it down to 2D just end in frustration. So there's been a method standard in GIS software for a number of years called viewshed, and viewshed methods

determine the line of sight, for instance from a light to a point on a beach. And they do so with a bunch of simplifications, but as you can see from the example it's already reasonably sophisticated, in particular that it can deal with intermediate conditions, unlike a buffer. So the intent is to use that concept to develop some alternative methods, and we ran this by the expert group and we got some really good feedback about it. What we've done at this point, I've actually gotten out on the beach with Kelly at Archie Carr and up at St. George and saw things from her perspective. And then I went out with some new equipment, an astronomical light meter and started taking some preliminary light measurements on the beaches. And I can only at this point confirm to you that physics works, and so lighting does fall off with a power of two. However, consumer GPS really stinks, and that's the basic limitation of this work; you'd have to bring in a better GPS or laser range finder. We get more noise from consumer GPS than anything else. The experts recommended rather than trying to fully calibrate a full blown model, that we do a kind of simplified theoretical model. So we have been pursuing that, and the theoretical model you have essentially a terrain system which represents the beach and dunes, you have buildings on top of that and you have vegetation and you have lights. And basically you render that scene in 3D software, and 3D software is used to compute lighting, and you get a lighting estimate from the sea turtle's perspective. We're still in the process of doing this, but the preliminary indications are that that should at least better than buffering, so we think we've got a slightly better solution and how much better we don't really know yet. But it does correspond reasonably to the physics measured on the beach. So we're going forward with that approach cautiously, because we're now very familiar with how hard this stuff is and how much work has been done and not successful in trying to do the next step which is jumping to biology. But we're trying to nail down the physical lighting side of things.

So the conclusion here relative to the meeting and what we've done since is we're on track to deliver revised estimates this month. For sea turtles we're just going to keep using simple buffering as a placeholder for now. We really got no consensus out of the expert group to do anything different in changing the buffer distance; nobody liked the buffer distance. So we'll leave it in there for now for consistency, but we hope to replace it with that viewshed analysis if and as validated next year. And then basically next year we have one thing leftover from this year which is the lighting and its adjustments, and the rest will be focused on reviewing the minimization simulations first and then creating the mitigation simulations. Amy and I will continue to work together to not have stakeholder stakeholder expert review fatigue and try and do single meetings where we review the minimization and get ideas about the mitigation. Questions?

EF I would like to learn more about the beach mouse methodology. I don't need to take time now, but is there someone I could talk with further?

MF Sure, you can talk to me anytime. The methodology, basically the review told us not to use much in the way of buffer distances, because beach mice can come in very close to existing structures. But I'm happy to talk to you in more detail about the specific distances used or impact accounted for.

- EF Okay, I'll follow up with you then.
- MF My email is mflaxman@geodesigntech.com, or you can find me through Jen or anyone here.
- DI First, excellent presentation both of you. I guess I'll start from the beginning, back when Amy mentioned 10-15% nesting in vegetation. That was a surprising statistic to me, and I think that it was green turtles mostly?
- AK That was sort of a ballpark statistic that came from Rick Herren in Indian River county.
- RT That was for greens, but you also looked at loggerheads on the southwest coast, right?
- AK Yeah, we also heard from other people in our meeting, and it wasn't just for greens. They did verify that there was at least some nesting by other species in vegetation.
- DI I'm trying to picture it in my head, a sea turtle climbing up a dune to nest in the vegetation. So is there any statistic about how high up a dune into the vegetation they go?
- AK Well, we do have the GPS locations of the nests and that was the driver for how far back we took that line.
- RT And that was sub-meter accuracy GPS.
- BE But that shows the location of the nest, not necessarily the height of the dune feature.
- DI I was just curious if they go halfway up and then it's too much of a burden, or if there's a some threshold that they just won't go any higher, because some beaches have really high dunes, vegetated from the toe to the top. So if you're trying to site development or armoring or something in relation to the top of the dune, set back, are you actually having that stuff there? I'm just curious; I'd like to have some more information.
- RT Greens will go up to the top of the dune at Singer Island, and that's about 15 feet up, I think. Blair can probably give a good insight into that.
- BW I would say that the most important criterion isn't distance into the vegetation, but elevation. And there's not a whole lot of data on that because it's pretty tricky to measure precise elevation. But if you're picturing a really tall dune and a sea turtle – either a green or loggerhead – crawling to the top of it, that's probably not going to happen. But a lot of dunes are low and they might achieve the crest of that primary dune. So it's an elevation thing, I think.

- DI And back to the habitat for non-breeding shorebirds, you mentioned that it is the same as for sea turtles. Could we go back to that slide?
- AK I should say that it was the same in geographic extent, not necessarily the landward amount of habitat we mapped. That is different for shorebirds and sea turtles.
- DI My question is on that buffer for solitary nesting shorebirds. How does the buffer relate to the amount of take we're anticipating from CCCL activities when the buffer area goes inland from the CCCL line?
- AK I think the buffer is causing confusion. We're talking about using a buffer in GIS to help us clip habitat at its extent. It's just a set radius from a point.
- BE And then you clip it at the plan area boundaries. In other words, anything outside that doesn't count as far as take
- DI I appreciate that clarification. My next question is related to the human disturbance buffers. The human disturbance that we're using and the type of usage of the beach, are we limiting those to activities that the CCCL program actually regulates? Because human disturbance can be a lot broader than what CCCL covers.
- MF We're limiting it in the sense that we're starting those buffers from CCCL permit points. So it has to be something that the CCCL program has permitted. For instance, a dune crossover that allows public access is going to change public access on the beach, and therefore the back amount of new buffer would be attributed to CCCL. So we're not counting varied other activities that cause people to be on the beach.
- TE So the way I'm conceptualizing this is you have some sort of activity – in this case a crossover – unless we know how many people are using it, then it seems the buffer is less of the equation. It's really how many people and how much disturbance there is. Are we trying to get that sophisticated with our take?
- MF That's where we say it's either private access or public access. If it's private, we're using the mean, and if it's public, we're using 95%. That's not entirely or mechanistically satisfactory. If we had the number of people showing up at that access point, clearly that would be a better model but we don't.
- BE What this is getting at is indirect effects. So you're permitting an activity – construction of a crossover – the indirect effect is that that now opens up that section of the beach up to more pedestrian traffic. So in the case of a crossover, the actual footprint isn't much of an impact. The direct effects may be less than the indirect effects.
- DI I'm not sure I agree if you put the walkover in it increases pedestrian access to the beach. I would say you put the walkover in where pedestrian access is happening naturally over the beach to be protective of the dune. So there's a balance of factors there.

- MF That's a tricky one legalistically, because as soon as you do that you're triggering the CCCL permit. And it doesn't exist in the CCCL world until you do that, even though you're actually minimizing the harm.
- JW Or a walkway to the dunes may not necessarily be legal. And also, you don't always put dune walkovers because people are already using that access point. We also put them in to give access to more public. There are stretches of beach where there is no formal access or parking lot, so the state and counties and municipalities work together to make that possible.
- GA How do you determine impact from public usage? How do you make the leap that if somebody that's on the beach is causing an impact, that that should be factored in the indirect take?
- MF We're assuming, for example, if there's no fencing or other minimization activity, that there's strong probability of impact at a public access site that is within 200m of habitat.
- GA Impact to what? Shorebirds?
- MF For all species, treated equivalently. For shorebirds, for example, we've got the literature supporting it based on flushing distances. So in that case, because it's very easy to measure and measure many times, we have quantitative numbers.
- GA Well, for example turtles, it would only be people out there at night. So in the dune crossover issue, how do you factor all that in? Is this an exercise that really matters?
- TE I'll try to answer the question and you all correct me where I'm wrong. We're having to simplify very complex phenomena, by definition. My understanding is that what we're saying is if there's a private access point, we buffer it with a smaller area and call that area take. Like if you're talking about beach mice, they're not going to live there. If you're talking about shorebirds, they're not going to nest there. And then if it's a public access point, we're buffering it with a bigger area and we're calling that take, and they're going to have to mitigate for that take later on. Is that how you all are viewing this?
- MF With the one asterisk being that if there are minimization measures taken when you build that access point, then we're showing that habitat as persisting. So we're only at minimization at this point. But that is the intent; it is a huge simplification.
- TE But conversely, your data from Australia shows some people do walk as much as a kilometer away or further, and there could be a nest that gets trampled and chicks die, but we're saying that's not take. So that's what I was saying about it being a balancing act, and that's why the expert review is critical to try to find those balance points where you have your curves overlapping or not overlapping.

