San Francisco Bay Conservation and Development Commission
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May 15, 2015

TO: All Commissioners and Alternates

FROM: Lawrence J. Goldzband, Executive Director (415/352-3653; larry.goldzband@bcdc.ca.gov)
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SUBJECT: Draft Minutes of April 16, 2015 Commission Meeting

1. **Call to Order.** The meeting was called to order by Chair Wasserman at the Metro Center Auditorium, 101 Eighth Street, Oakland, California at 1:07 p.m.

2. **Roll Call.** Present were: Chair Wasserman, Vice Chair Halsted, Commissioners Addiego, Bates, Chan (Represented by Alternate Gilmore), Cortese (represented by Alternate Scharff), Gibbs, Gioia, Gorin, Hicks, Lucchesi (represented by Alternate Pemberton), McGrath, Nelson, Pine, Randolph, Sartipi (represented by Alternate McElhinney), Sears, Spering (represented by Alternate Vasquez), Techel (represented by Alternate Hillmer), and Zwissler.

Chair Wasserman announced that a quorum was present.

Not present were Commissioners: Department of Finance (Finn), City and County of San Francisco (Kim), Secretary for Resources (Vierra), Napa County (Wagenknecht), U.S. Environmental Protection Agency (Ziegler), Governor's Appointee (Vacant), and Association of Bay Area Governments (Vacant).

3. **Public Comment Period**. Chair Wasserman called for public comment on subjects that were not on the agenda.

There were no public speakers present to comment.

Chair Wasserman moved to Approval of the Minutes.

4. **Approval of Minutes of the April 2, 2015 Meeting**. Chair Wasserman asked for a motion and a second to adopt the minutes of April 2, 2015.

MOTION: Commissioner Vasquez moved, seconded by Vice Chair Halsted, to approve the April 2, 2015 Minutes. The motion carried by a voice vote with no opposition or abstentions.

5. **Report of the Chair**. Chair Wasserman reported on the following:

a. **New Business**. This is the time when Commissioners can ask for an item to be placed on a future agenda, new business. Does anybody have any burning items they wish us to consider? This is not your only chance.

Commissioner Pemberton requested: As it related to legislation, if BCDC could look at AB 1323 by Assembly Member Frazier that relates to abandoned vessels and maybe consider bringing that before the Commission at a subsequent meeting for consideration.

Chief Deputy Director Goldbeck replied: Thank you Commissioner Pemberton. We just became aware of that bill and we are planning to bring it to you.

Chair Wasserman continued: We will put that on our next agenda.

b. **Report out from the Bay Fill Working Group meeting**. Chair Wasserman continued: There is a report from the Bay Fill Working Group; Barry would you like to do that?

Commissioner Nelson reported: We had a brief discussion today focused on how the Commission has handled challenging permits in the past as we look to determine what types of projects will need to be considered in the future and whether we can approve those projects under our current law and policies. The staff looked in about half a dozen different areas and came back with a list of what they called, "challenging projects" that required us to think creatively about existing law and policy. We went through a number of projects some of which were approved by the Commission, some of which were not. We had a really helpful discussion about where the Commission has flexibility within its current laws and policies and where we don't and the limits of that flexibility. We also had a good follow-up discussion about the Steering Committee that we have set up through the NOAA-granted project. We discussed what they just did in the recent inaugural Steering Committee meeting and how that dovetails with the work that our Working Group is doing. We did not come up with a new name for us. We will do that at our next meeting.

Chair Wasserman continued: Thank you for reminding me of new names, we will get to that in a moment. I have a couple of item to report on.

The state agency formerly known as the Joint Policy Committee has changed its name to, Bay Area Regional Collaborative (BARC). The reason is that nobody knew what JPC or Joint Policy Committee meant. I am not 100 percent sure that they will know what the new name means except that; it is intended to be a collaborative of the regional agencies. It is going to focus primarily over the next couple of years on rising sea level but will also continue paying attention to coordinating policies amongst the four regional agencies that comprise BARC.

The one item of controversy in that was indeed whether, "BARC" was acceptable as the acronym for this new agency. I confess I said it was appropriate because this is an agency that has bark but no bite, no money, no power. Despite those restrictions, we think that BARC is starting to do some very effective things and working very well with the executive directors of the four agencies.

Anne Halsted and I gathered information and conducted a review of our Executive Director earlier this month. A couple of Commissioners made comments. We did survey some outside parties. Our report is that Larry is doing an excellent job. He is elevating the presence of BCDC in a number of forums. He led us through the development of our strategic planning effort and the adoption of the Strategic Plan and is administering that with staff and making significant progress on bringing our record keeping into close to the 21st Century. There are some tasks yet to do. He is certainly working very well in the regional context with BARC and others including important regional partners that are not part of BARC like the Coastal Conservancy and on some occasions the Coastal Commission. We are very pleased with his performance and we thank you sir.

I want to report on the status of activities for our 50th Anniversary. The formal celebration and activities will take place on September 16th. In the morning there will be a summit on the future of the Bay. We may come up with a better name, maybe even better than BARC. This will take place in the morning between 8:30 to 11:30 at the Exploratorium. In the evening there will be a larger celebratory party also at the Exploratorium.

We have formed a non-profit, Friends of BCDC. It is incorporated. It has received its certification from the IRS. We are about to embark on our fundraising. We do intend to raise a significant amount of funds for this event because we really see the summit as the formal kickoff of the campaign that we have all talked about to see what we can do about rising sea level and how we are going to pay for it. We are working on some significant keynote speakers. We will have a couple of panels at the summit and are working on a number of announcements that we think will get significant press attention for that.

We have gotten conceptual approval and should document next week an arrangement with the San Francisco Estuary Institute to serve as our fiscal sponsor to cover those donors, particularly foundations, who will not deign to make a contribution to an entity in existence for less than three years or more. They will participate to help us in that and the event itself will be connected to the State of the Estuary Conference which will occur on the following two days over on this side of the Bay.

We will convene the first week of May, both the Working Group of Commissioners for that as well as the Board of Friends of BCDC. I met yesterday with Bob Tufts, former Chair of this Commission, who has agreed to serve as one of the directors. We will announce the full seat of directors at the next Commission meeting.

