

# San Francisco Bay Conservation and Development Commission

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**TO:** Bay Fill Policies Working Group Members

**FROM:** Steve Goldbeck, Deputy Director (415/352-3611; [steve.goldbeck@bcdc.ca.gov](mailto:steve.goldbeck@bcdc.ca.gov))  
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**SUBJECT: June 6, 2019 Commission Bay Fill Policies Working Group Draft Meeting Summary**

**1. Roll Call, Introductions, and Approval of Agenda.** Acting Chair Commissioner Jim McGrath called the meeting to order at the BCDC offices, 455 Golden Gate Avenue, McAteer-Petris Room, San Francisco, California, at 10:37 a.m., and asked everyone to introduce themselves. Bay Fill Policies Working Group members in attendance included Commissioners Katerina Galacatos, Sam Ziegler, and Sean Randolph. BCDC staff in attendance included Deputy Director Steve Goldbeck, Shannon Fiala, Megan Hall, Jaclyn Mandoske, Brenda Goeden, and Anniken Lydon. Also in attendance were former Commissioner Ms. Patricia Showalter, Ms. Emily Loper of the Bay Planning Coalition, Ms. Ashley LaBass of the Bay Planning Coalition, Mr. David Halsing of the South Bay Salt Pond Restoration Project and Ms. Marilyn Latta of the State Coastal Conservancy.

**2. Approval of April 26, 2019 Meeting Minutes.** The Working Group members approved the meeting summary for April 26, 2019 as presented.

**3. Discussion of Staff's Preliminary Recommendation.** Acting Chair McGrath moved on to Item 3, Discussion of Staff's Preliminary Recommendation.

Ms. Hall continued: Thank you to everyone for being here. I wanted to note we have released the draft language. I wanted to congratulate all of us for getting there. It was a group effort and thank you for all the BCDC staff that worked really hard to get everything together. Also, the Background Report was released on May 24<sup>th</sup> and another staff report to recommend initiation BPA 3-19 which is very closely related to the Fill for Habitat Amendment.

We are going to present on that this afternoon. That staff report was also mailed out. So, congratulations to everyone who was involved, and I am glad that we met that milestone.

I will go over our upcoming timeline and next steps. Today we will be having that public hearing to potentially initiate BPA 3-19. Until next Friday June 14<sup>th</sup> we will be accepting written public comment that we will actually be able to address in the June 20<sup>th</sup> meeting.

We will still take public comment after that, but we may just not be able to address it at the June 20<sup>th</sup> meeting. On June 18<sup>th</sup> we will ideally be mailing the Staff Report for BPA 3-19 although depending on where we actually do find time for the public hearing on that this may shift.

We will have the public hearing for the Fill for Habitat Amendment at the next Commission meeting on June 20<sup>th</sup>. We will figure out when we are going to have the public hearing for Bay Plan amendment 3-19.

Commissioner McGrath asked: Are you suggesting we may want to cancel that?

Ms. Hall replied: We may need to because if we do end up having an extra Commission meeting on that morning to support other matters, since that afternoon July 18<sup>th</sup> is going to be the Environmental Justice Bay Plan Amendment hearing and so we want to leave that afternoon Commission meeting clear for that.

Commissioner McGrath asked: Do we need to make a decision on that today?

Ms. Hall clarified: On that cancellation?

Commissioner McGrath answered: Yes.

Ms. Hall responded: We probably should but we could communicate via email. I also think it may be difficult until we have the public hearing what the next steps are in terms of the Fill for Habitat Amendment because depending on the progress of that day how we can best engage with the Bay Fill Working Group after that date may vary.

Commissioner McGrath continued: So, if we can just leave it with the other members you are on notice that it might be cancelled and trust the staff to cancel it if necessary. Is that an okay outcome?

Ms. Hall agreed: Yes, it sounds good. Then depending on the outcome of the June 20<sup>th</sup> and potentially the July 18<sup>th</sup> public hearing on these Bay Plan amendments we may have additional public hearings and ideally, we would want to bring those two amendments to vote on the same day— hopefully sometime in the fall but that may vary depending on what we hear.

And so, were there any questions on this?

Commissioner Ziegler commented: I am working with Luisa and Jen to go through this and get your comments. How would you like those comments? Do you want us to get them in – how important is it for us to get them into you in writing to you by the 14<sup>th</sup>? Would that be best?

Ms. Hall replied: Yes, I think that would be preferred so we have time to process them.

Commissioner Ziegler further asked: And is that okay to be doing as a subcommittee or group member?

Ms. Hall answered: I think you could provide written comment.

Ms. Fiala stated: Well it wouldn't be coming from you personally. The key to the June 14<sup>th</sup> date is that we will email it out to our Interested Parties List. So that is the deadline that you would be missing if you turn it in after that. It would still be transmitted to our Commissioners.

Any public comments received after that date will still be shared, they just won't go out in that email blast.

Commissioner McGrath added: But it is relevant because as Commissioners making a decision and going through a public hearing and then commenting at that hearing you really want all the public comments. And it really is important to listen before you opine.

Commissioner Galacatos chimed in: I know for the Corps the District as a whole is going to be providing comments so most of this will work fine.

Ms. Hall asked: Any other questions on this slide? (No further comments were voiced) All right. So, with that we can get into the main thrust of the meeting.

Today we wanted to have this meeting on an off week because the last scheduled Bay Fill Working Group meeting was before we had released the draft policies, and the next scheduled one that had been was on the morning of the public hearing, and so we wanted an opportunity after we had released the draft policies and before the public hearing to check in with you and hear what you think, now that we have had an opportunity to actually run the draft policies by you. We want to hear in general any thoughts you have on the Staff Report and the Background Report – ideas about what we can strengthen, if you do see any red flags and then also start gearing up for that June 20<sup>th</sup> meeting, maybe hear about public comments that you anticipate, if we should be expecting public comments from your respective agencies, maybe hear if you anticipate any Commission concerns. This could be policy specific or broader. And how you think in the next few weeks we can best prepare for this public hearing and be ready for that day to make it as good as we can.

Ms. Fiala stated: I would just add to that list if you have any ideas on what we should or should not include in our staff presentation that will help us.

Ms. Hall continued: And so, I can walk through the policy changes at a high level if you think that would be helpful.

Commissioner McGrath stated: Let's do that.

Ms. Hall continued: We can go to the table on page five of the Staff Report. First, we have the Major Conclusions and Policies section. I can pull this up on the screen for everyone.

The Major Conclusions and Policies section of the Bay Plan is not typically used in actual permitting processes. It does just set the tone in general on fill and things like that. So typically, these two policies Policy 4 and Policy 5 –

Commissioner McGrath noted: They also articulate substantial, public-benefit tests that everything must pass. It is important to put everything in that context. It is somewhat akin to the public-interest tests in 404.

Ms. Hall agreed: Restoration, fill for adaptation, these things have not been included in the list of justifiable filling.

We did add one section here to include those kinds of projects.

In the effects of Bay fill section this language had been pretty harsh in terms of Bay filling before, making it sound like it was pretty much only negative. And we agreed that filling – of course we all recognized that it can be very negative, but it can also be positive in some instances. And so we wanted to tone down that language and make sure it was clear that this is a much more nuanced subject. It is not only good or only bad and you have to recognize that in some cases it can have negative effects. So that is how we changed the language here. Does anyone want to comment on that?

Commissioner Showalter chimed in: I wondered if you wanted to add on under 5, Effects of Bay Filling; if you actually wanted to add another one that said, filling that creates marshes or eel grass or oyster beds improves the water quality in the Bay. This is all pretty much negative and I was reading it from the beginning and things came afterwards. I really thought right up front we should state explicitly that there are good reasons for filling.

Commissioner Ziegler asked: Do you think the added policy “g” isn’t enough there? That is where you did that wasn’t it?

Commissioner Showalter opined: Oh, I think policy “g” is great, but I think under 5 we should have, you know we’ve got this A, B, C, D – I think we should have another one that says, filling that creates marshes as an example. These are examples and effects of the Bay filling. And we should have something that says the effect isn’t just bad it can be quite good.

Ms. Hall explained: We did go back and forth quite a bit on something like that internally but ultimately the reason we did go the way we did is because this whole introductory part was already structured so that Number 4 is talking about the benefits, and Number 5 is talking about the potential impacts. And so, we didn’t want to change too substantially especially because this section isn’t really used in issuing permits.

Commissioner Showalter stated: I think B, “filling almost always increases the danger of water pollution..” is just – I don’t think that is true.

Commissioner Ziegler added: Especially in terms of what we are trying to justify. We probably have a net, water-quality benefit.

Commissioner Showalter continued: I think you could say filling “may” increase -

Mr. Goldbeck suggested: Or “often” – I mean I think they are thinking the way it was written was in regard to somebody filling for other uses. They weren’t thinking about fill for habitat uses.

Commissioner McGrath added: And part of it is that fill had completely occupied the water body rather partially.

I understand your point. I am not supportive of that and there is a reason at this point. I think we want to start at the 30,000-foot level and open the door a bit but I don’t like the idea of singling out one particular kind of habitat in the Bay because there aren’t any ecological, empty zones in the Bay except maybe at the bottom of the Bay Farm Island borrow pit. Everything has some ecological value.

Commissioner Showalter agreed: Oh, true and that is why I listed three of them.