- MF So if there was evidence that trampling was more or less of an impact on a particular species or that the human disturbance from one person a day walking there was significant, then yes that could sway us. But right now we're trying to pull back to that 95% consistent rule. But, yes, there is a possibility that an infrequent human disturbance is causing biological impact.
- TE As well as the possibility that even though we're calling it take, you could have a beach mouse living right there and/or a nest that happened right there. So it's trying to find the balance point where those two things are relatively equal.
- GA Do you foresee people using the beach or public access as a large impact?
- MF No. In overall terms single family trumps all. So in the original sensitivity analysis when we did single family stuff it's very much dominant. Because much of the beach access points have already existed historically, so there's actually less in terms of new stuff going in. If they put in new ones, probably in the panhandle where most of that could occur, those could have bigger impacts. But relative to the existing simulations, 80-something percent of the impact is still from single family.
- BE Consider a perennial, colonial seabird site, and you put in a crossover in the middle of that.
- BM But does that happen?
- TE Well, ideally we'd minimize that.
- JW But it can happen. In fact, we've seen it happen. Exactly what he's shown does happen in Florida. People don't walk very far from the beach access point, so in many ways it's great when birds choose to nest at distance from the crossover site because there's that natural attenuation. What sometimes we'll see is a heightened demand for public use and a new crossover will be put in closer to where those nesting areas are.
- TE You can see just in the example data that Amy had where the nests occur was where there was no development adjacent to it. And there were one or two outliers, but they were where there was a little bit of natural area right next to development.
- BM Do those colonial nesters adjust and change location, or do they always go back to the same area?
- JW Colonial nesters will move around some, but the number of options of sites for them to move to now are much reduced.
- BM I just have a whole philosophical issue with this issue of impacts from dune walkovers. We have dune systems which are there to provide storm protection, source of sand for the beach, and habitat protected by people by building walkovers. So now we're talking

about the impact of building the walkovers, and I don't know if they're getting any credit on the positive side. So in public access points, it's still controlled pedestrian access. I agree that people don't walk very far from the access point, so there's this zone where you expect some disturbance, but if you don't have this controlled access point then you have a lot of trails over the dunes and you'll have disturbance distributed over a wider area.

- JW It may differ between municipal areas or densely populated areas versus those that aren't or don't have acceptable roadside parking. So there may be some geographic variations there, but I agree with you because I want people to be able to go to the beach. If we accurately characterize this, though, it's going to help us not only with mitigation but with minimization. We'll start to factor in where are we siting these dune crossovers. It's not always where there's traditional use; it could be a county or municipality or state park saying we want to provide additional access here. And so if we've done this, it helps them make an informed decision about where to put that crossover.
- TE I don't disagree with you; it's a multidimensional problem, and we're picking one dimension of it and we're talking about it in isolation. My assumption is that avoidance, minimization, take, mitigation, we're going to optimize, not maximize, all of that. We're talking about 16 species, and it gets very complicated. So I'm making assumptions that people are going to get credit for not impacting the dune. The challenge is that you got sea turtles and shorebirds that are utilizing the beach and we need to figure out how to optimize or overall minimize the overall take and impact. I'm with you; I think we may be overstating this that people will just be penalized.
- BE I just wanted to point out that there are a lot of positive aspects to some of these things, but from a regulatory perspective, we still have to account for take. And there are indirect effects from crossovers that have to be accounted for to the Service. So it's an accounting thing, it doesn't mean we'll be focusing all our efforts on crossovers. As Thomas said, it's a collective basket that we're looking at.
- DI I'm grateful for the discussion on public access and I'm a little concerned about unintended consequences. Public access and increasing public access is very important for beach nourishment projects. Almost half of our mileage of sandy beaches are critically eroded, and about half of that are nourished. So there's more critically eroded beaches that need nourishment projects than are actually getting them. And usually that's due to expense, or also politics and public outcry in certain issues, but the point in bringing this up is if we start limiting or creating a deterrent for public access, then we could have an unintended consequence of having fewer nourishment projects that are able to rank highly enough and get a high enough cost share from the state because they don't have enough public access. So now you're disincentivizing nourishment, and nourishment is good for, dare I say, all of the species we're talking about.
- GA How do you offset these pros with the cons?

- MF It's difficult for us relative to the purposeful blinders we have on relative to CCCL jurisdiction because we have nothing to say about beach renourishment, for example. I understand the possible inadvertent consequence of this. On the other hand, I don't think in reality it would play out to be, because the cost of the minimization measures that we're going to recommend for these very same areas is pretty small compared to the cost of the crossover. So I don't think it's going to stop a county from putting in a crossover.
- BE There's nothing in here that we're contemplating would restrict public access to the beach or the construction of dune crossovers. But we do have to account for both direct and indirect impacts that would be associated with those crossovers. And all that gets thrown into the mix as we determine how well we can minimize those impacts, and then we'll mitigate for those. So there's nothing on the front end that would prohibit or restrict public access. There may be some indirect things that I'm not seeing that you may have concerns for, but I just don't see...
- GA I think it's that question of how are you going to balance it. You may not know about the issue of beach ranking based on public access. And there's a complicated ranking system, but one small amount of that ranking system is based on beach access.
- TE I would say how do we, because that's what our job is, and it's not an easy one. The challenge is how do we, with best available science data and information approximate what kind of take might happen, and then build in avoidance, minimization and mitigation. And finding the balance with a lot of this is let's avoid having 8 trails and only have one. And let's do access in a way where one, it would minimize impacts to the dune as well as impacts to shorebirds if people aren't going to walk very far. And then the hard part is how do we get to what the mitigation is going to be, and that's going to be the heavy lift. And all this is going to be adding up acres or numbers and then all that is going to be multiplied by money, and then it's going to be money or other things that need to happen. That's the challenge that I think we're all starting to see more clearly as we're getting a more sophisticated analysis and getting closer to that part of our journey. I think it's all good; I appreciate the discussion. I just don't want us to get locked up on one issue because we're going to have to figure out how to have all those pieces moving in a way that it works for all parts.
- KF It seems like the primary impact on beach mice is predation. So are you accounting for predation as it related to development?
- MF The shore answer is no, we're not accounting for it. The longer answer is that there was a very nuanced discussion within the beach mouse expert group about the relative merits of explicitly accounting for that, versus using these generalized disturbance areas. And the opinion was that we'd be better off for the purposes of the FBHCP using a generalized mechanism and not specifically identifying predator zones, because that would have the best conservation effect without entraining the issues that come up when discussing predators and DEP and what it does and doesn't permit. So that is my best summarization of a rigorous conversation, and it is not a uniformly held opinion even

across the science groups. But right now as we speak, the call has been to not explicitly model predation or other things that aren't directly permitted by DEP.

- JW I understand that decision making. Would that preclude including measures in minimization or mitigation that get at that predation problem?
- MF Public education, for instance, about keeping your cats in doors was on our list already for mitigation measures.
- JW Or funding for predator control, because cats aren't the only predator; coyotes are a big problem in the panhandle, for example. And the other thing is looking at new development and covenants on the property with regard to outdoor cats.
- TE We went there with Perdido Key; I don't know if that HCP is finished yet or not. But all that was in the discussion as part of avoidance, minimization and mitigation.
- KF So just to make sure I understand, with beach mice, the actual calculation of take is somewhat related to footprint of proposed development.
- TE There's a buffer in addition to that.
- KF But the predator buffer is much bigger.
- JW Mike, I think that's a question for you. I know you looked into it a little bit. How much does the predator range differ from...
- MF The estimate is 2km, but it wasn't clear from that paper whether that was the 95%, but it's probably close. So it's much larger than what we're using, in terms of the way the beach mouse habitat is laid out. It would indeed have significant consequences on those particular areas.
- JW So you could be missing quite a bit of that take.
- MF Yeah, but the complicating one is it really only affects things when you have new development further than 2km from existing development. And that doesn't occur very much in Florida, because there aren't many places left on the beach that are further than 2km. There are some, and those will show up with huge impacts. If you permit a house that's 2km on either side of anything, that would show up if we were to use predator buffers. But additions, in fill development, most of the existing platted parcels would not actually be that heavy.
- BE The impacts from free roaming cats are going to be great in large undeveloped areas, but those are also the areas where natural predators would be too. And by just focusing on indirect effects associated with new development, and not paying attention to the natural predation going on, you're not going to resolve the problem. So I think the best way to

do that is through mitigation, through dedicated control programs, because then you get the whole issue.