My last item is a piece on thinking about resiliency. I received in the mail the HUD National Resiliency Newsletter. It has a long piece on resiliency focusing on what HUD has done and focusing primarily on resiliency to natural disasters. They talk about resiliency meaning

how well and how quickly one can recover and how fair that recovery is, how it affects different populations in terms of geographics and socio and economic differences.

It also includes in resiliency the preparation for those natural disasters. That is our primary focus as we think about adapting to rising sea level. It actually points out a number of other areas and plans that have dealt with rising sea level that we are going to take a hard look at.

I should note, and also released this week, was the Bay Area Economic Institute's report on responding to storm damage in the Bay Area which also includes rising sea level. Its focus is more on the storm event. As we know, storm events are very intimately connected to the problems and challenges of rising sea level. It is a good background report to look at because it looks at the areas of vulnerability and it makes the important connection between rising sea level and upland water sources which will be affected by storms and have a significant effect on vulnerable places throughout the Bay.

Commissioner Gioia was recognized: While there is no Commission meeting on the 7th of May, is there still a meeting of our Rising Sea Level Working Group at 11:00?

Chair Wasserman answered: Yes. The Bay is going to continue to rise whether this Commission meets or not.

c. **Next BCDC Meeting**. There will not be a Commission meeting on May 7th. The next meeting will be on May 21st at the Ferry Building. At that meeting we plan to take up the following matters:

(1) We expect a public hearing and vote on a contract with the State Office of Oil Spill Prevention and Response.

(2) A vote on the application by the Golden Gate Bridge and Transportation District to replace its ferry terminal in Sausalito.

(3) A public hearing and likely vote on a permit application from the City of Larkspur to rebuild the Bon Air Bridge.

(4) A public hearing and likely vote on the U.S. Army Corps of Engineers application for a consistency determination to enable it to perform maintenance dredging in the Bay.

(5) We also expect to hold a public hearing on the NOAA Assessment and Strategy report prepared by BCDC staff.

d. **Ex-Parte Communications**. This is the time to make it on the record reminding everybody that you do also need to make a written report and submit it to Sharon.

Commissioner Pine reported: I did have a phone conversation with some of the sand mining applicants.

Chair Wasserman moved on to Item 6, The Executive Director's Report.

6. **Report of the Executive Director**. Executive Director Goldzband reported: I was not here at our last meeting. I want to tell you, however, that as much as my family marveled at the flowering cacti, cheered at a couple Giants exhibition games, loved the desert sunsets, and enjoyed sharing an inner tube while floating down the lazy river at our Phoenix resort, without a doubt, I prefer living with a Bay in our front yard to visiting in a giant ashtray.

I spent yesterday in Sacramento – which I would take over Phoenix pretty much any day – testifying before the Assembly Budget Subcommittee with jurisdiction over BCDC. I am happy to tell you that the Subcommittee approved the Governor's budget proposal of both the one million dollar General Fund augmentation and the $85,000.00 rent augmentation with neither discussion nor fanfare. That is very good news. In two weeks Steve Goldbeck and I shall be up in Sacramento on April 30th to do the same thing before the Senate's Budget Subcommittee. Assuming that goes as well then we will most certainly be looking forward to hoping that the budget gets approved and signed by the Governor. At least that way we know that there will not be any legislative issues. Tomorrow, Lindy Lowe and I shall accompany our own Commissioner Bijan Sartipi and MTC Executive Director Steve Heminger to meet with Secretary Brian Kelly so that we can all advocate that Caltrans fund a Baywide Adapting to Rising Tides program.

I do want to let you know that BCDC is now on the hunt for a new Chief Counsel. John Bowers, our staff counsel, has been pulling at least double duty for 28 months since Tim Eichenberg retired. We now have the funds to fill that position, and I encourage you to think about attorneys who might be interested in applying for the position and sending them to our website.

Each of you has received from Reggie of our staff a new Emergency Contact Information form that will ask you for some confidential information, including your cell phone number. While it is not mandatory to complete the form and be assured that if you do provide it, it will be kept very secure and that we would only contact you in case of an emergency.

Finally, I am happy to report that BCDC received all but one of the FPPC Form 700s. It was two as of about four or five days ago. Recognize that Chair Wasserman believes in the power of public shaming so be forewarned but we are very happy about that and I will most certainly make a call to the individual, who I am sure has completed the form, and it just got stuck with all the other April 15th mailings.

That completes my report with two exceptions. You each have in front of you a copy of, the Risky Business Report. You will remember that Risky Business is the business, government, non-profit partnership that is taking a look at various portions of the United States and identifying how businesses will be affected by climate change. I encourage you to take a look at it. It is in a very interesting context.

I also want to encourage you to read Will Travis' article called, The Shoreline of the Future, Permanently Temporary. I think it is a really good article and I encourage you to take a look at it.

That is my report Mr. Chair.

Chair Wasserman asked: Any questions for the Executive Director? (He received no comments) John Englander who we have heard from on a number of occasions has formed or taken over a 501 (C)(3) that had originally been created by the Bay Planning Coalition to be a rising sea level institute to focus nationally and internationally on rising tides and the ways to deal with them. It will be based here and Trav is very much involved in it. We look forward to hearing from them. We turn to Item 7, Consideration of Administrative Matters.

7. **Consideration of Administrative Matters**. Chair Wasserman stated: You do have a report on them. Does anyone have a question about this? (He received no comments) That brings us to Items 8 – 10 and I will turn you over to our Vice Chair and will intend to see you at the end of the meeting. (Chair Wasserman exited the room)

8. **Possible vote on BCDC Permit Application No. 2013.004.00, Hanson Marine Operations, for mining up to 12.03 million cubic yards of sand over ten years from Central San Francisco Bay deep water sand shoals located between the Golden Gate Bridge, Alcatraz and Angel Island, Marin and San Francisco Counties**.

9. **Possible vote on BCDC Permit Application No. 2013.005.00md, Suisun Associates, for mining up to 2.45 million cubic yards of sand over ten years from Suisun Bay deep water sand shoals located in Suisun Bay south of Chipps Island and Van Sickle Island, Solano County**.