Commissioner McGrath continued: And trying to make absent some more comprehensive effort trying to value one particular habitat over another is problematic. I want to open the door to allow consideration of habitat modifications but they need to be based on relative scarcity, what is missing or under-valued, what is endangered and so I think – I mean it is true that marshes at the mouth of a stream will strip out contaminants but that doesn't necessarily translate to we are going transform mud flats into marshes. And that is a more complicated question.

Commissioner Showalter noted: Okay so we disagree. (Laughter)

Commissioner Ziegler chimed in: I think for me agreeing with both of my colleagues and then thinking too that at a point I mean this is just one word of a big document and so I am thinking about the overall tone and does it set an overall tone through all the policies that balances right. And I had some places like that which rub me a little bit, but I am going to try to look overall to see the weight of it and see how it balances out.

Like in the dredging and re-use section I have questions about that and it is just in the balancing thing and I am just doing that because (Ms. Goeden joined the group) Brenda came in. (Laughter)

Commissioner McGrath continued: The concern I agree with here is filling that eliminates water bodies. I think that is this.

Commissioner Showalter agreed: Well yes that is the problem.

Ms. Marilyn Latta commented: I just raised the question of the definition of "beneficial fill" and that term. What I am hearing is a clear differentiation between the type of fill that negatively impacts the Bay that we all want to make sure the policies still prevent and protect against. But the beneficial fill for habitat restoration is a differentiation that I was thinking would be made at this early stage in the document.

And that would not require - I very much agree with both of your comments. And Jim I think that wouldn't preclude any over-priority or focus on a certain habitat type but defining that term and the goal of it is to create habitat versus the goal of it to create a structure.

Commissioner Galacatos chimed in: I think we are all basically saying the same thing. And I think what you said early on that paragraph four basically lays out justifiable filling which includes those restoration, beneficial, re-use projects.

And five is pretty much just the effects of it of Bay filling overall. One of the things that we encounter a lot at least when we are doing our permitting, we have to account for the fact that you are putting in this fill and that is an impact but overall it is outweighed by the benefits of the project. It is good to acknowledge that there is this impact, but it is being offset by the project itself.

Commissioner McGrath added: There is always an impact.

Commissioner Galacatos continued: Yes, so I think it is important to differentiate the two but also to still acknowledge that even if you are restoring a site or you are creating new habitats there is still an associated impact for that. So, from the regulatory perspective I liked having those two, separate areas and differentiating between the two and not mashing them.

Commissioner McGrath noted: So, Katerina a language that would say – well fill always has some impact and eliminates or changes habitat but can be outweighed by benefits of some sort.

Commissioner Galacatos agreed: Right. It could be a self-mitigating.

Commissioner McGrath: I agree with that kind of statement. And I think that tones it down in a way that doesn't eliminate the protection.

Commissioner Showalter noted: And that is further in the report and it is stated quite well but it would be nice to add it here.

Ms. Hall clarified: Okay so everyone would want to see an even stronger statement beyond saying, it can provide substantial benefits but can also be harmful.

Commissioner McGrath stated: It always eliminates some changes to habitat.

Commissioner Galacatos opined: It is not so much that maybe the word "harmful" may be that there are still impacts associated with it and they are being offset by the overall project.

Mr. Goldbeck asked a two-tiered question: Or was I hearing that folks wanted to differentiate that fill to provide habitat can provide benefits or something? I am hearing you talking about teasing them apart. Is that what I am hearing?

Commissioner McGrath commented on the bifurcation issue: Well I hear two points. I hear first of all that fill can have offsetting benefits. And then the second point I hear is that there is a differentiation between fill that is intended to enhance habitat and fill that is intended to create vast land that is developed because that eliminates the habitat rather than changes it. And that distinction is not as clear as maybe we would like it to be. Does that capture the comments?

Commissioner Galacatos responded: I think so, yes.

Ms. Hall asked: Any other thoughts before we move on? (No further comments on this issue were voiced) So moving on to the Fish, Other Aquatic Organisms and Wildlife section.

Here in the findings we made some changes for clarity, changes to update outdated things like changing Fish and Game to Fish and Wildlife, other small additions as well. I don't know if any of you wanted to make specific comments on any of these smaller changes.

Commissioner McGrath had a question: I have a question under B with sediment concentration. What was the intent there?

Ms. Hall replied: I think it was just to note that suspended sediment concentration is also a key component of establishing the habitat that is needed for these organisms. To say that this is an aspect that can affect how well organisms can do in a given area.

Commissioner Showalter asked: Normally that is established by turbidity. Is that what you mean?

Mr. Goldbeck stated: It is the sediment that helps build and let the marshes keep up. So, they are both.

Commissioner Showalter responded: Absolutely. I mean it is both but when you are talking about it with respect to fish usually it is –

Ms. Hall interjected: Yes, we have gone back and forth between turbidity and suspended sediment.

Commissioner Galacatos asked: Do you mean sediment availability?

Commissioner Showalter answered: Yes, sediment availability is important too.

Commissioner McGrath noted: Yes, there are two things.

Commissioner Galacatos stated: My mind as well went to turbidity not necessarily that you want to have sediment availability in the system that will promote the establishment.

Commissioner McGrath added: Morphologically they are functioning in different ways. I mean you get turbidity from erosion of mud flats or direct inputs from your watersheds. But we have endangered species sturgeon in the Bay and they are sensitive to turbidity. I think it is important to have – if you have other places where fish assemblages and benthic assemblages absolutely need turbidity. How do you get both points across?

Ms. Hall asked: You are saying the turbidity and the actual need for sediment?

Commissioner McGrath answered: Yes, I mean we are not going to be able to put sediment into the Bay if we mark the impacts on turbidity. I think we need to make that distinction here.

Ms. Hall explained: This one is really just saying the different level of each of those factors matters, not which one is good or bad.

Commissioner McGrath replied: Well let's just register it here and try to move on.

Ms. Hall added: I think turbidity could be there.

Ms. Jaclyn Mandoske commented: One thought too in reading this is at the beginning it says that conserving these things depends on the availability of – so we already have the availability piece. So, it is already sediment. If you took out concentration, then maybe sediment could be both availability of and then also the turbidity like because that impacts where the sediment is. So just acknowledging that the availability piece is already built into the sentence.

Ms. Hall continued: I have been going through if anyone has comments on any of these smaller changes I don't know if it is worthwhile to go through step-by-step each of these?

Commissioner Galacatos chimed in: So, the only thing I would suggest is under paragraph E you have “or its official fish habitat or critical habitat” and it needs an “and”.

Ms. Hall replied: Got you, that is a good point.

Commissioner Showalter commented: On page 11 I and K – I thought these were great basically, but I wondered about adding something in here about large-scale, habitat conversion can increase the habitat available. I mean we talk about habitat conversion as if it always a negative. And a lot of what we are trying to do is to convert to marshes to increase the amount

of marshes. So that is a habitat conversion. I didn't feel like it was ever here as a positive. It says at the end of paragraph I it says, large-scale habitat conversion could reduce the amount of habitat available to certain species but –

Ms. Hall asked: Is this in J?

Commissioner Showalter responded: Oh, you are right. I'm sorry. J and I don't look that different. Yes it is definitely J. I wondered if we wanted to add a little bit about the value of increasing some of the habitat types that have been depleted over time?

Ms. Hall replied: Okay, yes. Maybe in a previous iteration there had been some more language along those lines.

Ms. Brenda Goeden observed: I think the very next finding talks about doing it for tidal marshes. It doesn't come out explicitly strong, but it is focused on the issue that Pat is talking about.

Commissioner Ziegler noted: But it also lends to confusion between what is going to happen because of quote "natural functions" including accelerated, natural functions and what would have happened anyway right with a purposeful type conversion. I am looking at that through this – how we talk about those two things because change is going to happen, change has happened.

Ms. Hall agreed: Right, exactly. And we do address that to some extent like how the time horizon is going to matter in those things.

Commissioner Ziegler replied: Yes, definitely.

Ms. Hall continued: So, I understand wanting to add more in explicitly about how habitat conversion can be beneficial.

Commissioner McGrath had a process suggestion: Can I try to suggest something for how we process this? We've registered some concerns about this and whether or not it's balanced. To me the real question about the use of the findings has to do with their relationship to the proposed policies because they are used to interpret. So, what I suggest is that we table this with concerns until we look at the policies and see what implication it might have on the interpretation of those policies and then maybe come back to it. I want to get through the policies. So, we will just table this one for now.

Ms. Hall was amiable to the suggestion: Okay, good point. So, starting with policies for fish and wildlife, fish and other aquatic organisms and wildlife; we could start this one. This policy was just adding the other federal agencies. There were inconsistencies in the findings and policies about which federal agencies and state agencies were mentioned where even though there were places where we thought that they should all be mentioned potentially.

Commissioner McGrath stated: Habitat should be protected. Who can disagree with that? (Laughter)

Commissioner Showalter added: Nobody in here.

Ms. Goeden chimed in: And I think to Sam's point if I may, Barry last mentioned for that policy protection in habitat may entail placement both to ensure persistence to future sea level rise. Does that help?

Commissioner McGrath stated: I am fine with this item.

Ms. Hall continued: This was supported by the finding K that added bit at the end. In reviewing or approving habitat restoration projects and programs – so this one we took the focus off of referencing specific goals reports in the policies and saying that we want to be guided by the best available science including regional goals so that that is more timeless and as those goals are updated we there will still be records of them. But the specific documents are referenced in the findings as examples of the most current versions of those documents.