EF I just have a question and a thought and maybe Gary could say more about this, but Archie Carr National Wildlife Refuge has a lot of protected habitat and I would assume some similar size buffers primarily for sea turtles. But my understanding is there's quite a bit of good beach mouse habitat on the refuge. And while the sea turtles have benefitted from the habitat protection, they've lost the beach mice there because of cats. So I wonder if there's any kind of comparison between Archie Carr and what you're proposing for other beaches?

TE I don't know that area super well, but there's not development in Archie Carr, right?

GA Yeah, there is.

MF But it does give negative light on the idea that just lighting control is sufficient for beach mice, because Archie Carr is one of the better places.

KC And there's a population of southeastern beach mice on the river side there; they've moved inland.

JW And it's not just beach mice. We have predation from feral cats in state parks on beach nesting birds.

BE When we roll out the BMPs, I think we're going to get some good feedback from you guys.

TE Other questions coming back to Amy and Mike's presentation?

BW I've got one about the minimization simulation methods that Mike presented. I'll have to admit that I was a little but disappointed because it seemed a little counterintuitive. I would have thought that some benefit of setbacks would be seen in the analysis. And I'm wondering if maybe the analysis was just a little bit too simple. For example, it seems intuitive that with setbacks, the probability of armoring occurring would be less. Certainly, if the viewshed of lighting on the property is considered, that would be affected greatly with increased setbacks. And I'm wondering what Mike thinks about perhaps a slightly more detailed analysis to get at those setback benefits.

MF I have to admit to also being disappointed, because it was an awful lot of work and I thought it was a good idea. The reality is that the model is too simple to capture a lot of the intuitive effects. So if you imagine backing up a house way into the woods, clearly its effect on flushing birds, for instance if people are out on their deck, is going to be lower. But when you have a simple buffering method, intermediate conditions are basically discounted. And so the simple buffering works great on the beach where line of sight is a decent estimate, but it works much less well when you're talking about moving

development back. So that piece of it is still very much a modeling limitation. And the aspect of that that we might have purchase on if the sea turtle lighting viewshed pans out, it will account for that particular effect. So that initial work done for sea turtle lighting will actually give us a better estimate of the potential multiple benefits of backing up development. But it is much more tightly constrained than I would have thought. So if you treat that development is going to occur on that parcel and it's a small parcel, most of the remaining development parcels that are platted are pretty small; there's not much room to back them up. But you're right. In part it's a model limitation that we should be aware of. But, in part, if you really stick to the HCP premise that you're never going to say no to a permit that's building on land that's otherwise entitled for development, then there's not that much room to push things back.

DI Is that the premise?

MF For modeling it has to be.

POTENTIAL LEGISLATIVE CHANGES

SD At the Steering Committee's request, we did a little more examination of what legislative changes might be necessary for potential minimization and mitigation measures. However, there's only so far we can go until we know exactly what those minimization and mitigation measures will be. What we did was look at each of the species groups, what minimization and mitigation might be, and what the legislative changes might be.

This is a chart you saw at the last Steering Committee meeting. It's very simplified; it just has what categories we think we might need changes in, and where we believe those statute changes, as far as DEP is concerned, are located. So you can see that those are changes so that we can address all the species, changes so that we can implement minimization measures, mitigation measures, and then how we're going to fund it. And that's what we have the least idea about at this point and where that's located as far as statutory changes are concerned.

TE Before we leave this slide, do people want or need to know what the individual statutes are and what they're associated with? We can't read it from here, so I'm asking if people want more detail.

SD I did get some quotes from each of those.

BE She has the actual statutes on slides.

SD So here is what we think is one of the primary statutes for minimization for sea turtles and what it says now. 'The department may condition the nature, timing and sequence of construction of permitted activities to provide protection to nesting sea turtles and hatchlings and their habitat, pursuant to [s. 379.2431] the Marine Turtle Protection Act, and to native salt-resistant vegetation and endangered plant communities.' Of course,

this gives you your handle as far as sea turtles are concerned to minimize and mitigate a CCCL permit. Any of the attorneys that want to break in at anytime, please feel free.

Here is the statute [FS 161.053(4)(f)] that allows some mitigation, and we can decide how much that might be. 'The department may, as a condition of granting a permit, require mitigation, financial, or other assurances acceptable to the department to ensure performance of conditions of a permit or enter into contractual agreements to best assure compliance with any permit conditions. The department may also require notice of the permit conditions required and the contractual agreements entered into...' I realize this is very generic, but it's how far you can stretch it, I think, at this point or whether it needs to be enhanced so that mitigation can be done for all the species that are covered in the program.

I think I'm just going to turn this over to you, Bob, if you don't mind, because you've really thought this out as far as sea turtles and those are the ones that are most covered under the current program.

BE I think what we had intended to do was just provide an example of a minimization and a mitigation measure for each species group to start discussion on if we implemented that measure, would we need to have any statutory changes. For sea turtles it's pretty straight forward. For example, if we put a minimization measure to limit the period when construction could occur, which is already being done – no construction during sea turtle nesting season. The only caveat there is that currently in practice what's happening is that there's consultation with FWC, and they're looking primarily at construction impacts, or those direct impacts, trying to minimize the impacts that occur at the time that something is built. But whether or not those minimization measures could be applied to indirect effects, things that occur remotely either in time or space to that actual construction. An example of mitigation that we might adopt would be establish and maintain vegetative light screens between buildings and the beach to provide light buffers. And 161.053(4)(f) allows the department to impose certain mitigation. And after lengthy conversations with Gene, he seemed to think that they pretty much have broad authority to do whatever they need to do in the way of assessing or implementing minimization and mitigation measures for turtles through existing statutes. We got into the mitigation fees issue, and he thought that 161.0535 authorizes the department to collect fees to process permit applications, but that probably does not extend to assessing impact fees. So that's an issue of concern. And if 161.053(4)(f) does allow that, is that specific to that project? In other words, what we would probably have with the FBHCP is the big picture and we will have developed a mitigation framework and impact assessment structure that applies to the while plan area, and not specific individual projects. So can you assess somebody a fee for their particular project, which is broader in scope, in other words you're trying to accommodate a lot implementing the plan, all these costs associated with the HCP, they might be assessed a portion of that even though their thing is only limited to geographical area. So these are the things we're trying to point out to initiate some discussion.

One of the other things that we're grappling with is how to control these things that occur further in time and space than the CCCL permit expiration, because they're construction permits not operation permits. So the issue that Julie brought up earlier about putting certain conditions on facilities that might limit what they're allowed to do with pets and that sort of thing. Right now that would be a problem, because once the permit expires, there's no more constraints. For example, lighting is built to certain specifications, but after that CCCL permit expires, you might have change in ownership and somebody comes in and retrofits their lighting. How do you ensure that stays in compliance?

The other issues are what statutory changes are needed? We're just looking at this to entrain activities currently exempt in statute, specifically they're listed as exempt from having to get a CCCL permit. In other cases there are non-regulated activities, and what if we want to use those as mitigation? Would that mean any statutory changes to authorize the department to do that? Beach furniture is one of those examples of a big issue that's unregulated. Monopole structures is an exempt activity that could have impacts.