10. **Possible vote on BCDC Permit Application No. 2013.003.00, Lind Marine Incorporated, for mining up to 1.25 million cubic yards of sand over ten years from the Middle Ground Island deep water sand shoals located adjacent to Middle Ground Island, near the Suisun Channel, Contra Costa County**. Acting Chair Halsted continued: Thank you very much and I hope we can keep this as level as you have. Items 8-10 on the agenda: Item 8 is a vote on the application by Hanson Marine Operations to mine up to 12.03 million cubic yards of sand over ten years from Central San Francisco. Item 9 is a vote on the application by Suisun Associates to mine up to 2.45 million cubic yards of sand over ten years from Suisun Bay deep water sand shoals located in Suisun Bay. Item 10 is a vote on the application by Lind Marine Incorporated to mine up to 1.25 million cubic yards of sand over ten years from the Middle Ground Island deep water sand shoals located adjacent to Middle Ground Island in Contra Costa County.

Brenda Goeden, Anniken Lydon and Pascale Soumoy of BCDC staff will provide the staff recommendations for each application, starting with a general introduction that encompasses all three. After the staff's recommendations are complete I shall ask the Commissioners to make motions and seconds on the staff recommendations in order so that we can then entertain Commissioner comments and questions on all or any of the recommendations.

Sediment Program Manager Goeden commented: First, I just want to mention that in the effort to continually recycle we recycled the title of the agenda items from the last Commission meeting and the volumes that are there are unfortunately the volumes from the last Commission meeting. So when you see a difference in my presentation, my numbers are correct.

We have before you today three staff recommendations for a possible vote on sand mining in San Francisco Bay. I will present an overview of the three recommendations and we will then make individual recommendations and individual votes.

But before I move into the presentation I want to give Chris Tiedemann, our Attorney General's Office representative, the opportunity to address for the full Commission the response to Commissioner Gibbs' question last time on our ability to consider impacts outside of the Commission's jurisdiction.

Deputy Attorney General Ms. Tiedemann commented: We provided a response to Commissioner Gibbs but we thought the analysis would be helpful to the Commissioners today. While the Commission only has jurisdiction to regulate activity within its permit jurisdiction, you are entitled to consider both the benefits and the impacts of activity within your permit jurisdiction that occur outside of your permit jurisdiction. This is particularly the case for resources that migrate such as sand, birds, fish and other migratory resources.

There are numerous sections of the McAteer-Petris Act and the Bay Plan that illustrate that you can consider those impacts and benefits but the most pertinent ones today are the subtidal policies of the Bay Plan. The subtidal policies recognize that resources move between rivers, the ocean, the Delta and the Bay and they direct the Commission to conserve those resources, but also direct the Commission in determining whether the resources are conserved to consider the feasibility of alternatives to the proposed project and also to consider whether the project provides substantial public benefits to the Bay Area.

In making both of those determinations it is impossible for the Commission to simply look at the Bay and the 100 foot shoreline band, it has to look at the impacts and benefits of the project on the resource that moves inside and outside of Bay and the shoreline band. So you cannot restrict any activity outside of your permit jurisdiction but you can certainly consider impacts and benefits outside of the permit jurisdiction.

Ms. Goeden continued: First, I am going to give just a brief refresher on the projects for those of you who maybe forgot or were not present for our last presentation.

Sand mining basically occurs in two general areas in San Francisco Bay: Central Bay, located in the lower left square between Alcatraz and Angel Island and the San Francisco coastline and then up in Suisun Bay near the eastern extent of our jurisdiction.

Previously there were four sand mining applications, one for mining in Central Bay from Hanson Marine Operations; one from Hanson Marine Operations for mining at Middle Ground, another for mining at Middle Ground from Lind Marine and then one for mining at Suisun Channel from Suisun Associates. Through our negotiations over the last few weeks Hanson

Marine Operations opted to withdraw their application for Middle Ground Shoal, in order to redistribute some of the volume to other areas and also reduce impacts to Middle Ground Shoal.

The Central Bay leases are shown here in the pinkish red. There are four lease areas that were issued by State Lands Commission so they are all State Lands tidelands but each lease area has several parcels.

The Suisun lease areas: One is Middle Ground, the smaller, eagle-head shape, which is a private property known as Tide Lot 39. That is the project proposed only by Lind Marine at this time. Suisun Channel is a State Lands Commission lease and that is Suisun Associates' project.

Over the ten years the total acreage that is proposed for mining remains 3,900 acres in removing Hanson's proposal the Middle Ground Shoal did not reduce the acreage, simply the amount of mining that was proposed by their area was changed.

The total proposed annual mining went from 1.613million cubic yards to down to 1.426 in total million cubic yards (mcy).Peak mining is still proposed, at a total of 1.75 mcy per year, down from 1.95 mcy. And the total mined over the ten years now would be 14.26 mcy.

The way acreage for the lease areas now break down is Hanson Central Bay area will be 2,601 acres and a total of 11.41 mcy over ten years. Lind Marine is now down to 1.0 mcy over ten years and the total lease acreage remains the same. Suisun Associates also reduced to 1.85 mcy over ten years, with the originally proposed acreage.

You can see here the average annual volume and the peak year volumes for each lease. It is important to note that in the recommendations there is the inclusion of maintaining cumulative averages. So in one year the miners may mine – we'll take Lind Marine for example – 80,000 cy. The next year they may have a better year as far as demand goes and they would be allowed to use the 20,000 cy that was left over from the previous year to bring them up to 120,000 cy for that year's. But then the next year they would need to drop back down so the average continues to 100,000 cy per year.

We did redistribute the volumes a bit from the summary and I just wanted to point out to you that the two lease areas in Central Bay that were reduced. This is Alcatraz Shoal South and this is Presidio Shoal South. In Central Bay we reduced the volume of mining in these two areas, particularly because this is the area that sand is transiting out of the Bay to coastal beaches, shown in the scientific research. Similarly, we reduced the volume considerably at Middle Ground Shoal because that area was showing direct erosion and did not seem to have contributions from outside the lease area, and did not seem to be replenishing much. So we moved volume from Middle Ground over to the Suisun lease area.

At the last public hearing one of the Commissioners asked about a reasonable long-term average so we wanted to include a couple of slides here to show you what we have on averages. This chart shows a ten year averaging period. You can see by the bars, as you move the averaging period along depending on which ten years you pick, the averaged volume changes. So where our current proposal is at for the total volume is right about there. If you

were to take those bars and change them into numbers, this is the long-term averaging every three years, starting in 1995, which is the beginning of our record, up to 2014. And you can see that the average changes every time you look at a different period. But again, our currently proposed volume is around the 1990 through 2008 mining average. Similarly if you look at the 15 year average, just taking the exercise a little bit further, you see a very similar trend. Now you see the volume that we are authorizing is approximately the same as the volume mined between 1988 and 2014.