Commissioner McGrath stated: I want to put a comment on the record here. It is something that is kind of gnawing at me and it really comes from a question that was raised by Dr. Young the chair of the Regional Board. I was telling her what was going on here and she said to me - well is it time to reopen the LTMS? And we did not look at any new sites in the Bay particularly non-dispersive sites as part of the LTMS. There was a fair amount of resistance to that from various parties. And it took four years to do the science and stakeholding for Middle Harbor. It is complicated and expensive. I just want to register that while I agree with this language one of the implementation issues that I want to flag going forward: okay, how are we actually going to do this?

Ms. Hall asked: In terms of being guided by the best available science?

Commissioner McGrath replied: Yes. It ain't easy.

Ms. Hall announced: So, comment noted.

Ms. Goeden stated: Jim, your question has intrigued me. Can you say anymore as to why she was asking the question about re-opening the LTMS? I understand you want to park it, but I am curious as to the basis for that.

Commissioner McGrath replied: It came sufficiently out of left field that it made me start thinking. I haven't finished thinking about what I should do with that.

Commissioner Ziegler chimed in: I think that is probably another discussion and worthy of having. And it comes up when you are looking at the policies it is just the fact of that interplay. So, I could see why Terry would just ask the question. It is just a question and it is not meaning that she is saying to do that.

Ms. Goeden responded: I am not worried about whether she is saying that we should or not. I am just wondering if there was a basis that we knew of that is the reason she would say it especially related to the best available science.

Commissioner McGrath added: Well it wasn't triggered by the best available science. It is like how do we get sediment to the places that need it with the structure we have?

Ms. Hall continued: Number 4 was just changes about capitalization et cetera. There was nothing major in this.

Policy 5 – this was the minor amount of fill policy. So, we suggested the replacement to say may permit fill or a minimum amount of dredging necessary to enhance or restore fish, other aquatic organisms and wildlife habitat but still kept it at a minor amount of fill to provide public facilities for wildlife observation and interpretation and education.

Commissioner McGrath stated: So, we could create roosting areas or shellfish areas if they are needed.

Ms. Hall agreed: Yes, exactly. Okay these are three added ones. So first, proposed policy 6, habitat restoration or enhancement projects in the Bay that need fill to adapt to rising seas should plan for repeated placement of fill over time. And so this one is trying to get at that issue of looking at time horizons and how much fill is actually needed at a given time for a project to prevent drowning and thinking about how we may potentially see projects that want to place large volumes of fill in preparation for a time horizon maybe 50 years out or something where that isn't actually necessary. If that amount isn't necessary this time it could result in larger amounts of type conversion and impacts than necessary to help the habitat adapt in the short term. And so for that reason this policy would be generally calling for smaller, repeated fills through time as necessary to help those habitats adapt. But then we have an out if the Commission does find that for some reason in this case fewer, larger placements would actually minimize the impacts to Bay organisms, or that small, repeated fills are not feasible.

Commissioner Showalter commented: This one I think the timeframe is kind of a matter of the order of magnitude. And we don't really – well to adapt incrementally to sea level rise is sort of the only connection to time but it is one thing to look at doing a fill project maybe every decade or every two or three decades but I can tell you from my experience on the South Bay Salt Ponds that these are very, very difficult to get going.

And you don't want to have to do this every year or every three years or every five years. Like the first round we might want to do what we expect to happen to 2030 or to 2050 which is said other places but that is one thing I am concerned about. I am concerned about it from both the cost and a feasibility point of view and also how difficult is it for the organisms to equilibrate after – to adjust after they've gone through this fill? So, I was wondering – could we put in costs as a consideration here? I know that is unusual but –

Ms. Hall interjected: Feasibility could cover costs.

Commissioner Showalter ascertained: So, you think feasibility covers that.

Ms. Hall answered: Yes.

Commissioner McGrath joined the conversation: I mean the same concern but until I saw the last phrase there. I think temporal loss is a real issue. But I also agree that if you are going to triple or quadruple the cost of a restoration project by doing it in increments it is clearly not feasible and I don't think this covers that. Feasibility covers more than just costs.

Commissioner Showalter added: I just want to make sure that the costs are in there because I think it is important.

Commissioner Galacatos shared a concern with the group: We do every once in a while get projects that are seen much more as speculative of future conditions. And this type of language would facilitate having much more of those very speculative project, just as a cautionary note. Projects that say we project this and we anticipate that therefore we are going to do this for something that may or may not happen in the future. I am just saying the way it is written it may facilitate some of the more speculative projects coming in.

Ms. Fiala asked: Is there a way that it could be changed to address that?

Commissioner Galacatos replied: I would have to think about it. I just wanted to bring that up to your attention.

Commissioner Showalter chimed in: Well I think that is one of the reasons why explicitly making a statement about we want to support fill for habitat and not fill for filling that will be developed.

Ms. Latta chimed in: I agree with Katerina's statement that even habitat restoration some if is quite pie-in-the-sky and maybe not feasible. So even all beneficial fill we certainly – you know the other policies show that there will be careful and thoughtful review of that but maybe there is something here with Katerina's comment.

Commissioner Ziegler stated: I wonder about how it interacts with the stuff on adaptive management. Projects need to be designed for the time period with the changes coming in place and expect that the habitats are going to evolve over time and whether they are being designed to have more fill placed or they may not be because they are going to be built for that time.

Commissioner McGrath added: And the sea level rise is a big unknown on this. And the one that I try to think through I share Katerina's concern. So, we've got projections of sea level rise from 16 inches to 10 feet. And let's take a project like Highway 37 and the concept that Highway 37 should be some combination of relocated, widened and put up on stilts and it should be part of a larger restoration effort that may or may not include Sonoma Creek. I mean this is a wonderful concept. And at some level you should consider a 10-foot sea level rise for the road but if you are designing a habitat as if there was a 10-foot, sea level rise it is not going to be habitat. It is going to be a hay field for maybe 100 years or 80 years. That is the kind of worry that I share here. I don't think we can anticipate everything. I think we just have to have a good staff work and discretion.

Commissioner Galacatos continued: I think the key phrase there would be prior to the onset of future conditions and the fact that what one person considers future conditions – there is a lot of ambiguity.

Commissioner McGrath interjected: But the assumption here, the start of it – the rebuttable presumption is it should allow habitat to adapt incrementally to sea level rise. And I think that is a sound policy. I think that kind of states our - we care about temporal loss. And so, if I was working on a permit I would say, I'm going to start with this. I am not going to let you put in 10 feet of fill for a mud flat to adapt to sometime after 2070. (Laughter) It just ain't going to happen.

Ms. Hall emphasized: This policy is actually trying to get at limiting those kinds of situations where someone would – if someone does come forward with a more speculative project that we would ideally always be saying you should start it off slowly so you are not doing massive changes all at once.

Commissioner McGrath stated: Although it might be clearer if instead of just jumping into it if there was a phrase in here – habitat, restoration, enhancement projects in the Bay should account for the possibility of temporal loss.

Ms. Hall replied: Okay.

Commissioner McGrath noted: So it is very explicit that temporal loss is part of what we are concerned about.

Commissioner Ziegler asked: And how would you account for temporal loss? What is an example that you are thinking of that would account or are you then getting into mitigation?

Commissioner McGrath offered a hypothetical: So, let's say that I've got an interest in the Salt Marsh Harvest Mouse. I might allow a certain amount of fill because I know that this is a valuable ecotone but I'm not going to have it completely outside, I am not going to allow fill that is completely outside the range of habitat for that. So, I can see some reasons to put in fill earlier anticipating that. But the idea of temporal loss is that it may be one thing to take low marsh and transfer it to high marsh when you are dealing with an endangered species and you are going to live with that kind of temporal loss because it really is more of a change. Whereas fill that takes it high enough, so it is med-level habitat – I mean the raptors are going to like that, but it is not going to be a wetland anymore for a period of time. And I think temporal loss is a well enough established concept in ecology.

Ms. Fiala chimed in: I would just point out that our Bay Plan mitigation policies are not a part of this Bay Plan Amendment to address the temporal loss.

Commissioner McGrath surmised: So, you think it is already in there. Maybe. I think we have beaten this one up enough. Should we move on?

Ms. Hall continued: This next one might also help with some of the concerns about bad actors. We are thinking about how it would all operate together to prevent issues. This one is getting at the issue of how we do address those potential negative impacts with projects that maybe aren't as well thought out. So, we don't want fill-for-habitat projects to cause substantial negative impacts to habitat. Fill should be scaled appropriately for the project and necessary sea level rise adaptation measures, which also helps with that issue we were just talking about in terms of considering the appropriate amount and the appropriate times; and finally to not significantly alter the balance of species or habitats within an embayment or on a regional scale, unless the project restores the area that had been lost to rising sea level because that potentially depending on how you interpret it could be considered altering the current balance even though it is bringing it back to what once was before sea level rise. And so, this last one is getting at the issue of type conversion and not wanting to do too much extensive type conversion on a Baywide or some embayment scale where we don't really know how those kinds of larger-scale shifts could be impacting the needs of species throughout the Bay.

Commissioner Showalter was recognized: I am just a little confused about where the loss of wetlands fits here. I mean the loss of wetlands has already occurred. It is not because of sea level rise it is because of human diking and filling. I wondered where that fits in here or does it? Is there a reason it is not here?