The most problematic issues so far, we think, are lighting and beach cleaning. Beach cleaning, according to Gene, falls into a gray area. It's something that the department permits, but if it's just simply for removing refuse from the beach it shouldn't be regulated at all. But if the activity causes impact to the beach and dune system, then it should be regulated. Some people would say that repeated beach raking in areas does cause impact to the beach and dune system. So those are the primary issues we're looking at with sea turtles. We think existing statutes provide pretty broad authorization for the department to authorize minimization and mitigation, although there are a few areas that require clarification

SD Do you all prefer to go all the way through before asking questions?

TE Yes, unless you would rather go species by species.

SD Well with beach mice and shorebirds we run into a different situation because they're not specifically mentioned in statute. So the concern is do we need authority to minimize impacts. And we just put a few examples in there, like amend 161.053(4)(c), which is the turtle reference, to allow for minimization of impacts to beach mice and shorebirds as well as sea turtles. And then we have some suggested language that would add 'all of the species in the HCP' rather than just add beach mice and shorebirds.

BE This is kind of nuanced, because one of the first things that I suggested is maybe there could be language added that would allow the department to impose minimization and mitigation measures for any species within the plan area that's currently listed as threatened or endangered under the ESA. We have a while suite of species that aren't currently listed that we have minimization measures in place for. So the wording would have to be somewhat different than that. So that's something to toy with.

SD And in order to be able to require mitigation for beach mice and shorebirds we would add to 161.053(4)(f) which currently allows for mitigation of impacts just to sea turtles. And we would suggest to allow minimization of impacts to shorebirds and beach mice and, by reference, mitigation of impacts would follow automatically.

Other issues identified are some of the same ones that Bob brought up with sea turtles: indirect impacts persisting after CCCL permit expiration; unregulated activities; and exempt activities. So those are the same and would have to be addressed at the same time as we address those issues for the sea turtles.

Then we give a few examples of potential minimization and mitigation for beach mice. Kim, did you want to discuss those?

KC Well this is just one example of a minimization measure that could be incorporated for beach mice in particular, above and beyond minimizing the footprint of impact. One minimization measure might include planting native salt-tolerant vegetation around the building instead of ornamentals. And this is pretty much in line with what DEP requires anyway, so it's not anything new and drastic, but it is a minimization measure for beach mice. And then an example of potential mitigation for beach mice is establishing a mitigation bank for acquisition, restoration and management of beach mouse habitat.

TE Clarification here for me – are you all indicating that that would need to be in statute? Or are you giving us a background on what might happen outside of statute?

KC I think this is what could happen as a result of statutory change.

BE If we do this with existing statute, could the department do that?

MF We're not certain. Mitigation banking, for instance, came up and we're not sure if that's legally allowed.

TE I didn't know if you were proposing this exact language.

KC No, these are just examples.

And some examples for breeding seabirds and shorebirds, something that's already been done within the Beaches program, but not necessarily within the CCCL program, is marking and flagging colonial nesting with a buffer where no CCCL activities may occur. Typically that buffer is about 300ft. And then a possible mitigation strategy might include some sort of incentive for permittees to maintain blowout areas that naturally happen, rather than replanting them with vegetation. Also, possibly encouraging nesting in those areas by placing decoys.

SD At this time we welcome any comments or questions from Steering Committee members.

- BM 161.053 calls out in the beginning what the department's task is. Isn't that where you need to stop trying to hide things in the statute and come right out and say 'include protection for state and federal listed species,' or whatever you want to say, to capture the spectrum of species in the HCP and include protection of their habitat, because I think that's always been a weakness. You know, you'd say, well we've got all these ways of applying a little of this and little of this to protect turtles, but it's not really clear. So it seems like if you put the right verbiage right up front, then you can establish protection through various measures through the rule.
- WG I don't think you're necessarily hiding it throughout the statute. That first bit of language is the general purpose of the control line program, and I would characterize it as intent language. Intent language is generally not enough to justify rule making under our current interpretation of what has to happen during the rulemaking process in Florida.
- RT I think that's an excellent point, Brett, because there is language throughout the statute that says 'protection of the beach dune system'. Gene and I have argued about this since the 90's. There's no definition of the beach dune system, as I recall, in statute. So just amending that definition to include the natural system, that would be more than just intent language, wouldn't it?
- WG Yeah. Does everybody understand why the statute needs to be changed?
- TE Are we all in agreement that the statute needs to be changed to accommodate what we're talking about?
- All Yes
- GA I think we as a Steering Committee need to make it clear that statutory changes should be as pinpointed, surgical, and limited as possible. And then we go to the legal staff to make those changes to accommodate what we need in that kind of way – surgical and limited. I think that should be a really high priority. West, the question for you is, how do you accommodate what Brett is raising with a word or two, and where would we put it? One slide up there showed you could do the nature and timing for sea turtles. Is it, in your opinion, if we were to include the language that was up there for other species protected in the HCP, is that the best way to do what I'm talking about?
- WG I think figuring out what statutes need to change without knowing what you want to do yet is premature. I know you guys want to do turtle and mice and birds and yes, those things need to be addressed in there. If you know what your minimization and mitigation requirements are going to be, then we need to evaluate what statute needs to be changed to do that. The CCCL program does not contain an operational component, nor does it cover endangered species outside of sea turtles. So those are the kinds of things we would need to address. So if I knew what you guys want to do, I could – myself or other staff – work to make that surgical change to statute.

- TE Again, I don't know any of these statutes very well. I've heard differing discussions and thoughts on whether the current statutes would allow us to do the type of things that are being put up there. What I heard you just say is no, that as long as it's outside of sea turtles the current statutes aren't going to allow that to be implemented.
- WG That's correct.
- TE So I think that's one basic thing as a Steering Committee we're trying to wrap our minds around, and then once we have more detail on what the actual measures are, figure out the best way to do it.
- WG A JCP legislatively combines three regulatory programs. You have your 161 coastal construction, your ERP and your sovereign lands authorization. So we're able through our JCP program to capture those parts of ERP, like operation and maintenance, and we're given the power to look at all animal species, not just turtles. But CCCL is not a JCP; it's a different program. So mice and shorebirds and operation and maintenance are not covered by the CCCL program. On a broad 10,000 foot level, we don't generally make the law. We are given the power from the legislature to enforce the law. We do serve a quasi-law making function by doing rule making, but we have to be given that power from the legislature. In Florida, there are very tight restrictions with what you can do with rules.
- JW I think what Brett and Robbin are proposing is very good, and I like the fact that as things shift it gives the ability to accommodate wildlife management through the CCCL program. I have always had concerns with DEP's assertion that they don't have any responsibility for anything other than sea turtles, because FWC has constitutional authority over wildlife in the state. And I truly believe if FWC says to DEP, we really need your help on this, we need you to work on your permitting program and make sure it's not impacting wildlife, that mechanism already exists. If the individual members of Florida's public are subject to FWC's constitutional authority, I don't understand why state agencies are not. Now we can argue back and forth on this all day long, but I do think that this helps to give DEP what they need to feel comfortable in doing, frankly, what the wildlife requires. And Robbin's completely right, these wildlife are inherent to the beach dune system. It is a system; it's not just an organic collection of sand and plants. I would hope that it would get us back to the intent of that statute. I personally don't think that DEP has to play mother may I with the legislature over wildlife if FWC enlists them under their constitutional authority, but if providing that redundant system makes it easier, then let's do it. And maybe that's where we need feedback from DEP; how can we best empower you to make it possible for this to move forward.
- DI I would defer to West here, but to me, 161 only references turtles and no other critters.
- JW Right, but it may. Silence, in my mind, does not necessarily imply exclusivity. I think that it is particularly calling out sea turtles, saying somebody in the legislature cares about sea turtles and we want to make sure you're especially paying attention to them.

But the people told FWC you're in charge of wildlife and we expect you to engage on behalf of wildlife constitutionally. So I think there's that expectation there for the agencies to work together.