This is our conceptual diagram for you today. We were thinking about the idea of uncertainty and how there is a lot of uncertainty involved in this particular action. It is not like putting a building on the shoreline where we have dimensions; we have the actual shoreline. So how do we deal with uncertainty in this case? We thought about the things that the Commission can do as far as trying to reduce uncertainty and we found that there are basically three levers or dials that you have to turn.

One is the project volume. If you look at the bottom bar of the triangle, the originally proposed volume was 2.04 mcy. You could start there because that was proposed. You could go all the way down to zero to increase your certainty that there will be no impacts, but that would decrease a lot of certainty for the miners as far as getting anything done.

There is also the idea of scientific understanding and funding for scientific information. You can have zero dollars to further the scientific information or you can increase funding and increase scientific information over time. And then there is also the authorization period. You could zero it out, but what was proposed was ten years, you could do more, you could do less. Depending on how many years you authorize you get more or less certainty, either for conservation or for the mining companies and you can move those numbers around quite a bit.

So this is where we have landed in the staff recommendations. We moved the ball to the right on the volume, so we went from the original 2.04 mcy requested and went down to the reduced project alternative that was covered in the State Lands Commission Final EIR; and that is represented on the bottom arrow. As far as the authorization period, for a number of reasons we left it at ten years, but primarily because there will be a reauthorization of a lease likely in eight years and that would involve another review period. We would like some time to have some scientific work done and have results to consider. We talked with the miners about the opportunity to fund science and came to an agreement in which they would provide $1.2 million, for sand transport and studies of different sorts and they agreed to that at the proposed volume.

This is the package we are presenting to you today. Increasing scientific funding hopefully will give us some certainty the next time around. As we move through the process we will have reports back to the Commission. And if we do find through scientific studies that there are significant impacts from the mining, there are reopeners in the authorization to allow us to modify the permits, suspend them or even revoke them if necessary.

In an effort to show what has been done historically permitting-wise, this chart shows what's been done. Going from left to right, it starts with the permit length. Historically BCDC has not authorized more than five years at a time. Originally it was even shorter, 30 months, but over time we have had the opportunity to increase lengths of time.

As you go across the chart that you see before you we have what has been requested, which was ten years, what the Water Board has approved, which was also ten years. All of the Resource Agencies approved ten years of mining. CEQA talked about length of mining period, which was ten years. They have requested a ten-year authorization period and that is what we are suggesting to you today.

In addition, looking at total volume. Historically we have authorized to several different companies rather than two companies, at the time, 2.24 mcy of sand mining. The applicants have reduced that a little bit in their original application to 2.02 mcy. The Water Board was able to negotiate down the number to 1.613 mcy, which was a proposal from the miners. The Resource Agency opinions all authorized the 2.02 mcy with mitigation and minimization measures. The CEQA Reduced Project Alternative was 1.346 mcy as the environmentally preferred alternative. The applicants amended their permit down to 1.426, which is the reduced project alternative from the CEQA document and that is what we are recommending today.

As far as peak volumes go. That was not actually part of the original picture and it was not part of the CEQA analysis. However, the Water Board felt it was appropriate and BCDC feels it is appropriate to allow the mining agencies to kind of bump mining up and down with market demand depending on what is needed, and to keep a lower number overall.

And then as far as scientific information. As the permitting process has continued and marched down the path, every agency has added in some additional requirements due to their particular authority and concerns for different types of resources. We had originally required bathymetric change analysis and tracking of sand mining activities to help us understand how mining was affecting the Bay and that began in 2003. When the application requests came in they were included as part of the package. It was also part of State Lands Commission's CEQA document and their leases.

The Water Board included an effluent study to look at water quality impacts of the mining as they discharge water over the side of the barge with fine sediments in it. The Resource Agencies, particularly NOAA Fisheries, required a benthic ecology study to better understand the impacts to the Bay bottom and essential fish habitat. As we got to our application and recommendations we negotiated for some additional funds to help cover the cost of understanding the sediment transport issues and the impacts of this project to those issues.

Finally, what is the Executive Director's role in this recommendation and what is the Commission role? Originally BCDC had in its permit, at least since 2003, the ability to amend or revoke the permit. We continue to maintain that authority and we have actually asked and required the mining community to come to the Commission on a two year basis to update you on what they have been doing mining-wise and the progress of the different studies.

In your recommendation you will see a number of special conditions. They are grouped by different impacts, but in this slide and the next slide I have grouped them by minimization, mitigation, monitoring, studies, and other sorts of measures—to get through them quickly—but you do have the specific language in your recommendations to refer to.

So as far as minimization measures, we did include a requirement to use the same type and volume equipment that they had proposed in their application and that is because if you change the equipment, the analysis of the impacts can change due to the amount of water that is being pumped with different pumps, the different size barges, the different type drag heads, et cetera. We continue to have volume limits as a condition, consistent with the authorization section. There are conditions that minimize impacts to species, particularly fish screens. There are buffer zones keeping mining 200 to 250 feet away from shorelines and shallow water habitat. There are navigation and safety requirements, particularly regarding oil spills and having prevention plans in place when they are required.

Regarding monitoring we have bathymetric change analysis, which I mentioned earlier, to look at how the Bay bottom is changing with the sand mining activity, and that is required on all lease areas. The mining tracking is an automated tracking device that goes on the mining equipment, which we have been using for a number of years now to make sure the mining is happening on the lease areas.

There are now designated biologists required to do operational compliance monitoring and education programs for the workers so they know what endangered species look like if they happen to find one and reporting requirements if that does happen. There is protection of water quality, which is pulled right from the Water Board's water quality certificate, which includes in that a self-monitoring program. We continue to have a quarterly and annual report submitted by the sand miners, which they have done diligently for as long as I can remember. And we also have continued to include the requirement to allow people to come on board, observe the activities and inspect them to make sure they are being done in compliance with the permits.

The mitigation was primarily required by the Resource Agencies. NOAA Fisheries required contributions to Cal Recycle in the form of $100,000 of funding and/or work to remove derelict vessels, old creosote pilings that are no longer in use or other marine debris to help mitigate for impacts to essential fish habitat. US Fish and Wildlife, Cal Department of Fish and Wildlife and NOAA Fisheries included mitigation for take of listed species and they did that in the form of mitigation credits at Liberty Island, which is an approved mitigation bank that is considered appropriate for salmonids, delta smelt and longfin smelt.