Ms. Goeden asked: What do you want it to do? Acknowledge that loss has already happened?

Commissioner Showalter replied: Yes.

Ms. Goeden continued: Because that is acknowledged – so you don't have all the policies, you only have the changed policies. And where that is specifically included is, I believe, Tidal Marsh and Tidal Flat Policy 1 which says tidal marshes and tidal flats have been diked or destroyed.

Commissioner Showalter stated: That is exactly what I was worried about.

Ms. Hall reiterated: That has been in the Bay Plan.

Commissioner McGrath had reservations: I am troubled by C and I am troubled by C in part from the Salt Pond perspective where we had vision which in the South Bay was dependent on a very altered habitat that had steered our ecology in a particular direction. And we made a conscious choice to try to favor a more natural system, a system that wouldn't require quite as much intervention on an ongoing basis as the Salt Ponds had to sustain that habitat. But more than that I am willing to alter ecology to benefit endangered species. I am willing to say that enhancement of the Ridgeway Rail and the Least Tern and certain other species that had been diminished should be a restoration priority. And I think this is something we couldn't do because I don't think humans are capable --a system suffers from stasis. But it takes away a significant part of the policy background that we have in our work which is elimination of the endangered part of endangered species – getting them off the list.

Ms. Hall offered the following: So, if it said something like significantly decrease the number of species, would that –

Commissioner McGrath offered specificity: Well I'll be very specific. If I saw a habitat project that eliminated *Potamocorbula* habitat but restored habitat for salmonids I would say that is a good idea.

Commissioner Galacatos added: But I think the difficulty is when you find yourself pitting one endangered species against the other. I think that is one of the things that is a concern.

Ms. Goeden suggested: Potentially we need to add the word native species into C because *Potamocorbula* is an invasive species and I am hoping that you would trust us not to benefit *Potamocorbula* over salmon.

Commissioner McGrath cautioned: But it might change the ecology with an embayment.

Ms. Goeden replied: But I am not done yet. (Laughter) Talking about the endangered species question Policy 1 and 4 actually are very protective of those two, both their habitat and the species themselves. I think that tries to cover your endangered species issue. But as far as the changing within an embayment--so your case of the South Bay Salt Ponds is designed

specifically to adaptively manage so that we don't extricate native species or cause them to become endangered. So, we would expect that a project like South Bay Salt Ponds which continued to be something that we would benefit from as does the region. And then the very last phrase says, unless the project restores areas that have been lost to sea level rise which we could say loss with sea level rise or we could also potentially say where historically tidal marsh or something along those lines.

Commissioner McGrath noted: If you say it had been historically altered – historically altered moving back into a direction that is beneficial to endangered species but that is what I am interested in.

Ms. Goeden replied: Oh okay that would be probably the fix that you are looking for.

Commissioner McGrath continued: So, I think there is a little wordsmithing obviously.

Commissioner Ziegler commented: One of the things that strikes me is that the context that we are saying here that the potential to negatively impact and it seems like there are definitely going to be trade-offs. There are going to be plusses and minuses and it is also similar to that we know we have to place fill to accomplish these goals and they can't be done otherwise. And there is definitely going to be this trade-off. And it is going to be really hard decisions. And so anyway setting up that framework that can help keep us in that playing field to make those trade-offs.

Commissioner McGrath followed up: So, we'll just look at broadening the ability for restoration for the reworking C. We could say broaden it to allow consideration of restoration of degraded habitats.

Ms. Hall continued: Okay so 8 – sediment placement for habitat adaptation. Here we suggest that we should prioritize sediment placement in subsided, diked Baylands, and tidal marshes and tidal flats as areas particularly vulnerable to inundation and loss due to sea level rise because they lack necessary sediment supply. Or in shallow, sub-tidal areas to support tidal marsh, tidal flat and eel grass bed adaptation, a minor amount of sediment placement for any habitat project in deep sub-tidal areas maybe authorized if that sediment placement will maximize the habitat restoration or enhance the benefits provided by the project.

So this policy there are a few things going on but it is trying to first of all prioritize sediment where we need it the most and at the same time add a little bit of the function that Dredging Policy 11b had been serving in terms of limiting placement or potentially disposal of dredged sediment in deep-water areas and that maybe isn't always primarily for a habitat reason although it could be called for habitat purposes.

And so we still did want to limit that kind of deep-water, sediment placement especially because we don't know a ton about those areas and how much sediment is needed there for sea level rise adaptation or how the impacts of sediment would ultimately play out there. So that is what is going on in this policy. Comments?

Commissioner Showalter commented: I think this is excellent particularly I am glad to see the last sentence, the minor amount of fill in deep, sub-tidal areas or on a mud flat it could also be because this could be used for seeding the mud flats outside of the South Bay Salt Pond.

Ms. Hall repeated: And so we didn't limit it to a minor amount.

Commissioner Showalter acknowledged: I know and that's good. The only thing that I wondered about is there are instances where we need to fortify interior levees in order to breach the ponds so that marsh restoration can go forward. And there is a tremendous amount of sediment required for that. To date that sediment has always come from land sources but there might be a time in the future where we wanted it to also be able to come from dredged materials. So, I was wondering how if there was some language we wanted to add about that like what about protective levees that are needed to – you might think about it to be fortified so that the dike can be breached to allow more restoration.

Ms. Goeden commented: I would just say aside from that we have allowed that in the salt ponds one of the challenges of using dredged material to fortify to build or fortify levees is not generally the quality of the material that you would want to build a levee.

Commissioner Showalter agreed: That is true.

Ms. Goeden continued: So that would be an engineering challenge more so even than a policy challenge, but I think that is not a habitat issue. That is a shoreline protection issue. I can understand that sometimes you have to do that for habitat purposes but when we have permitted levee enhancement as part of restoration we pulled in our shoreline protection policies.

Commissioner Showalter stated: I just feel that these projects are – it is really hard to tease out what a flood-protection part sometimes and what is a habitat part. For instance, in the South Bay where you are building the ecotone that is going to be –

Ms. Goeden stressed: Well that is a habitat part of it, and we are very clear on that.

Commissioner Showalter continued: Well maybe it is in here but it is just something I wanted that concept along with cost are one of the recurring themes I kind of wondered about with this because not being – and I know we are going to be doing the fill for flood protection later on but that could take another couple years.

Commissioner McGrath inquired: So, I have a question about the deep sub-tidal. It is a rather imprecise definition. And it brings to my mind the Bay Farm borrow pit and I'm not here to argue in favor of the use of the Bay Farm borrow pit for cheap disposal. And it is far more complicated than the Corps staff realized when they promoted this as an alternative. On the other hand, if there was an anoxic zone at the bottom of that and the science was very clear that said we have a degraded habitat down here and it would be far more useful for habitat at different elevation – I don't want to introduce language that would prohibit consideration of that. And it would have to qualify as habitat restoration not as cheap disposal.

Ms. Goeden commented: So, in the interest of the Bay Farm borrow pit they have looked at it and haven't determined that it is an anoxic area. They've actually said it is a decent habitat previously.

Commissioner McGrath noted: Then we don't have to worry about it.

Ms. Goeden added: But the other thought that we had when we were talking about this was that we know that we have a very limited amount of sediment to be used in the Bay Area, period. And filling deep, sub-tidal areas to create some other kind of habitat when we have an extreme need in the tidal marshes and tidal flats we –

Commissioner McGrath interjected: Okay, okay.

Ms. Goeden finished: - felt that it was really important to use where it is important.

Commissioner McGrath stated: I'm done I got it. (Laughter) You win.

Ms. Latta chimed in: Are you specifically focused on sediment and wanting not to refer to other types of beneficial fill that could be placed in shallow or deep, sub-tidal just to raise that.

Ms. Hall responded: Yes, this is just about sediment here because the other types of fill for sub-tidal areas are already addressed in the sub-tidal area section.

Commissioner McGrath opined: But I think the point that Brenda makes which is a good one that if you are going to make habitat changes like that you should make them on areas that are already shallow rather than deep in terms of sediment and in terms of rock.

Ms. Latta asked: And do you define it – I do think that point was great. In the sub-tidal goals that zero to three meters is shallow and then three to ten is sort of mid and greater than ten is very deep.

Commissioner Showalter asked: So, do we want to get rid of “deep” here and just say –

Commissioner McGrath gave another option: Or do we want to reference the sub-tidal goals?

Ms. Hall replied: We could reference the sub-tidal goals although that gets into the issue of referencing specific documents that we wanted to avoid. I mean that would be open to interpretation by the analyst.

Ms. Goeden recommended: We could say habitat projects in deep, sub-tidal areas defined as blah, blah and blah.

Ms. Hall agreed: Yes, we could define it.

Commissioner McGrath stated: I think it would help to define it.

Ms. Hall continued: Okay, tidal marshes and tidal flats. Again we will –

Commissioner McGrath suggested: Jump to the policy issues first.

Ms. Hall read Policy 4, then stated: This had already been in the Bay Plan at the end of another policy, but based on additions and the way this policy had been altered we thought it made more sense for it to be one of the stand-alone policies. But otherwise it is the same language that has always been.

Commissioner McGrath asked: It's the same language it is just in a different place?

Ms. Hall answered: Yes, exactly.

Commissioner Randolph asked: What is the definition of restorable lands?