- DI And on the connection between FWC's constitutional directives and how that related to DEP's authority, I don't understand how FWCs constitutional directives carry over to our authority under 161.
- MY Julie's right that the other species we're talking about are species under FWC's constitutional authority, so it's different than when we're talking about turtles.
- TE I just want to make sure everyone is clear that FWC does not have constitutional authority over sea turtles; the other critters we do.
- GA When the constitutional amendment passed, the legislature has to pass an enabling statute to implement the constitutional amendment. That enabling statute says, and I'll paraphrase, the Wildlife Commission has the constitutional authority over all wildlife except threatened and endangered marine species.
- TE This is why we need to be all in sync and think this through and have a solid game plan for how to move forward.
- MY The second thing is that FWC has very broad authority, and West's comments about restrictions on rule making and it being simply a flushing out the details of statutes, that's not the case for FWC's constitutional authority. We have tantamount to legislative authority, we're acting under our constitutional authority. However, that's not to say that we can step in the shoes of the legislature and just direct DEP, and to me that's what you're suggesting. Honestly, the answer would lie in litigation, and that's not been litigated. So the extent to which we could somehow expand what DEP could do with respect to an existing legislatively created permitting program to minimize impacts to species' that we have constitutional authority over is just an unknown.
- WG And we can't impose on our applicants requirements that we aren't directed to impose on them, basically.
- DI It seems that FWC's authority is very broad, except that it does not include rule making authority. So you have to rely on DEP's rules to implement some of the protective measures that you have the authority for, and yet DEP can, through rule making under the statute that authorizes them to.
- JW I guess what I'm saying is it's good customer service to instead of making them go through more than one system, to go through one system. And some of that requires FWC and DEP to work together to make sure that wildlife needs are being met through the CCCL program, rather than telling the applicant you're giving them a permit but they might be in violation of law.

- DI Yet our ability to work with FWC in terms of requiring applicants to do things is limited by our rule making authority.
- JW So Mike's right, it'll have to go to litigation. It's creating redundant statutes – well, I'm calling it redundant; it's probably not.
- BE I just had a basic question – West, you said you'd need to know more about the specifics of minimization and mitigation efforts before you could decide which statutes have to be changed, but those don't lay out any minimization or mitigation measures for turtles. It's very generic and says you have the ability to do that.
- WG Yeah, we do have pretty broad authority to require minimization and mitigation as part of our application review.
- DI And we wouldn't be filling that out and attaching it...but the linking in of the species that are not currently covered, and then linking in of the ability to require minimization and mitigation, and in terms of the world of what we want to do. If we want to start charging not just permit fees but impact fees, our ability to charge fees is connected to whether or not we have the authority and what we have the authority to do.
- WG And something else about the fees that came to mind is that if we're going to charge an impact fee, it needs to be tailored to have a nexus to the impact of the same cause and be proportionate to that impact.
- GA This is a big thing we're trying to do here, and maybe we should try to break it down a little bit into what's easy to accomplish and what's not. And since you have broad authority over turtles to minimize and mitigate through your permitting process, if that language just incorporated the HCP species, that takes care of a lot of what we're trying to deal with. Then there are those minimization and fee charging issues that are separate that we need to separate out as needing statutory changes. But a whole bunch of what we thought would be needed statutory changes would be addressed by adding HCP species in that original 161.053 language. So then we need to know what minimization measures beyond what's allowable by that change need statutory authority. Is that correct?
- WG I think you guys are interested in doing maintenance and operational type activities.
- BM That brings me to my questions. When you set up a JCP, is that a legislative action?
- WG Without a doubt.
- BM So what's wrong with having a joint coastal control line program?
- DI Well, you're on to something there. Could we just connect 373 to 161.053, and therefore we've got the species covered in terms of threatened and endangered.

- WG The JCP statute is 161.055, and to be a JCP you have to have all three things. Most CCCL permits are not on sovereign lands.
- DI What usually bumps something out of JCP and into the CCCL world is that CCCL activities can't extend seaward of the mean high water line. And back to what you said a minute ago in terms of what kinds of statutory changes do we need to make, and if we had it our way we'd change all these portions of the statute versus well at least to get started on implementation before maybe an adaptive management plan kicks in then we at least have to have these changes. That tiered approach, that's exactly what we talked about in September when we were discussing this. And this presentation is a good start, but in terms of this is the absolute minimum that we need to implement the HCP, for example including shorebirds and beach mice, that kind of has to happen, that change right there. And then all the other changes are incredibly helpful and potentially mandatory.
- GA Like converting the permit to operational.
- DI Yeah, so you shoot for the stars and settle on the moon. You can shoot for everything, but you also have to know the minimum, because once we get into legislative changes and working with all the stakeholder and lobbyists and various legislators, what we want to happen gets changed. So we need to know the bare minimum that needs to be changed in statute versus what would be needed to implement everything in the HCP.
- GA We talked about this last time. Is a tiered approach on legislative implementation a possibility that would be accepted by the federal agency and does it come under that category that Kat explained in great detail about adaptive processes?
- BE This is that big picture that we were going to suggest that discussions at higher levels in the agencies should occur. It's my understanding the applicant proposes what it's seeking incidental take coverage for – what area, which species and so forth. So to go in with this full blown plan and then ask the Service to issue an ITP just for these species until you implement these regulations, my feeling was that is not something the Service would be receptive to.
- GA But the Service doesn't really know what we're talking about here. We're talking about when you put that language in there to incorporate the other species, we capture most of the minimization and mitigation measures that we want to capture.
- BE But you're asking for incidental take coverage for these species in this plan, but we don't have the statutory authority to implement these measures for their protection.
- GA But you could put that in there.

- WG They're not going to give us the permit unless we have statutory authority to implement it.
- BE But you could have a schedule. You can say by this date certain we will have these statutes in place. I've seen that in other HCPs, although nothing on this scale. But you could have that. There would have to be some certainty in there that the changes would occur, which you're not necessarily able to provide.
- GA I don't think you can provide certainty from the legislature on anything.
- BE But the Service isn't going to authorize incidental take if they don't have assurances that you can implement the measures that you propose and you can fund those measures.
- JM Brian, can you give us the Service's perspective on that?
- BP Yeah, it's exactly what Bob just said. We do have conditions that will allow things to occur at a point in time after issuance of the ITP, but there are also measures put in place that if those things don't happen, then the take coverage that's provided in the ITP goes away. So we're granting that conditioned approval with the understanding that those changes are going to occur for sure, otherwise, take is not provided.
- DI And the take that would go away would be just for that one species or the entire ITP? You know, if we have multiple species in it, but we only have the authority currently to implement for sea turtles and the rest are dependent upon changes, if those changes do not happen, are we also losing the ITP for sea turtles?
- BP My gut feeling is that we could probably provide take for sea turtles, but that would mean that any permits issued that would result in take of those other species, that take coverage wouldn't be provided to the department, and the department would be issuing permits for take that they're not covered for and then be vulnerable to not being in compliance with the ESA and/or would have to not issue those permits any longer.
- GA I'm still not convinced you wouldn't accept an HCP that if the statute was already changed to incorporate all the species in this HCP, and some statute change was made to provide funding. If those two things occurred, couldn't the Service then approve the HCP under the adaptive policy that those minimization and mitigation measures that require additional statutory changes come down the road.
- LR I think maybe where some of the confusion is coming from is it is anticipated that the statutory change to incorporate those minimal changes to incorporate the shorebirds and beach mice will take some time. And that would probably be done after the HCP is completed. So I think the discussion is whether or not we can submit the application for the ITP to the Service prior to those statutory changes.
- BE Any changes as all.

LR Right.

TE In my opinion, the Service would have to be convinced that not getting everything up front meets their whatever they need for meeting the ESA. And the challenge to me is how do you pick one species out of a multi-species approach? To me, it's going to have to be a tradeoff – we talked about beach access, dune conservation versus potential impact on the beach – having all of those species at play and creating a mitigation approach that draws off of all of that is how we're going to get there. And once you start pulling individual species out it's going to get harder because mitigation for individual impacts is going to get a lot higher when you don't have the hundreds or thousands of other ones to offset that.

So those are all assumptions on my part. So I think the Service could do what you're saying, but we would as a state, DEP, would have to meet the minimum requirements for ESA with whatever we're bringing forward to them at that time, and then the adaptive approach would be extra, and they would have to make the determination whether we're getting what they need for ESA.