In the areas of studies we have the benthic ecology study, the effluent monitoring and the sand studies. All of those studies, with the exception of the effluent study, will have technical advisory committees developed to help us, the agencies assure they are appropriate. All the agencies that want to be involved will be involved but we will also have scientific advisors to help us because we recognize we are not the experts in these particular fields and we will definitely need scientific expertise to help us along the way. Those will come back to you as reports as things get completed.

As far as limitations go the permit has a duration of ten years. We have the ability to modify and suspend the permit. Particularly for BCDC's permit, because we are legally required to have property interest for any permit that we authorize, there is a requirement that says if the lease has expired you need to give us a new lease or your permit gets suspended until then. I believe there is a clause about holdover status, if the State Lands Commission doesn't issue a lease but continues mining allowances with holdover.

There are a couple of conditions that speak to legal protections of the Commission should there be impacts from this activity that are unintended and also the ability to pay for costs if we end up in court defending this permit. I have laid out in very quick summary for you what is in the recommendations.

So what we need from you today as we get to the recommendations is to determine as Commissioners whether or not you believe these projects are consistent with the McAteer-Petris Act, and the San Francisco Bay Plan policies. I have for you on the screen the references to the policies from the Bay Plan that are relevant to this project and the specific language and analysis is in the recommendations and in the staff summaries.

With that I am going to give the first recommendation and then I am going to turn it over to Pascale Soumoy who will do the second recommendation and then Anniken Lydon who will make the third recommendation and then we will invite questions and discussions from the Commission.

So here is the first recommendation. Regarding BCDC Permit Application 2013.004, for Hanson Marine Operations proposed mining in Central San Francisco Bay, the Commission staff recommends that the Commission approve up to 1.141 mcy of sand mining annually, with peak mining years of up to 1.395 mcy, as long as the cumulative average remains 1.141 mcy per year with a total of 11.41 mcy over ten years, as conditioned as the recommendation shows.

Sediment Project Analyst Pascale Soumoy presented the following: I am here to present our staff recommendation for the Commission's approval of Suisun Associates' Marsh Development Permit Application 2013.005 for the mining of 1.85 mcy of marine sand from the subtidal sand shoals of the California State Lands Commission lease located in Suisun Bay within the Suisun Marsh primary management area in Solano County.

Suisun Associates is a joint venture partnership between Lind Marine Incorporated and Hanson Marine Operations that was formed to mine construction grade sand from the State Lands Commission's 936 acre lease; 534 acres of this lease lies partially within the Commission's

jurisdiction. These acres are located in the Suisun Channel along the southern edge of Chipps Island and Van Sickle Island, which are part of the Suisun Marsh. The remaining lease acres extend into Broad Slough, which is the confluence of the Sacramento and San Joaquin Rivers and they are not within the Commission's jurisdiction.

The authorized project will allow Suisun Associates to hydraulically mine 185,000 cy of sand annually over a period of ten years, delivered by barge to various sand yards along the Bay shore and sell it to construction projects.

The sand mining project has evolved over the course of the permitting process. Suisun Associates' original proposal was for 300,000 cy of sand per year for a total of 3 million cy over ten years. After analyzing their application, the feasibility analysis and related scientific studies, staff worked with Suisun Associates to lower this requested volume to 185,000 cy per year, with the possibility of mining up to 235,000 cy any given year as long as the cumulative, rolling average did not exceed 185,000 cy and the total over ten years did not exceed 1.85 mcy.

As detailed in the recommendation, there are a number of special conditions specific to the reduction of sand mining impacts to benthic habitat in Suisun Bay as well as to native and listed species and their spawning areas through operational practices. Other conditions refer to Suisun Associates mitigation for their take of listed species and impacts to essential fish habitat per their purchase of mitigation credits and financial contributions to Cal Recycle's Bay cleanup project. There are also conditions that describe Suisun Associates' participation in the benthic ecology and water effluent studies and the formation of technical advisory committees that will address sand transport management questions through the development of scientific studies and additional research.

Staff believe that as conditioned, the project will minimize impacts to sensitive Suisun Bay habitat and species, help obtain additional information on the source and transport of Bay sands and contribute to a better understanding of Bay systems through regular monitoring and reporting and the support of scientific studies, while remaining an economically viable venture to Suisun Associates.

I would like to note that the Commission staff recommends including the following sentence to the end of Special Condition 2-N on page 13, as it was inadvertently omitted. The sentence reads: "The permittee's obligation to reimburse the costs and attorneys' fees incurred by the Commission shall terminate if the Commission, in exercise of its independent authority, takes a position in the litigation that is adverse to the permittees." Staff also recommends that the Commission allow staff to make minor, non-substantive corrections to the permit. Staff recommends approval of BCDC permit No. 2013.005 for Suisun Associates' sand mining project in Suisun Bay and Channel as described in the staff recommendation.

Sediment Program Analyst Lydon presented the following: The staff recommends approval of Lind Marine Incorporated's BCDC permit application No. 2013.003 for sand mining of construction grade sand from the subtidal sand shoals located on a 365—acre privately-owned lease near Middle Ground Island in Suisun Bay. The project would allow the applicant to mine up to 100,000 cy annually over a ten year permit period using a hydraulic drag arm

dredge. The authorization would also allow the applicant to increase mining up to 120,000 cy in certain years to address market demand, so long as the ten year mining total does not exceed 1.0 mcy and the annual rolling average remains 100,000 cy. The mined sand would be offloaded and sold to Bay Area customers at various upland offloading facilities.

The previous BCDC permit for Lind Marine's mining at Middle Ground Island allowed up to 250,000 cy of sand to be mined from this lease area. The applicant initially proposed to mine 150,000 cy annually from the Middle Ground Island lease area. The Middle Ground Island lease area has been shown to exhibit slight erosion in the deeper, mineable portions of the lease and the available sand on this lease is limited to material already in place. Staff analyzed the environmental documents, relevant scientific literature and the feasibility analysis provided and worked with the applicant to reduce their requested project volume from the originally proposed 150,000 cy down to 100,000 cy with peak volumes up to 120,000 cy.