Ms. Hall replied: I don't think it is actually defined in the Bay Plan but I would think any land like diked, agricultural land that is –

Mr. Goldbeck chimed in: It is mainly diked Baylands that could be easily restored back to the Bay.

Commissioner Randolph continued: So, I am thinking about what was that big project in Redwood City some years back that caused a lot of controversy?

Mr. Goldbeck offered: The Salt Works?

Commissioner Randolph responded: Yes. Was it on restorable land?

Ms. Goeden answered: Yes.

Commissioner McGrath added: The one that blew up the first round?

Commissioner Randolph asked: In its entirety?

Mr. Goldbeck opined: I think it is restorable in terms of being subsidized in that regard, yes.

Commissioner Randolph clarified: So that would apply in that case for the entire property?

Mr. Goldbeck answered: I'm not sure about the entire property but that is a good question.

Commissioner Randolph suggested: There could be a little discussion or controversy if you get to a specific project or case around the term "restorable".

Ms. Mandoske asked: And could that also refer to managed wetland migration space? This has been identified in the Adaptation Atlas so I don't know if that would cause concerns or if that is what we want it to do.

Commissioner McGrath noted: Sean's concern is the same as mine. This is kind of the third rail that we grasp briefly and pull back from it when we first grappled with the Bay Plan policies.

Commissioner Ziegler asked: And in essence what impact is this actually going to have on land use and tax policies? And so, I wonder because it is not going to impact that, but it is going to get some people riled.

Commissioner McGrath further asked: And is it in our lane?

Ms. Hall responded: All of these are good points. It has always been there.

Mr. Goldbeck stated: This is a policy in the Bay Plan.

Commissioner McGrath continued: Just seeing it in a document underlined reminds me of copies that I had with the various people in putting this thing back into it. (Laughter)

Ms. Hall asked: Are people feeling that it needs to be removed?

Mr. Goldbeck emphasized: Let me just make the point that says the land use and tax policies should not lead to the conversion to uses that would preclude or deter potential restorations. The idea here and maybe we could think about refining it is simply saying let's not – there is a lot of potentially restorable land, let's not adopt policies that cause them to be become unavailable. Let's think about this basically.

Commissioner McGrath warned: Just be prepared for it to blow up in our faces. I've seen this movie before.

Commissioner Ziegler was in agreement: I agree with that, but this isn't going to do anything actually about that. Does it actually, would it –

Commissioner McGrath interjected: Well you could apply this Williamson Tax Policies at Sonoma Baylands that if they eliminated the Williamson Tax benefits –

Commissioner Ziegler interjected: - but not because the policy in the BCDC Plan.

Commissioner McGrath responded: No.

Commissioner Ziegler continued: - I mean as much as I might like it to.

Ms. Goeden chimed in: So, this is sort of an advisory policy because these tend to be outside of our jurisdiction to begin with. There are also two parallels in other policies in the Bay Plan which are not stated exactly the same way but it is the managed wetlands and the Salt Ponds sections both have policies that state that should these areas be no longer used for the purposes that they are, they should be bought by the public and restored as a first priority and then it goes on to say later if the public can't do that they can be developed but they can only be developed in these ways. So, there is similar intent, different language – in those two policies that kind of have the same potential effect but again they are advisory because this one tends to be outside of our jurisdiction.

Commissioner Randolph asked: Could there or should there be cross-reference of some kind to – I think what you were describing is clearly something that had a natural use before and it is a salt pond, it is restorable but if there was a reference or cross-referenced to for example – salt ponds or other things it might preclude unnecessary controversy – maybe.

Commissioner McGrath was direct: I'll just tell you as a Commissioner if the building trades come after this one, I'm not falling on my sword. (Laughter)

Ms. Goeden added: The benefit of this policy is we do later on talk about mitigation space for marshes which I think we all know we need. And if local governments for whatever reason via taxes or land use decide to take all of the mitigation space and much of it is already taken then we have no mitigation space for the future.

So, you might think about it in that context as well.

Commissioner Ziegler opined: I think there is a lot of interest that we have in protecting those lands that you are indicating but this doesn't do that.

Commissioner McGrath interjected: Right.

Commissioner Ziegler continued: It just says –

Commissioner McGrath noted: And it is a discussion that I've had with David Lewis about what he would like to see. And he would like to see authority in a state agency whether it is BCDC or the Regional Water Quality Control Board that has some land-use override on areas that will eventually be subject to inundation. But it doesn't exist now.

Commissioner Showalter stated: Wow it doesn't.

Ms. Goeden voiced agreement: Right.

Commissioner McGrath continued: And the place to argue those things is in legislative changes not in Bay Plan policy changes. And I recognize this is here, but it has the potential and Sean and I both got bloodied – to reignite a fight that was hard to get our way through.

Mr. Goldbeck stated: Yes. So, we will go back and think about that. It does send a message if you take it out of the Bay Plan since it is already in. And so we need to think about that as well. But we will go back and think about it.

Commissioner McGrath noted: Well it can't be unseen. (Laughter)

Ms. Goeden offered options: There are a couple of options we could take. You can leave it where it was so it doesn't get called out so strongly.

Commissioner Randolph noted: Well it's already out there.

Commissioner McGrath re-emphasized: Well it can't be unseen.

Commissioner Ziegler commented: And on the messaging I mean it goes both ways. You have both constituencies to deal with but it is one way to say that we are respecting that differential and not looking to expand it in this context.

Commissioner McGrath stated: I am not in favor of developing lands that the government will eventually bail out because they are inundated. But I can't find a way to deny a project under the McAteer-Petris Act because of that deal. (Laughter)

Ms. Hall continued: Well I think this has been good anyway to prepare for the June 20<sup>th</sup> hearing recognizing that now that this is separated out we may actually be getting more discussion about it.

Moving on to Policy 5—this policy already existed and recommends the restoration of former tidal marshes that had been diked from the Bay. We updated the reference to the Ecosystem Habitat Goals Report and also added language to state that projects should be sustainable by natural processes and that they should restore, create or enhance ecosystem integrity by increasing habitat connectivity and restore hydrological connections.

So, this is trying to incorporate some of those elements from the Goals Science Update as well as the Adaptation Atlas to be thinking about appropriate siting of these projects and making sure that the natural processes that are needed to sustain them are there.

Commissioner McGrath stated: I like it. Would you be amenable to adding help recover endangered species as a clause in there?

Commissioner Galacatos asked: Wouldn't that be part of the habitat goals?

Commissioner McGrath replied: If you think it is not needed I don't know.

Ms. Hall replied: I would need to look at the fish and wildlife policies that are already there in conjunction with it. But I don't think it is needed.

Commissioner McGrath noted: I like the structure.

Commissioner Showalter stated: I think it is good.

Ms. Hall continued: I will note that Jim and do a deeper consideration.

Ms. Latta commented: Again, I wanted to just raise I see in the sub-tidal policy there is good reference to placement of sediment at times to protect sub-tidal. I again want to call out – just make sure that we don't sequester sub-tidal into its own section too much because a lot of times we are constructing things like eel grass beds or oyster reefs to protect tidal marshes and the placement is specifically within those tidal marshes and flats. So, I just want to call out the multi-objective that integrated it is not just for sub-tidal.

Ms. Hall replied: Of course. The challenge is that we have those two separate sections of the Bay Plan but I agree that it would be useful to still note like the benefits that we confer on the other.

Ms. Latta also noted: Another confounding factor which is annoying is that the sub-tidal is often an inter-tidal so when we refer to oyster, eel grass we have in our sub-tidal, but they are very much inter-tidal as well.

Ms. Hall acknowledged: That is a good point also.

Commissioner McGrath added: And it's that 100 to 1 slopes that make the system resilient and really valuable. Flat is better than steep. (Laughter)

Ms. Hall continued: Thank you for that point Marilyn. The tidal flat section could be also considering oysters.

Commissioner McGrath stated: I like six it puts in regional restoration goals.

Ms. Hall explained: Six had been there already, and covers this list of different things that should be considered in designing and evaluation of the project. We also added in a few things – regional restoration goals, whether the project would be sustained by natural processes and increase in connectivity across Bay habitats.

Commissioner Showalter stated: I really like that one.

Ms. Hall noted: We also added this little bit at the end. So, this is tying into the adaptive management piece and how we handle projects based on various outcomes and that spectrum of what is success or failure and how do we make those calls. Pretty much we are relying on adaptive management and taking adaptive measures to adjust things as necessary along the way, but we do say that if there are substantial, adverse impacts to the Bay or species then the project should be further modified to reduce its impacts. We are trying to make sure that in that case if it is really harmful that something is done about that.

Commissioner Ziegler shared a thought: Just a thought and just a comment on how this strikes me and just by saying "how and how" it sounds to me and it is describing an adaptive management plan and then what happens is you get a planning document that actually says more about justifying the actual project than it does about how it will be managed. And I am thinking unless I am wrong that we want an adaptive management plan that reflects the

regional goals, that plans for how they will be managed consistent with those goals. How many different times do people justify a project and do they provide a good plan for management over a timeframe? Is that what is meant by an adaptive management plan? Providing for that ongoing management?

Ms. Hall replied: Yes. That is how I think of it.

Ms. Goeden noted: They general don't provide it at the outset though – currently.

Ms. Hall clarified: But you are saying in terms of the way that these are K and L and M are written.