BP That is exactly correct. For the minimum requirements of ESA and what our issuance criteria for issuing an incidental take permit says that the permittee must have regulatory authority over the permitted activities for which they are seeking incidental take. Right now DEP has and meets all those requirements. So that basically you're asking for incidental take for the department's issuance of CCCL permits, which the department right now currently has that regulatory authority. From the Service's stance, that's all that's need for us to issue an ITP. How you implement the mitigation and minimization measures on your end, is completely up to the department. As the service, we issue permits daily to permittees that do not have regulatory authority over wildlife species. We issue those permits to counties, to private individuals, private landowners. They don't regulate the species, but they have the regulatory authority to do what it is that they're asking permission to do in the permit. And then they, in turn, implement the mitigation requirements that are set forth in the permit.

So what would happen is the department could submit the application. We agree to all the terms and conditions of the minimization and mitigation, and we issue the permit. Now, if we issue the permit and the department continues to issue CCCL permits, but they do not implement the minimization and mitigation measures that we agreed to, then the department would be in noncompliance with the ITP and then the take coverage would be removed.

TE Another way of stating what I think we're trying to talk about is you just said whoever is being permitted, from the Service's perspective, has to have authority over what they're going to do. Currently, we're saying DEP doesn't have authority over anything other than sea turtles and arguably not full authority there if you want to get into operational things.

- WG Actually, I don't think that's what he's saying at all.
- MY There's a difference between having the authority to regulate the activity that has the impacts versus having the authority to require the minimization and mitigation measures that would ultimately comply with the permit. So that's the distinction he was making.
- JM So you're saying regulating the activity versus regulating the impacts of the activity?
- WG No. We have the power to issue CCCL permits. He said that's all we need to have to get our ITP. We're saying, to do the minimization and mitigation measures required by the ITP, we need special added power in the statutes.
- TE And, Brian, what I hear you saying is the Service would be willing to authorize that without DEP having shown that they have the ability to fully implement the avoidance, minimization and mitigation.
- WG Right.
- GA If you have the authority over all these species – if we tweak the language and you have that authority – then you can do almost all of the minimization and mitigation that is required. We just need to isolate out which ones need statutory changes.
- BP So the question I have, and I'm not clear on that, this statute [161.053(4)(f)] doesn't say anything about a species, but it does say that the department may, as a condition of granting a permit, require mitigation. It doesn't say anything about tying that mitigation to a species. It may be my ignorance to the law and the way that these sets of statutes are set up that this may refer back to something else that says that it is tied to a species. But, to me, that seems like that gives the department the ability to do everything that we're talking about doing.
- BM The difference there is the department there can't have these conditions for the protection of species that they don't have the authority to protect.
- TE So this clause is limited to what DEP has the authority to do, which currently does not include anything outside of sea turtles.
- WG It would be the mitigation for the impacts that we're allowed to regulate.
- GA Can you put up the slide that has the potential language change that we're talking about?
- JW Are we anticipating that it'll be much easier to get that changed as opposed to getting that changed and getting what are, frankly, technical changes? Because I both of those are pretty big, legislatively, and as long as you've got that momentum, I'm somewhat inclined to just tack on the additional stuff and just get it all done. Part of it is just an

education aspect, which is going to be a big hill to get over, and as long as you're doing the education, why don't you just add...or you could just do some in that first package and then add more as you work more with the scope and develop it.

GA That's a valid question and the type of strategizing you have to do...

JW I'm just curious why you would carve them off that way.

GA Well it just seemed to me that that proposed language is really tidy, and that's 80% of the way there.

KC JCP permits have conditions related to shorebirds and beach mice, and where do they derive their authority?

WG 373

KC Is there a way for the CCCL program to tie into that?

WG That was what someone had suggested, but we could use what we currently have because to be a JCP you have to have the three things.

JM And that was the sovereign lands issue.

BE We had initially talked about a tiered approach and what's the first most important thing. And, obviously, I think the minimization and mitigation component, which we think we can simply be changed here, is one. And assessment of mitigation and impact fees or funding the program is another. And there's one element that we haven't talked about which is solicitation of county participation through MOUs, and I don't know if that requires anything. Are there any other components of this that might require statutory change that we haven't put on the table yet?

DI In terms of county involvement, my understanding based on the conversation we had earlier today is that that would be on a voluntary type basis as far as minimization and mitigation efforts, so I don't see that necessarily being in statute. But the third component – you mentioned the species, you mentioned the beach – the third component is the operational functionality of the CCCL permit, which currently does not exist. So those are probably the three biggest changes from my perspective.

BE And this, being the first and simplest one, the one thing I wanted to point out is that the inclusion of marine turtles in this section seems to be derived from another statute. And I'm wondering if there has to be a similar statute for these other species to be able to have that authority to include those in there.

WG I don't think so, because that statute 379, the Marine Turtle Protection Act, tells you how to review the conditioning of nature, timing and sequence.

- BE So that's a reference to specific elements of that.
- WG Yeah.
- BE Very early on when we started talking about statutory changes, one of the things I think we explored with you was something at a higher level where the legislature would give authorization to the department to develop rule to allow the implementation of the FBHCP. It's pretty broad in general, and there'd probably be a lot of pushback from that, but is that an option?
- DI Can you repeat that?
- BE Just statutory authority to allow the department to implement the FBHCP.
- KF I thought the other approach was that the beach coastal system includes the native fauna and flora, and amend that to actually state that in the statute. It's a truism, but it doesn't currently say it. So then when you talk about anything on the beach coastal dune system, you're not just talking about sand and elevation; you're talking about the things that live there. Would that be in addition to this? The thing I'm thinking about is that kind of locks it into a certain number of species that are captured at this time, whether they're federally listed at this time, and it sort of limits things. So I think the broader, better approach might be to just acknowledge that the coastal system is its biotic community. Would that not give you the authority?
- WG It expands the number of species you're looking at.
- KF Well it expands the universe of species you can consider, but you have an HCP that's submitted that outlines the species you're dealing with. But it allows you the authority to then do those things for wildlife.
- BM Just to throw something else out there – I wonder if there's any risk of actually tying it to the HCP, and kind of like Kipp is saying, make it more general. First off, if you tie it to the HCP then there has to be an HCP, so that means you have to wait until it's all finished. Whereas, maybe you're introducing protection to find a way to get state and federal listed species...let's continue to change just like expected species for under an ERP. If all of a sudden there's an HCP, there might be too much attention on that HCP and it might be difficult for the legislature.
- RT CCCL permits include a condition that directs the permittee to comply with all other state rules and requirements. Is that correct?
- WG That is correct.

RT But would you have the ability to tell them how to do that? Like, could the Migratory Bird Treaty statute be a part of BMPs? Is that a potential way to streamline it?

WG I think that's more of a CYA that we put in there.

DI But then that would put us, as I understand it, in the role of being responsible for enforcing those BMPs under some other agency's authority. That would turn DEP into the enforcing agency.

RT Another thing is your application process requires a letter of local approval, right?

WG Right.

RT That is consistent with the comp plans. And all the comp plans have species protections in them.

BM It's consistency with zoning in the comp plans.

RT Okay, I thought I'd try.

TE Other questions or comments?

BE If indeed you think you have the authority right now to enter into memoranda of agreement with local governments without any statute changes, to me it almost comes down to two tiers. We've got the initial minimization and mitigation for those other species and the ability to collect some kind of impact fees to fund the program. The operational nature of the permit, I think we can work around that. The preference would be that you have the ability to do all of that, but you could work on that over time. We'd have BMPs for lighting, and we'd work with local governments to get them to enforce local lighting regulations. I think there are ways to work around that. So you could basically go after these other two components. This one seems pretty straightforward, and then the mitigation component could be a bit more complicated.