The permittee will provide up to $84,151.00 in funds for research to increase understanding of the sand budget in the Bay, sand transport to the Bay, the amount of sandy material existing on the mining leases and the potential impacts of mining on the Bay sand resources. The applicant has fully mitigated for the take of listed species and impacts to essential fish habitat by purchasing mitigation credits and contributing to the removal of marine debris, including creosote pilings, abandoned vessels and other debris from the Bay. The applicant is also required to contribute funds for the completion of a study assessing benthic impacts of the project and a water effluent study analyzing water quality impacts of the project.

The applicant agreed to reduce mining at the Middle Ground Island lease area from the originally requested 150,000 cy and to redistribute volume to Suisun Associates' lease, which has not been identified as exhibiting erosion. This redistribution of volume decreases the impacts to the Middle Ground Island lease area. The reduced project volume at Middle Ground, recommended by staff and the authorization as conditioned, will reduce impacts to benthic habitats in Suisun Bay, reduce erosion impacts to Middle Ground Island and reduce impacts to both native and listed species within the Bay, while allowing for a feasible and economically viable project for Lind Marine Incorporated.

As conditioned, the authorization requires studies that will further assess potential impacts of the project and require regular updates from the applicant to the Commission regarding the status and results of scientific studies and monitoring. The funds provided by the applicant will support further understanding of sand dynamics in the Bay, which will reduce uncertainty and inform future Commission decisions regarding sand mining in the Bay.

The Commission staff recommends including a sentence on page 12, Special Condition 2-N at the end of the paragraph and the sentence should read: "The permittee's obligation to reimburse the costs and attorneys' fees incurred by the Commission shall terminate if the Commission, in exercise of its independent authority, takes a position in the litigation that is adverse to the permittee." This sentence was inadvertently omitted from the recommendation. Staff also requests that the Commission allow staff to make minor typographical, grammatical and non-substantive corrections to the permit. Staff recommends

approval of BCDC permit application No. 2013.003 for Lind Marine Incorporated's sand mining project on Middle Ground Island as described in the staff recommendation.

Acting Chair Halsted continued: Procedurally, we intend to ask for motions on each of these matters and then for the applicants' agreement to the motions and then proceed to Commission discussion of each of the matters and then to a separate vote on each of the permits. Commissioner Gioia had a process question: Because we have three different permits but the issues all intertwine, then we would need three separate motions. Do you want those motions all up front so that we could then have discussion? Acting Chair Halsted replied: That is what we would like to have. That would be perfect if we could have it done separately. Commissioner Gioia added: Putting these motions on the floor does not mean there cannot be amendments to the motions, right? Acting Chair Halsted answered: Simply for discussion at this point, yes.

MOTION: Commissioner Gioia moved approval of the staff recommendation for Item 8, seconded by Commissioner McGrath.

MOTION: Commissioner Gioia moved approval of the staff recommendation for Item 9, seconded by Commissioner McGrath.

MOTION: Commissioner Gioia moved approval of the staff recommendation for Item 10, seconded by Commissioner McGrath.

Acting Chair Halsted acknowledged the three motions on the floor: We have three motions on the floor.

The next matter is to ask for the applicants' agreement, whether or not the applicants have agreed to these proposals as they are put forth now. Would the applicants' representatives indicate on each one of these items – Item 8, do you agree to this proposal as put forward now? Mr. Roth spoke: Mike Roth from Hanson. I would like to accept the terms and conditions in Item 8. Mr. Butler spoke: Bill Butler, Lind Marine. On behalf of Lind Marine for Suisun Associates I would accept the terms and conditions as recommended by staff for Item 9. Mr. Roth spoke: Mike Roth from Hanson again. I am the other half of Item 10 and I too accept the terms and conditions. Mr. Butler spoke: Bill Butler, Lind Marine. For Item 10, on behalf of Lind Marine I accept the terms and conditions as recommended by staff for Item 10.

Acting Chair Halsted continued: And before we proceed to Commission discussion, we did not schedule a public hearing on this issue today but I would entertain any public comments on the motions and recommendations that are forthcoming and I have one card, Jason Flanders of San Francisco Baykeeper who would like to address us.

Mr. Flanders addressed the Commission: My name is Jason Flanders and I am here today on behalf of San Francisco Baykeeper. First, I do want to extend our sincere thanks and gratitude for the earnest effort the Commission as a whole, individually and the staff have put

into this challenging project. Baykeeper, of course, has commented numerous times so I will save everybody hearing those comments again and focus on two points that have recently been provided and the response to some of the questions the Commissioners had at the last meeting.

First is, I wanted to comment on the aggregate demand projections that were included as the basis for the need of the volumes of sand sought. Those were based on per capita consumption between 1960 and 2010, which we would contend is inapplicable and not a good basis for future planning, given that municipalities and agencies throughout the Bay Area have rightfully turned to a focus on low-impact development and have, in fact, spent millions of dollars removing the hardscape, the very hardscape that was put into place between 1960 and 2010. To count that among the need going forward would be to continue those past practices.

Of course, low-impact development creates green jobs that have not been discussed in this context, improves water quality and water supply and sea level rise resiliency. Increasing sand production is going to lower the price of aggregate and it is going to make LID slightly less cost competitive. So from the demand projection flows a lot of other assumptions such as, what would the impact on the local economy be because of a lower production rate? What would be the need for additional importation of sand? I think the higher the demand projection is the more compelling the case is for each of those points. But we have also heard that sand from British Columbia is not entirely interchangeable.

We think there is still room, to find a sustainable extraction level that meets local demands in a way that is more protective of Bay resources. We also would like to urge the Commission to consider a shorter permit term. These are two of the three levers that staff presented as providing more or less certainty. The ten year permit term, of course, provides the least amount of certainty.

We have heard the applicants rightfully say that this has been a very arduous permitting process and the science and the policy have evolved tremendously over the past ten-plus years. I would posit that revisiting this permit publicly in five years would make that process easier. Waiting another ten-plus years, it is just going to be harder. Industries throughout the region regularly do business under a five-year permit cycle under the Clean Water Act permits so there is a precedent for this. You do have a reopener provision but, candidly, that is somewhat little comfort for the public who has no role in that unless and until the Commission decides that they want to reinitiate this process again.