Commissioner Ziegler answered: Yes. I am just taking this and thinking and making sure I understand what you are intending.

Ms. Hall explained: Pretty much here we are saying that these things should be considered but the more implementation arm of them would be here.

Commissioner Ziegler noted: The project would be designed with the regional goals in mind and that is already addressed. And then the regional goals also need to be considered in planning or their ongoing. And we want to plan to account, be consistent with those regional goals.

Ms. Hall agreed: Right and in monitoring, adaptive management, and design.

Moving on to the next policy--this was only deleted because it is moved down to be with other added, research-oriented policies.

Ms. Hall then referenced the new policy 7.

Commissioner Ziegler inquired: When you say a funding plan do you have a sense of how much, is there a level of assurance of being able to actually have the resources for it?

Ms. Hall explained: We've talked about that—about what exactly would that mean. Do we need to require a bond of some sort? I think at this stage we are not going that far as to what specific mechanism would be used but it is more saying that they should at least be able to show us that they are clearly thinking about options for funding and ideally the more secure it can be, the more evidence that they can show the better but that is a bit more open.

Commissioner Galacatos chimed in: I think it was really important to have something in there that brings to mind that we do need to have monitoring of these projects. But you get into a lot of difficulty when you are talking about the specificity of the funding plan. It may just be that want to make sure that they have built in the cost of the project to include monitoring.

Commissioner McGrath pointed out: There is something wrong with your last sentence.

Commissioner Randolph added: A couple of extra words.

Commissioner McGrath continued: Commensurate with the level of monitoring and adaptive management that, that required.

Ms. Hall responded: Yes, I remember there was a typo in here.

Commissioner McGrath suggested: That is required, that should be required.

Ms. Hall observed: Oh yes, that should be required for the project, yes.

Commissioner Showalter chimed in: This is the thing that I saw as creating the biggest red flag in this document. And that is in my experience that putting together these funding plans can be a huge regulatory stumbling block. And I would be happy to see that sentence taken out. Obviously if you are going to do monitoring it has to be paid for. But I just think that we are going to get the agencies that have done projects coming to complain about this.

I would be surprised if Valley Water doesn't complain about it. I know that we spent three or four years working through issues related with the California Department of Fish and Wildlife on just these issues and came sort of a special understanding. You know there is a project but there is a problem because government agencies don't really set their budget except in a two-year cycle. So, for them to set a bond for things in the future that can be a big issue.

And I also think that this can be a huge stumbling block for non-profits that do smaller projects. And clearly they need to be done and they need to be funded but I think that we almost should be having BCDC and the regulatory agencies working on collective ways to encourage this funding and support the funding because we don't want projects stopped because they can't come up with a discreet, funding plan for the monitoring.

Mr. Goldbeck added: And this is a difficult point. We completely recognize that and that is one reason why we are supporting the Regional Wetland Monitoring Initiative to try to address that aspect and try to get some funding sources to try to deal with some of these costs. I would point out that it says a funding plan it doesn't say that you have to have a bond or have the funding in place. So, it is more that you need to be thinking about getting the funding for this as opposed to requiring that a public agency put that money aside.

Commissioner Showalter pointed out: But we don't really define what that is and I think we are going to hear about it.

Mr. Goldbeck agreed: I think we will hear about it, yes.

Commissioner McGrath commented: Well I think we are going to hear complaints but the language that is important here is that it needs to be commensurate with the risk. I've been in public service for 35 to 40 years and I remember when I worked at the Coastal Commission the storms of 1983 pushed a lot of sand into Oneonta Slough and the Tijuana Estuary and the U.S. Fish and Wildlife Service would say – oh, we can fix that. We will go out and dredge it. And they had no money for monitoring. It is the classic coastal-engineering wetland restoration problem of the relationship between tidal prism and wave energy that clogs, and it failed. So, they spent a certain amount of money and because they had no monitoring they learned nothing. And I'm fine with experimentation. I'm not fine with learning nothing from your experimentation. And so, I am going to hold out for there has to be a certain level of learning from what we are experimenting with.

Commissioner Ziegler stated: That brings to mind for me the referencing of demo and pilot projects. There is a difference between a project that is intended specifically for learning. And while we are going to learn from all of this because it is the nature of the work some projects

are going to be specific to – we are going to learn from, we are doing this to learn. And there is going to have to be a lot more monitoring with that if that is a reality.

Commissioner McGrath noted: Our university communities have done us a great service.

Commissioner Galacatos joined in the discussion: The only thing I would add to the discussion is if we recall early on we were saying that you are going to have some impacts or have in these restoration projects and it behooves everybody to remember that if you are saying where these impacts are being outweighed by the benefits of the project you need to be able to afterwards be able to have that data to say – yes it was successful.

Commissioner McGrath stated: What she said. (Laughter)

Ms. Hall responded: Exactly. That is a very good point.

Ms. Goeden added: I would also just remind folks that a little bit further down in the policies there a discussion of pilot projects versus straight-up habitat restoration projects.

Ms. Hall continued: The Commission should encourage and support regional efforts to collect, analyze, share and learn from habitat monitoring data. Short and sweet. This is the minor fill policy for this section. We took out “a minor amount” and said that fill may be authorized for habitat, enhancement, restoration and we added – or sea level rise adaptation if the Commission finds that filling is necessary to achieve the goals of the project.

Commissioner McGrath pointed out: I think that is what we were here to do. (Laughter)

Ms. Hall continued: So, the next policy is about pilot projects. And it is pretty much saying pilot and demonstration projects should be encouraged and authorized. We want the risks to be less than the benefits of course. They should include appropriately-detailed experimental designs and monitoring. They should be analyzed and reported expeditiously so that we can actually apply the findings that we learn. And then the design, management and size should minimize impacts to the Bay.

Commissioner Randolph asked: What is the specific thinking behind the reference to risks and benefits? What would a case study be there of? Where would there be relevant language?

Ms. Hall replied: I think in terms of considering – it ties into the design at the end there. When you are thinking about how you are going to ultimately design this project you want it to be something that is going to minimize the risks to it.

Commissioner Randolph continued: So, I am trying to think what would a risk be? It is very specific because it there is a risk and a benefit. Anticipating what would a risk be where there would be a greater benefit because there is a risk to everything but is that an issue for us?

Ms. Goeden noted: Like some of your type-conversion questions and then take the tidal mudflats--say we decided that we wanted to pilot augmenting tidal mudflats, so your risk could be to the feeding structure of migratory, shore birds and the benefits could be to understanding how to grow vegetation in tidal flats and how to fill in tidal flats.

So, you’ve got type-conversion. You’ve got a set of species that will benefit and some species that will lose. And you have to understand the techniques and the outcomes of such pilot projects.

Commissioner McGrath stated: It looks okay to me.

Ms. Hall continued: Moving on to the last policy in this section--the Commission should encourage and support research and action on the following topics. Two of these were just moved down and consolidated and had been policies already. That was B and C. And we also added habitat, restoration, enhancement and creation approaches especially research that will inform strategies to make Bay habitats more resilient to sea level rise.

Moving on to sub-tidal areas. Also, in the interest of time a lot of these policies and findings are just repeats from the tidal marshes and tidal flats. So, we can skip over the ones that are –

Commissioner McGrath interjected: But before we do that since she is the queen of sub-tidal (Laughter) Marilyn I want to give you a chance to weigh in on any of the findings if you had any concerns from any of the findings.

Ms. Latta replied: I am just so happy to see a lot of advance. It is just great to do this acknowledgement.

Commissioner McGrath announced: The queen is happy. (Laughter)

Ms. Latta continued: We are doing collective comments from the Conservancy as a group so those will come together. Some minor comments on the first one – I certainly agree with the strong monitoring language and –

Ms. Hall noted: Those are not findings they are policies right now.

Ms. Latta continued: There is a comment further down on monitoring. Where we talk about analyzing the effect of the project on the Bay, sediment budget – that is a bit of an overreach for some of these small, pilot projects that might not have the capacity. I really appreciate Pat's prior comments too about non-profits or scales of projects where it might be onerous. While I don't want to – we certainly appreciate the strong language on monitoring.

It is Number 3. I think mostly it reads great but on C – that is hard to demonstrate especially at these pilot scales. So, while some may be able to; it's just appropriate to the project scale and size. Some may be able to do that and should and others it may be too much.

Ms. Hall pointed out: I will note that this is existing language that is currently in the Bay Plan Amendment.

Ms. Latta replied: Maybe there could be a modification to that. And then sub-tidal includes inter-tidal I think is a big, global one where – and there is a lot of focus which is great on oysters, but I would broaden that to shellfish potentially or shellfish beds. And when you refer to oyster reefs, I think that is fine, but I also get concerned that we are focusing on a single species whereas the purpose of it is very broad, multi-species and multi-benefit. It could be called near-shore reefs or reefs and not always calling out oysters, mussels other species are important.

And then also the other habitats that are included within this sort of sub-tidal and inter-tidal zone that hasn't been well described in the past can include beaches, sand, gravel, rocky intertidal and so I want to make sure those aren't lost and that we are only focusing on the

oysters and eel grass – I think it is fantastic that we are focusing on oysters and eel grass, but we don't want to repeat the sometimes the pitfalls that can happen when we only focus on single species like the rail and the mouse.

Ms. Goeden stated: These are all really, good points. The one thing I would let you know is that the beaches really are covered under tidal flats.