TE My thoughts on this discussion is we're still feeling around the edges of the issue and that's why we asked the legal team to be here; thank you all for coming. It sounds like we've got a resounding yes, at least from the state perspective, that DEP needs some level of statutory changes to be able to try to do what we're talking about here. I don't have clarity on how that happens. I can tell you that making that happen, it's not an accident that FWC doesn't have constitutional authority over sea turtles and other critters. So getting consensus on what we need to do and how to do it is like 1%, and the other 99% is how do we mobilize an effort to get that passed and how do we synchronize that and do we start that now or wait until the HCP is done or closer to being done. To me, those are the discussions that we need to start having.

- KF I think the timing is interesting, and also a lot of things could change federally. Experience has shown that when your work is done and you celebrate and hand over the final HCP for the Service's consideration it takes a long time to get that approved. So you may have multiple years that you may start building the strategy, and if you tie it to the HCP they're going to say, well I want to read it, but if you tied it to other species things then you could start a strategy that might take two or three years or legislative attempts while you all are building it or while the Service is reviewing it.
- MY There's one possibility, too, what I hear is you build in the general, like the ERP program where it just talks about fish and wildlife generally. Or the alternative is what you're saying with tying it to the HCP, but there's also a middle ground approach where you tie it to species that are covered by some HCP. If it's tied to protection for anything that's subsequently covered, that might give some comfort, and it's not to say that this is going to be the only HCP in the future.
- DI I'm curious as to how many other HCPs actually cover species that aren't listed? And I bring this up because when DEP and FWC have to try and convince the legislature to include these species, it's going to be an even heavier lift to include species that aren't listed.
- BE The Wilson's plover is the only one that's not either state or federally listed. But the notion for including those non-federally listed species is because of their current status it's likely that they could be listed over the term of the ITP. So we wanted to go ahead and capture those minimization measures. The mitigation does not have to be implemented until the species is federally listed, but you do want to try to minimize the impacts so that it never becomes listed. So we included those species that are likely candidates for future federal listing.
- TE Jennifer and other work group folks, my recommendation is we need to continue to crystallize our thoughts based on this discussion and get the right subset of people together to talk about – and I think we had pretty good clarity on there's three main things – and talk about the best ways to do it, create options, maybe get with legal, get with some of our legislative staff, and just try to move that forward and have another discussion either next meeting or whenever's appropriate. Is that enough for you all to work off of, or are you looking for more from the Steering Committee?
- TO Are you giving us the okay to bring in legislative staff and legal?
- KF Internal staff.
- TO Yeah, I just meant internal.
- BE I think this has helped clarify what the issues are.

- TE Just a reality check, we're starting to work on not the current session but the next session, so it takes a lot of work.
- DI The other point I'll make in terms of when we start talking to legal aides and legislators themselves, and I'm not sure who the appropriate agency is to prove this, and I would not suggest that it's DEP, because it's a problem and we have to convince them that it's a problem. And it seems to me that convincing is FWS's domain because they're the ones who brought this to the state's attention that there was a problem to begin with.
- JW It probably makes sense for all of us to hold hands together on this and show that it's a shared problem and we recognize it and want to resolve it.
- DI I agree with you Julie that we all need to say together that this is a problem. But there's been a lot of turnover at DEP, so folks that have that initial presentation by the FWS that this is the problem and here's the proof...and the working group should, over the next couple of years, put together an education package for legislators that says this is what the problem is, this is the proof that there's a problem and this is why we need the HCP.
- BE And that's on the schedule; that's something that we anticipated. We've got the HCP primer, which discusses the problems and talks generally about the need to preserve species and why the program's important and all those things. But it doesn't focus on potential rule making or changes in statutes that may have to occur. There is a piece in there, right Sally?
- SD Yes, it's on the schedule as part of our outreach task to put together a packet or whatever is appropriate. But I think we need to work with your in-house legislative people and legal staff or whomever to frame that just right.
- TE The challenge is the chicken and the egg. We haven't gotten far enough yet, so it's hard for us internally for our legislative folks to tell us this is how you go about informing and setting the stage. So the sooner we can get clarity on what the ask is, I think we can start doing the prep work for how to lay that messaging out in a way that leads to success.
- GA Is there a way we can sort of institutionalize this discussion into our Steering Committee meetings so that we can have at least an update on the legislative conundrum?
- TE I agree that we should at least touch base on this issue of the statutory changes needed, what's our status, do we have clarity. It might be a five minute chat or an hour chat. And then as we move into a year from now, or whatever the timing is, and there's legislative activity, then I think the Steering Committee will be integral to make sure we're all trying to stay in sync.
- BP Something else I wanted to suggest is that David Dell, our regional HCP coordinator, wanted to be on the call today to answer some of these questions that I don't have all the answers to and that need to come from a higher level, and he also suggested that we have

one of our solicitors participate, however he is in training today and couldn't get away. So maybe we could have an agenda item for the next Steering Committee meeting so that he could participate and answer some of the higher level questions.

TE I think that's fine, and I'm pretty sure that we already had it scheduled as an agenda item. So Brian you can work with the work group to sort out the next agenda and how all that's going to come about.

MF What I understood from this conversation is that we have pretty good clarity on the major legislative changes. But in order to cue up the legislative process, is that all we're talking about, or are we talking about showing them the incidental take numbers to identify the problem and the extent of it?

TE I think we'll have to sort through all that. Until we know who and when we need to convince certain people I think, yes, everything will be in play.

DI And part of that framing up of the issue and establishing what the fees are and what the take levels are for these activities before we even go outside to the legislative community, we need to take that to our upper management. So this is a stepwise thing that has to happen.

TE Any other final comments, questions, thoughts on legislative or statutory needs?
(none)
Jennifer, anything else you wanted to discuss before I start winding us down?

JM No, I think everything else that we still had on there was just a continuation of the statutory talk if we needed to extend into that. But if we're finished early, that's okay because I know a few people have to leave early anyway. So if there's any other issues or anything that anybody wants to discuss, we have extra time.

BM The discussion about county involvement – I think a similar train of thought needs to be given to that as well. For anybody that's going to volunteer, they need to understand that there's a liability there, and that has to be explained to them.

GA A lot of counties realize that because there's already a lot of county-wide HCPs.

TE I assume the work group is capturing things from this meeting and taking note.

JM So from this meeting I have a couple things. For the next Steering Committee meeting we'll work on defining tasks for the economist(s), then report back to the Steering Committee on that. The Steering Committee also suggested that we set an early focus on the cost to the public and the agencies. We will provide a briefing on the draft BMPs at the next Steering Committee meeting, as well as make a recommendation to the Steering Committee about a reorganization of the scientific committee. Mike will have an update on sea turtle take by the next meeting as well. We'll continue our legislative discussion

at the next meeting on some of the legislative issues after we, as a work group, have a chance to go over the outcomes from this meeting. And we'll also continue discussion on county involvement. The next Steering Committee meeting is scheduled for February 25.

DI Last meeting we had some discussion on the commission, the department and the Service upper management getting together and talking. I think one of the things we talked about was putting together a presentation, which is starting to sound like this framing up the issue presentation. Do you have a timeline on that? I don't think we set a timeline last meeting, but we could ask the work group to prepare something that would be viewable first by the Steering Committee.

JW I thought you guys already had a meeting scheduled.

DI That was a different meeting, but I do owe you all an update on that. But I'm talking about a meeting specifically to discuss the HCP, and it would include people like the Secretary and the Executive Director. So I'm wondering if the work group could put a presentation together for them, but we, the Steering Committee, would see it first and make suggestions and then the work group would take it back and tweak it some more. So we could refine it over multiple Steering Committee meetings. And I know with this legislative session, coming in March and April, that we'll likely have a change in upper management, so I wouldn't want to brief this existing upper management only to have to do it again next summer. So in terms of timing, if I could even suggest that over the next maybe two Steering Committee meetings, or at the most in six months is we could see a draft presentation framing up the issues. And then that leads to nine months later us seeing the results of that feedback, so that by next year we'll be ready to have this meeting with upper management.

TE I'd be willing to move it faster than that. Can we shoot for a draft of the presentation at the February meeting? Maybe just take 5 or 10 minutes to talk about it just so it stays on our radar screen.