There are a number of scientific efforts that will be supported by the applicants and we have contended that many of those should have occurred before the EIR, before the Water Board's tentative order, before this. While it may seem as if they are voluntary, we would look at it more like "better late than never." And if they are going to happen over the next five years then, again, that really does seem like the appropriate term to reconsider this permit. Thank you again so much, for your consideration.

Acting Chair Halsted introduced the next speaker: Thank you. We have one more speaker, John Coleman.

Commissioner Gibbs had a question for Mr. Flanders: Thank you for your testimony. Do you have a sustainable, annual, cumulative or total figure in mind? And if so, how did you arrive at it? Mr. Flanders replied: First of all, we would support the Coastal Commission's recommendation, which is probably the most stringent proposal that you have received. Baykeeper has also advocated for extraction rates that approximate the average extraction rate over the last ten years.

You saw the chart of all the various ten year averages. The proposal before you is among the highest of any ten-year average going back thirty-plus years. The most recent ten-year average includes economic high and low periods. These businesses have stayed in operation and the science looks like it somewhat lines up with those numbers as being more protective and yet economically sustainable.

Commissioner Gibbs inquired further: And remind us what that number was? Ms. Goeden replied: The ten-year average, that if you look ten years would be 2005 to 2014, which is about 668,595 cy.

Acting Chair Halsted recognized Mr. Coleman: John Coleman, please, of the Bay Planning Coalition. Mr. Coleman addressed the Commission: On behalf of the Bay Planning Coalition I would hope that you would accept the three staff recommendations today that are before you. This process has been long and arduous as you are well aware; it has been going on over eight years and just nearly three years of negotiation. The staff worked hard to get what they wanted to get and the sand miners have worked hard to be able to make sure that that meets their economic needs. What we are looking at today is a proposal that will meet the economic needs as well as protect the environment for the Bay for the next ten years. I urge you to support all three proposals; thank you.

Acting Chair Halsted continued: I think now we are prepared to entertain Commission questions. Let's just start over here and start with Commissioner Nelson. Commissioner Nelson had questions: Some questions for staff and I will start with a couple of questions that come from Baykeeper's testimony and letter. First, they had suggested a five-year permit term. There is certainly a significant amount of scientific uncertainty about potential long-term impacts of sand mining given the state of the science of sand transport and related dynamics in the Bay and out in the ocean in terms of the sandbar on Ocean Beach. Does staff feel that ten years, I recognize that lines up with what the other agencies have required, but that ten years is an appropriate permit term, given the likelihood that our understanding of the science will increase significantly? Would a five-year term represent a reasonable amount of time for us to develop a significantly improved understanding of the science and would that be a more

appropriate term to allow us to know that we are going to revisit this permit, given the uncertainty we are looking at today? Ms. Goeden replied: There are a couple of things that we considered in thinking about the permit term. In the next five years what we think we will have the effluent study completed. So we will understand more about the turbidity as water is being placed over the side. And we expect that study to be done in 2017, so we would know more about the water quality impacts.

The second study that I believe also may be completed in five years would be the benthic ecology study. There is some potential that that may go on longer than five years but the current requirement is to finish by 2018. The sand transport sediment dynamic study - I would say that is the harder one to say whether or not we will have really good, new information for you in a five-year period. We certainly would have another set of change analysis. Another bathymetric survey is required and we would be able to look at 2014 versus the next five years, and so we would have that. But whether or not we would be able to fully identify sediment transport or what the changes mean or what is happening to the bar, that might be a longer term set of studies.

Chief Deputy Director Goldbeck added: If I can add, it is going to take a while to set up the Technical Advisory Committee and then have the independent science committees set up just to even figure out what the best studies are, so that's going to take a while. Then we have got to go out to bid, do the studies, have the studies completed, have them analyzed and then bring them back. So that's why Brenda is saying it is likely going to take longer.

Commissioner Nelson asked: And that is for the sediment transport analysis? Mr. Goldbeck answered: Correct. Commissioner Nelson inquired further: The second question from Baykeeper's discussion, they mentioned the Coastal Commission's recommendation. Two questions. First is, could you just walk us through the Coastal Commission's recommendation? And second, as I read the staff report, the Coastal Commission's recommendation is substantially outside of the bounds of alternatives analyzed in the final environmental document. So I would like to understand their recommendation and how it relates to the CEQA document that we are relying on here. Ms. Goeden replied: I am going to speak to the Coastal Commission letter off the top of my head. I do have it with me but I think I can summarize. In their letter they are primarily concerned with impacts to the outer coast, particularly sand being transported from Central Bay out along the southwestern part of San Francisco, around to the San Francisco Bar and then down to Ocean Beach; they didn't really speak to Suisun in their letter.

They called attention to the modeling study which they felt had left out some important assumptions that the modelers were unable to identify and I think that was partly because information was not available to be included in the modeling study. They did mention at one point in their letter the number 355,000 cy as an appropriate level of mining and I believe they based that on the replenishment numbers that came out of the EIR, being that the replenishment wasn't happening in Central Bay as anticipated. But then, in the conclusion of their letter they talked about a strong monitoring effort, reducing volumes of sand being mined in Central Bay, specifically to Presidio Shoal and Alcatraz Shoal, though they did not call them

out by name, and I think they also talked about monitoring San Francisco Bar. In their letter they did mention a number earlier on but they did not put it in their conclusion; they said simply, reduce the volume of mining in Central Bay, particularly these areas. That is my recollection of the letter.

Commissioner Nelson continued: But that is a number that is substantially lower than the environmentally superior alternative analyzed in the CEQA document. Ms. Goeden replied: The environmentally superior alternative number was 1,394,000 overall. About 285,000 of that overall number was assigned to Suisun Bay so yes, it is still substantially lower. That number was not analyzed as a reduced project alternative, it would have been an even further reduced project alternative.

Commissioner Nelson had a question for the Deputy Attorney General: A question for our representative from the AG [Attorney General's Office]. Baykeeper also raised a concern about whether the staff was correct that sand mining is an approved activity under the public trust. Could you walk us through the staff's thoughts about that and its bearing on our permit decision here? Ms. Tiedemann replied: First of all, the Baykeeper letter asserts that the State Lands Commission did not determine that their leases were consistent with the public trust. They are correct that the State Lands Commission does not make a finding of trust consistency for its leases; but the State Lands Commission must determine that its leases are consistent with the trust in order to issue the lease so State Lands did make that determination. Second, one of the most well-established public trust uses, and it is contained in the Bay Plan policies is commerce. California case law supports that mineral extraction is an authorized trust use and this is an extraction project. There is a notion suggested in the letter that purely commercial activity cannot be considered a trust use and our office disagrees with that assertion. Our great ports in California would be virtually shut down if commercial activity were not considered a trust use, projects such as fishing piers for commercial fishing would not be considered a trust use; so that is just an incorrect interpretation of the trust. Our office believes and has taken the position in litigation that this is an authorized trust use and supports this Commission's finding that it is a trust use.