Ms. Latta replied: Yes. So again, I guess that just comes back to that integration comment. Another over-arching one is that I think it is fantastic the protection for tidal wetlands and of course we support that but there is a lot of emphasis on tidal wetlands when you may need to consider other habitat types.

And then the same for the comment with endangered species. I really appreciate the strong, endangered-species protections but the reason why oysters and other species have been ignored in the past is there is a regulatory trigger that makes us focus only on those and we are trying to broaden it to native species.

I would also be really careful about "native" – adding native except for things like oyster shell that we might place. We might place non-native, clean, oyster shell.

Ms. Goeden chimed in: Also, just totally appreciate the comment but native species is covered under Fish, other Aquatic Organisms and Wildlife Policy Number 2 and 1. So that point is included throughout the document for those species and is not just focused on endangered species.

Commissioner McGrath commented: I am going to argue for keeping C here. I will give you a very specific reason for that. The city of San Francisco and GGNRA put in a wetland restoration project just upstream of Crissy Field and they didn't consider the impacts on sediment budget and it interrupted literal drift coming off the shoal there in Presidio Shoal. That is not the only problem with the project. And they trucked in 30,000 cubic yards of sediment and once that happened the beach began to be restored but the project should have been done with pre-filling the downstream beach. So, I think this language is important. I don't think it damages – I certainly don't see it as responsibility to have each project look at the entire Bay budget.

Ms. Latta chimed in: That was my only point. I totally agree to not remove it, yes.

Commissioner McGrath continued: But I think relative to the scale.

Ms. Goeden commented: I was just wondering if we should take the word "Bay" out and just have impact the project on the sediment budget because that – if you say "Bay" it sort of implies the full Bay but you might look at an embayment sediment budget or even a fluvial-system sediment budget, and I am just wondering that maybe we should pull that word out.

Commissioner Showalter stated: Good idea.

Commissioner McGrath replied: Well since D has "localized" why don't you just put localized in that as well? Replace "Bay sediment" with "local".

Ms. Hall stated: Or if we had nothing it could just be left up to interpretation which is maybe better.

Commissioner Showalter noted: Better, yes.

Mr. David Haling commented: All it says is that you have to analyze it. The project is surely minor, and it is very simple. You can just say that and show your work and –

Commissioner McGrath stated: Show your work. (Laughter)

Ms. Hall continued: I think those are all – we’ll deliberate with those suggestions after the 20<sup>th</sup> but noted. Thank you all.

Ms. Latta was recognized: I really appreciate the opportunity to call out a few things. As we go through, I will just chime in if there is anything else.

Ms. Hall continued: This is the same as how it applies to sub-tidal habitat and we are at the bottom of page 29 and top of page 30.

Commissioner Showalter asked: Did we skip completely page 27?

Commissioner Ziegler answered: Yes, we are skipping the findings.

Ms. Fiala added: They are similar to the Tidal Marshes/Tidal Flats section.

Ms. Hall continued: Policy 5 is also the same.

Commissioner Showalter chimed in: On page 30 under 7 – “the Commission finds no other method of enhancement or restoration except filling is feasible” – I wondered about that. What if the Commission finds that filling is the best, feasible method or something because there could be another feasible method. I thought this was pretty extreme. Does this jump out to other people?

Commissioner McGrath replied: No. I mean our purpose here was to get rid of the “minor amount”. But I still think you have the 404.b.1 tests.

Ms. Goeden added: But the 404 test is the Water Board’s test. It is not BCDC’s test, but we would run counter to each other.

Commissioner McGrath noted: We are cooperating agencies.

Commissioner Showalter asked: So, with your test there is no other method? Is that the test? I am not that familiar with it, but I just thought that the “no other” was very strong. I would think that we wanted to be –

Commissioner McGrath suggested: Well take a look as an example at Carl’s Marsh. Carl’s Marsh there is plenty of sediment coming down the Petaluma River to fill Carl’s Marsh. You didn’t have to fill it. You could under-fill at that time Sonoma Baylands. So, it did have a bearing on the amount of fill that was put in. I think you can ask and answer that question along the Napa River and the sediment coming down that you could do it without filling. I don’t think there is. So, I think this language isn’t harmful in that respect.

Ms. Hall observed: I will note we left the original language here but in the tidal marshes and tidal flats section we changed it to “filling as necessary” to achieve the habitat restoration enhancement or sea level rise adaptation goals of the project.

Commissioner Showalter opined: That is better.

Ms. Hall asked: Do others like that better?

Ms. Goeden explained: But one of the reasons we left it is because this is sub-tidal, so it is not inter-tidal, it is not the marshes – it is sub-tidal. And we only thought of a few things that this would come into play with. So, raising elevations potentially to support things like eel grass beds or placing fill to support things like shellfish and certainly shellfish beds in the southern part of the habitat and for those types of things like placing fill to raise elevation on sub-tidal. Why else would you be raising the sub-tidal bottom?

Ms. Hall added: We wanted to still add a little bit of caution in sub-tidal areas where there is less extensive knowledge about how fill might affect those areas.

Ms. Latta chimed in: I just thought of one over-arching comment is that often the non-sediment, sub-tidal fill is not filling the whole area. So, within an acre you might have a net fill and we often do – that is .1 net acres. And so that is an important distinction if it is not too fine-grained, but this isn't full filling of an area. This is strategic placement of beneficial fill to create new habitat.

Ms. Goeden added: And it is evaluated on a project-by-project basis.

Ms. Latta concluded: It is maybe too fine-grained.

Commissioner McGrath joined the discussion: Well I think the policy that we are going to add at the very start tries to acknowledge that there is a difference between filling that takes it out of the Bay and filling that alters the habitat for the Bay for beneficial purposes.

Ms. Hall moved on to the next policy: This was also – we already went over this. It is the exact same language.

This is again says that the Commission should continue to support and encourage research, but this policy had already been there, so we just tacked on a few aspects.

We can move on to the dredging policies.

Commissioner Showalter was a little unclear on verbiage: I was confused about the difference between sediment and material. What is the background on that?

Ms. Hall explained: She is wondering why sediment is the more appropriate word than material.

Ms. Goeden offered some levity: Oh – because it is my personal campaign. (Laughter)

Ms. Latta replied: I like the honesty there. (More laughter)

Mr. Goldbeck noted: At least she is honest.

Ms. Goeden continued: I am very honest. I am trying to elevate consideration of sediment because when you talk about material and you just talk about it as material – first it was spoils, right. Spoils have this toxic implication. Materials you don't really know what it is. But if you say sediment and people are like – we have a sediment supply issue? The two are connected. People know what you are talking about. You could further define it as sand or mud, and they would know even better but “materials” is more unclear.

Commissioner Showalter agreed: Well yes and when I was thinking about it these things seemed like “material” could include artificial things whereas sediment is stuff that you dig up.

Ms. Goeden pointed out: Well but is the dredging policy. So, it is dredged material which is stuff that you dig up in the water.

Commissioner McGrath noted: Fishing nets sometimes.

Commissioner Showalter followed the logic: Right it is stuff that you dig up in the water, but it is not going to be rip/rap of other things like that or very little of it.

Ms. Goeden agreed: No. But it is sediment in the Bay and even cobble is considered sediment as is gravel it is just a different size.

Commissioner Showalter offered: It is to go to a geologic term.

Ms. Goeden responded: Yes.

Commissioner Showalter stated: That is fine, okay. I get it.

Ms. Goeden continued: And it is a vital, national resource. (Laughter)

Commissioner Showalter explained: I wasn't sure what the background was. It is a good geologic term.

Commissioner McGrath added: I have to tell you I love BCDC staff thinking about grain size. (Laughter)

Ms. Hall moved on: We could go on about the joys of sediment all day.

Mr. Halsing inquired: Just one question on that. Will there be a definition of what you just said somewhere in this that sediment includes all the grain sizes or something like that? Because I had a similar question as Pat; is switching it to sediment is that restricting the grain size? If your answer is no then that is awesome.

Ms. Hall answered: I could explain it better in the staff analysis since we are changing the term a lot. So, we are not going to be defining it then in the Plan, but we would at least be explaining why.

Mr. Halsing replied: Yes, that would be great. That would be really helpful because otherwise it is a little – I like the word “sediment” better too I just wanted to know what it is. I support Brenda's mission.

Commissioner Showalter chimed in: From a geologic point of view it does cover a very broad range of grain sizes. Large rocks are included geologically – yes.

Ms. Hall continued: In Dredging Policy 11a not much was changed except for the sediment to material term change. I did add one bit on the project design and goals incorporate the best, available science.

But potentially it is more necessary to discuss Dredging Policy 11b. So, we did propose removal of Dredging Policy 11b. We probably have all seen David's letter and he is not happy as you might have seen. But we do make a good case for why it is appropriate to remove it and

how we are maintaining some of those same policy purposes that it did fulfill in other ways in other parts of our suggested amendment.

This also ties into this afternoon's public hearing on initiating another Bay Plan amendment specifically for the purpose of adding a Bay Plan map policy about Middle Harbor Enhancement Area.

Ms. Goeden offered the following: And the thing that Megan doesn't know because she has been diligently hosting meetings is that we are having visits from the Army Corps of Engineers this afternoon who strongly object to the policy changes on Middle Harbor Enhancement Project. Meaning these changes. So just moments ago we received a letter from them and the Port of Oakland. Here is the letter on my computer. I am imagining they are going to say the same things.