KF My recollection of this is it wasn't just here's what an HCP is and why we need it and where we're at, but it was more of here are the legislative changes that we'll need. So it's not just to talk with leadership about why an HCP is a great solution for a difficult problem, but in order to use that great solution it's going to require legislative changes.

DI Absolutely. Here's what the issue is and these are the changes that will need to happen and we need the people that we're presenting this to to be behind it to move forward with the changes.

KF So the clarity of the proposed legislative changes, we made some progress today, but there's a lot of progress that needs to be made. We need to be very clearly on exactly what is needed or is proposed to be needed before we have this meeting. We need to really hone in. I'm seeing specific draft language, pros, cons, unintended consequences, all those things, and try to have the work group really narrow down on some options for

the Steering Committee to say, okay I've really seen them now and you all can decide okay this is the way to go, so when we get together with leadership it's really kind of a very tight proposal.

- BE I'm not sure I'm completely behind that, not that I need to be. On the legislative side of things, we can discuss it and toss it around and everything, but we need feedback really. The Steering Committee should be directing us on how this stuff should be phrased as opposed to the opposite way around. That's the reason we wanted the attorneys in, to offer some suggestions on what might be the best way to go, what our options are. you guys have done lobbying before and we don't, or at least I don't personally, understand that side of things.
- KF I wasn't suggesting that the contractors were in this list for the next meeting. We've got Thomas, Jennifer, staff, attorneys on both sides, other staff that can take what we've done so far and start to flesh it out or also narrow it down, provide options, do some networking. That's agency staff. So next time the Steering Committee will have another crack at it, look at it again in more detail.
- TE I heard both. We need to pull the right players – attorneys, legislative staff, others – and then we'll be seeing multiple times as a Steering Committee to get it where it needs to be. Then be prepared for it to change a lot potentially even after that, because it never ceases to amaze me how the legislative process works.
- JM So we'll be working on that and have updates for the next Steering Committee meeting, and that's something that we'll be then including in the presentation on framing up the issues that Danielle was referring to. Would you be okay with an outline for the next Steering Committee meeting, since we won't have all those legislative issues finalized to be incorporated into a presentation?
- TE We're not talking about 100 slides. We're talking about 5-10 slides to key up the issue in a very concise, compelling way, and then another 3-4 slides on here's all the work that's happened over the last 8 years, and then another 5-10 slides or however many it takes to show here are the big issues at play legislatively, policy, otherwise. I think we can have all of that in a 20-25 slide presentation. And placeholder slides are fine, but just start pulling that thought train together and what major elements will be in there and just be ready to present that. And then you'll get feedback from the Steering Committee and then be ready to present a first real draft at the next meeting after that.
- MF It occurs to me that one time saving thing here is the beginning of those slides is probably the same thing we want to talk to the counties about, so the county outreach effort with the general problem set up...
- SD Yeah, we've done that. We've got that part of it.
- GA Danielle, did you want to give an update on the Singer island meeting?

- DI Yeah, I was just waiting until this discussion was over.
- TE Before we do that, is there anyone on the phone – public or others who have joined us – anyone have any comments?
(none)
Alright, I'll take silence as no one has any comments. Danielle, I'll hand it off to you.
- DI Last Steering Committee meeting I promised an update on the process of working on an interim agreement of sorts with the Service related to armoring in Singer Island. And since that meeting, the Service provided the department with their first stab at an agreement that would address that and included certain properties that they were particularly interested in and included siting recommendations that would become requirements in Singer Island and talked about the commitments of DEP, the commitments of FWC, the obligations of the different agencies, so on and so forth. We reviewed it internally, with our attorneys. We also reviewed it with FWC and then followed up with the Service. It turns out that there were a number of issues with the way it was worded, the requirements section, especially because a number of the siting requirements were essentially non-rule policy, and that was going to put us in a position of doing things that we're not legally allowed to do. So we made some recommendations to the Service and a commitment to follow up. In fact, our follow up meeting is next week. We suggested to them that we come up with a very finite geographic area that the interim agreement would relate to, specific properties it would relate to, best management practices for siting the armoring on the properties that are currently unarmored, as well as properties that were permitted but unconstructed. So we have sketched out an outline of what that agreement would look like, and we're working on it internally with DEP and FWC, before moving it to the Service next week. So we see that there are things that we can do to help in this interim process, particularly on this stretch of beach, and the ability for us to do that is tied in part to the fact that we have specific properties identified; it's not a statewide general requirement that we're trying to add without going through rulemaking. It's a very site specific minimization and mitigation type effort.
- GA I think it's important for us to pay attention to this situation, and as you draft documents that summarize the need for an HCP to try to convince others, this is an example of the kinds of situations we're trying to address in the HCP. So I think it's a good thing that this is happening.
- BM Is the county involved in that?
- DI That's a good question. I don't have an answer for you. The agreement that the Service sent over to us had put requirements on the department to make the county do certain things, yet the county was not a party to it. So we let the Service know that the county is either going to need to be on the agreement or the county requirements are not going to be a part of the agreement, because we can't force them to participate. So the Service, while DEP and the commission were stepping aside to think about what can we do,

because what they offered us we can't legally do, so what can we legally do, the Service was tasked with going and talking to the county. So when we come back together next week to figure out where we're at, hopefully the Service will be letting us know what the county's reaction was and whether or not they'll be a party to that.

BM The specific properties that are listed in there, do those property owners know?

DI Not yet. In fact, we just completed the list yesterday, so not yet. And I'll tell you there's three categories, the way we address the properties, which is and of itself may have unintended consequences. So the first category would be properties that have a wall, and they're pretty much off the table. Those are listed as excluded. The second category would be properties that have a permit, but have not constructed the wall yet. And those properties were identified only in the sense that if they wanted to modify or extend their permit or renew or reissue a permit that's expired if they had not yet constructed, that then they would have to come back into the department and they would be given an opportunity to voluntarily follow the siting BMPs that are being floated. And if they chose not to follow those BMPs, then they'd have to be reviewed on a case by case basis. And so the third category would be properties that were unarmored and unpermitted. And if they came in for an armoring application, then they would get captured by this agreement and would face the option of voluntarily following the BMPs for siting, and if you do that then you have certain perks that come along with that, and whether or not those perks hold up in the final agreement will be one of the subjects of the meeting next week. And then if you chose not to voluntarily follow those BMPs, then it's a site specific review, DEP consulting with FWC, and very likely FWC consulting with FWS. So that's where we're at right now.

KF So things that are going on in Singer Island provide that example for what the problem is. And in Singer Island, in particular, you have folks who have a valid state permit in hand and a letter from U.S. Fish and Wildlife Service saying don't proceed. So if there's ever an example of something you want to try to talk to legislators about a problem that needs fixing for the people, that's a bad place to be. So that provides a really good example of how you can make the case of why an HCP is needed. I think it's very interesting to see how the individual FEMA consultation plays out for just one condo, but if that played out and was found to be successful and they got their take, it could have implications on the overall of this group. Do you need a statewide HCP if individuals can consult on a project that they were previously not able to get take for.

DI And I think it may be a while before we really understand what the implication of the FEMA nexus might mean, not just to this HCP but to the overall CCCL program. It's not clear to me what that means right now, although I do know that it's something to watch closely and try to start thinking about in terms of the bigger picture.

RT Is it possible that if these are designated flood zones, that brings them under 373?

DI That's a good question.

TE For those of us who don't live in this world every day, federal nexus under ESA routes you from section 10 to section 7, which has very different processes. So if 90% of Florida has a nexus, then the need for an HCP goes way down. Kipp is not being dramatic when he says there could be very far reaching impacts from this.

Any other questions for Danielle on this? We're getting ready to wrap up, so now's the time for any other issues you want to bring up.

Well thanks, everyone. Y'all are doing a lot of work behind the scenes and bringing good product to us. I appreciate that, and I think we had a very productive meeting. I think we're getting a better clarity on some of the core issues. Particularly Amy and Mike, you all are helping solve some of the hardest issues and I appreciate your involvement, and I'm really impressed with the work. So with that, thanks again, everyone. We'll see you in February. This meeting is adjourned.

Adjourned 2:35pm