Commissioner Ziegler asked: Are they agreeing with David Lewis?

Ms. Goeden replied: No. (Laughter) But they say they thank us for the opportunity to comment. The Army Corps cannot support the amendment and I think they are talking about Bay Plan Map Number 4 – as it arbitrarily singles out Middle Harbor Enhancement Project retroactively applying new rules to a project that BCDC has already deemed consistent with this 2001 letter agreement...(Ms. Goeden continued to read the letter from the Army Corps)

Commissioner Ziegler stated: I think we got the gist. (Laughter)

Commissioner Showalter added: I get it.

Ms. Goeden stated: I wanted them to know.

Ms. Hall chimed in: I do really appreciate that you told me that now.

Commissioner Galacatos added: And I won't be able to make the Commission meeting today.

Ms. Hall continued: I am curious to hear from you all-- the last time we talked everyone was more or less on board with removing this policy. Does everyone still generally feel that way?

Commissioner Showalter replied: Oh yes.

Ms. Hall continued: And feel supportive of these or feel generally onboard with our suggested alternatives? Obviously, there are a lot of discussions that we have had.

Commissioner Ziegler chimed in: I like it. I like removing it. I haven't fully digested the alternative which means I haven't asked Louisa if it is okay. (Laughter)

Commissioner Showalter asked: So, what additional comments do you want from Committee members? I am a little confused about that on this.

Ms. Hall explained: We don't necessarily need any additional comments.

Ms. Goeden chimed in: If you have any additional concerns or additions that you would like to see just like any of the other policies. We would be happy to entertain those.

Commissioner Showalter continued: I did want to add one thought.

Ms. Hall mentioned: But we do have one more section to do.

Commissioner Showalter stated: On page 27--I know we are not going over the findings--but I would really like to see, I am just delighted to see all this stuff about adaptive management. I know I have been preaching to you guys for about four months and so I am really pleased to see this here. I do think it is quite significant. And I like the idea of also the Regional Monitoring Program and that is also very significant.

But one concept that I would really love to see put in here is the concept that adaptive management is an important mechanism for communicating the best available science to the restoration community because I think that one of the problems when you are doing this work so quickly is that it is hard for things to get written up in journals and it is hard for people to have time to read the journals and all of that sort of thing. So, I think that the adaptive management process with the meetings that go on, the regional meetings that go on as part of it is really an important mechanism for communicating best available science. And clearly, we've had best available science peppered throughout here as we should, and this is a way to communicate it. So, I'd like that added.

Ms. Hall continued: I would just like to ask in the interest of time then, shoreline protection is the one set of policies that we didn't get to yet.

Did anyone have a major concern or red flag that you want to raise at this time? This is on page 39 and 40.

Commissioner Showalter stated: Well again I generally thought it was quite good, but I was a little concerned about there is no explicit mention of the fortification needed to shorelines to allow the wetland restoration to go forward. And should we go there?

Mr. Halsing chimed in: It is unclear whether we are supposed to actually – I am going to hold off on that. The Salt Pond Restoration Project is a perfect example of a place where we need to do quite a lot of levee improvements of these old salt-pond berms and make them more like real levees in order to advance the restoration project. Otherwise we cannot maintain the current level of de facto flood protection provided by these former salt-pond berms.

And so I appreciate that this added fill for restoration purposes is what we are trying to get through and I certainly don't want to throw the barn doors open for building levees everywhere but where there is an existing berm and needing to improve something that is already there increasing its footprint area or volume inside of BCDC's jurisdiction in order to safely advance a restoration project – that seems an important thing to call out explicitly.

And there are a few places in my read-through where I didn't see that and maybe I didn't spend enough time with it, but I'd like to see something like that. If you can specifically link this added fill to flood protection specifically to enable a restoration project to advance, I think that is different and worth calling out.

Commissioner McGrath had a concern: I have another concern. On page 40 with the introduction of word “all shoreline protection projects” – and this is kind of triggered by the city of Emeryville whose public works director used to work for me and they have a little finger of land at the foot of Ashby that is eroding and they want to put in a revetment. That is a construction-debris landfill as is the Barclay/Cesar Chavez as are many others and they are protected by rip/rap to prevent erosion of material into the Bay. And in general, in the context of those things and ongoing maintenance I don’t think it makes sense to require evaluation of natural and nature-based themes. And this gets triggered for those kinds of projects. I think you need to look at long-term solutions for the East Bay shoreline at a more comprehensive but not in a context of a little project to fix an existing revetment that protects the Bay from erosion. So, I think “all” goes too far.

Ms. Hall asked: Do you think the suitability and sustainability aspect would exempt that kind of project?

Commissioner McGrath answered: I just think that you are irritating people that it doesn’t really benefit you irritating. (Laughter)

Commissioner Ziegler observed: It seems like there is a lot of resistance out there from a lot of folks on doing this. It is just the status quo. I agree with what you are saying on the example that you have if that is what you are trying to address to get over that hurdle.

Ms. Goeden stated: It is interesting that the South Bay Salt Ponds have an eroding levee an eroding berm in front of an existing landfill and they are using the ecotone to deal with that erosion issue.

Mr. Halsing added: It is not a fully tidal-influenced area.

Ms. Goeden replied: I know but it is a really big pond with long wave action.

Mr. Halsing agreed: It is a really big pond. Yes, and that problem has started in the short time since it was made tidal.

Ms. Goeden added: But you did a feasibility analysis to figure out – we didn’t ask you to, but you did – figure out how you would deal with that eroding landfill and that’s what you figured out. And so there may be cases where people could use a nature-based feature to deal with an eroding landfill.

Commissioner McGrath agreed: Absolutely but the question here is at what scale you trigger that kind of work.

Commissioner Showalter opined: I don’t think it really makes any difference whether it says “all shoreline protection projects or shoreline protection projects”. Each is fine with me. If it makes Jim happy let’s get rid of all of them. (Laughter)

Commissioner Ziegler stated: I agree.

Ms. Hall asked: Are you in favor of keeping the “wherever feasible and appropriate” part?

Commissioner McGrath replied: No if this is a step that doesn’t much meaning except filling out an extra form, I just don’t think it is worth it. I think the context for how we are going to pursue the visions that the Estuary Institute has articulated is not going to be in repairs of

levees on little projects whether they are a landfill or waste disposal that we stopped thanks to Sylvia and her friends or residential development. I just think you are opening a front on too many levels.

Ms. Goeden surmised: Well maybe the problem is the terminology of shoreline protection because what you are saying is that it is all-encompassing, and we would apply this to every type of even our repair of an existing bank.

And maybe some people are thinking that an overall protection project, like we are building a new shoreline protection and you are talking about repair of existing protection – I’m just wondering if there is something to be teased out there that might be useful.

Commissioner McGrath noted: Well the previous one said “new”. This one says “all”. So, the distinction is important.

Commissioner Randolph chimed in: I have sort of another question.

Ms. Goeden asked: Does it say “all”? I mean “new”?

Ms. Hall replied: No, before it said “Wherever feasible and appropriate” – shoreline protection projects should...”

Mr. Halsing asked: What is at the end where it says “airports may be exempt”? What if it said, “Public infrastructure such as airports or closed landfills may be exempt”?

Commissioner Randolph reiterated his inquiry: That was my question – why airports? What about the seawall in San Francisco or other projects?

Ms. Goeden stated: Because they are demanding it.

Commissioner Randolph pointed out: People will ask why airports and not ports or why not a seawall in San Francisco? It sort of opens a question if you call it an exception. Is it the one exception or is there a rationale behind this?

Mr. Hall explained: We have a finding added. It could be fleshed out a bit more but saying in some cases natural solutions may conflict with adjacent land uses in the case of airports.

Commissioner Randolph replied: Yes, so something like that is helpful otherwise “airports” is kind of there just by itself.

Ms. Hall continued: Yes, that is why we could expand on this finding too.

Commissioner McGrath noted: It is a little more like legislation. (Laughter)

Ms. Hall added: We could consider talking about adding another exemption for those other kinds of projects, but it is hard to define.

Commissioner McGrath pointed out: I just think there are benefits to regulation being as efficient as it can be.

Mr. Goldbeck stated: I just want to clarify that this isn’t going to result in a revised regulation going out for consideration.

Commissioner McGrath replied: Oh, we know that.

Mr. Goldbeck continued: I have to state the obvious sometimes and make sure everybody is onboard with that. We've had really good comments and thanks everybody for participating. It is really useful.

Commissioner Ziegler gave kudos: You did a great job, and this is really exciting – amazing work. It really incorporated a lot of what I know was discussed.

Commissioner McGrath emphasized: It does need some cleanup on typos.

Ms. Hall replied: Yes, I know.

Ms. Latta chimed in: And one quick, last comment – I really appreciated Jim's comments but I do think that these individual, rip/rap, repair projects are a major area we are trying to not do status quo. And there are opportunities to have green elements incorporated into that and the same with seawalls. And so, I think the harder ones that we traditionally said there is nothing else you can do and let's just keep doing that – anything we can do to also make reference to the vertical and the rip/rap would be good. Thanks for welcoming these comments.

Commissioner McGrath announced: With that we stand adjourned.

**4. Adjournment.** There being no further business, Acting Chair McGrath adjourned the meeting at 12:42 p.m.