The Bay Plan requires you to consider whether it meets the trust needs of the area. As I expressed at the last meeting, that does not mean that this Commission must determine that this project meets every trust need. That is impossible for most projects that come before the Commission. You need to balance various competing interests and make your determination that they are balancing those interests. But if you were to decide that this project could not be permitted because it does not include recreational or open space activities, that would be an incorrect interpretation and it would be one that would haunt the Commission in terms of many, many other projects that come before the Commission.

Commissioner Nelson had a final question: One final question, not from the Baykeeper letter. As I mentioned earlier, there is a significant amount of uncertainty around the implications of sediment transport particularly and its relationship with things like beach and marsh erosion. But we permit, substantial dredging for sand mining as well as for navigation, we do those things separately. So could you just very briefly walk us through? We have looked

here at the volume of sand mining, could you walk us through the volume of dredging for navigation purposes? How much of that is sand? Just give us a sense of whether the Commission is applying the same level of scrutiny to navigational dredging with regard to those impacts that we are applying to sand mining? Ms. Goeden answered: While you were talking I quickly checked the Coastal Commission's letter and they suggested 400,000 cy of mining for Central Bay. And that is approximately the average of the last five years of mining.

So regarding maintenance dredging: overall we authorize between two to three million cubic yards of maintenance dredging a year and I will give you a little background on that. Maintenance dredging includes federal navigation channels, so there are 17 Army Corps of Engineers navigation channels. Seven are deep-water channels that are dredged annually and that represents approximately a million cubic yards of maintenance dredging every year. The shallow draft channels are not dredged very frequently. In addition to that there are ports. We have five ports and all the ports dredge annually to keep their berths open for commerce. In addition to that there are, I believe, seven refineries that regularly dredge berths for oil and other products being brought in to refineries and being exported out. All of those are primarily considered for deep draft vessel traffic so 35 to 50 feet deep, although most of them are located, with the exception of the federal deep-water channels, along the shoreline. So being located along the shorelines, like our other almost 100 different kinds of marinas and small homeowner docks, are in shallow water habitat, shallow parts of the Bay. Those areas are primarily depositional. They regularly get mud settling in every year. When the level of mud builds up to the point where navigation is no longer viable they come in and they dredge.

The maintenance dredging program is managed under the long-term management strategy for the placement of dredge material in San Francisco Bay, which is a very detailed management program that the Army Corps, EPA, Water Board and BCDC agreed to with the stakeholders, including the entire dredging community, the environmental community and the business community back in 2000. We have been reducing in-Bay disposal of dredge material over the years in favor of beneficially reusing dredge material. We take the sediment and primarily put it in wetland restoration projects wherever we can but it also goes to deep-ocean disposal sites when that does not work out. So we operate under a set of programmatic biological opinions and agreed upon rules and procedures and all of that sediment is tested before it is dredged. Sand mining is not included in those policies. It was never analyzed under the EIR for that or those programs so they are not subject to the same sorts of rules.

Maintenance dredging is something that the McAteer-Petris Act calls out specifically. It says the San Francisco Bay is shallow and due to its shallow nature we need to dredge it for the Bay Area economy; and specifically says maintenance dredging for navigation is something that is a benefit to the Bay Area community. The McAteer-Petris Act does not speak to sand mining in that same way.

As far as what areas are, maintenance dredged that have sand, there are actually only three areas. The primary one is the Suisun Channel and that is a federal navigation channel that is dredged every year. Between 100,000 to 200,000 cubic yards of sand and it is deposited back in the Bay adjacent to the channel where it continues to transit through the system. The

other two areas that have sand are Conoco-Phillips on Rodeo Point, which dredges about 13,000 cubic yards a year and we have them place it at the outer San Francisco Bar to keep it in the littoral cell and help that sand hopefully stay in the coastal zone. The other one is San Francisco Marina's entrance channel, it regularly sands up and they dredge it almost annually now just to keep the entrance into the marina opened and that is usually to the tune of 7,000 to 8,000 cubic yards. The rest of the maintenance dredging is mud.

Commissioner Sears had a question: On the slide that you showed that shows the different total volumes that were requested and approved by different agencies at different times, it indicates that the CEQA reduced project alternative volume was 1.346 mcy, and as I understand it that was also found to be the environmentally superior amount. The amount being recommended by staff is slightly higher at 1.426 mcy. Is that because the staff-recommended amount is based on the average that was selected or is there some other reason that the amount recommended does not align with the environmentally superior amount found in the environmental document?

Ms. Goeden expounded: We ended up in a negotiating process with the mining community, our applicants here. We went back and forth with numbers and landed on the reduced project alternative, which I think at the time we were thinking was also the environmentally superior alternative but it turned out there is a slight difference, which is 80,000 cy that was mined by a different company. We had come to the conclusion that the reduced project alternative was something that we had agreed to and the $1.2 million for studies was part of that package agreement. We also believe that that's a feasible volume, that 80,000 cy is not a very significant number. Since we were able to find the feasibility for the 1.426 we did not feel it was far enough off the environmentally superior alternative to reopen the negotiations.

Commissioner Gibbs commented: It is kind of a follow-up to that question and it relates to concerns a number of Commissioners expressed the last time this matter was before us. And I think it was best expressed, by Commissioner Bates who said, "What is the sustainable number?" Please tell us how this number, given the concerns of Baykeeper and others, irrespective of what the negotiations were with the permittees, how this number is a sustainable number?

Ms. Goeden explained: That is a very difficult question to answer. The problem is there is no magic number that we have. What we have is some science that definitely shows we have a lack of understanding about benthic ecology. We have some science that shows that we have less sediment coming into the Bay and less being replenished, but we had to look into the whole question of feasibility and whether or not there was a place where we could hang our hat and find the actual number and say that it is feasible, sustainable, et cetera. That has considerations of the logistics, the economics, the impacts and we could not just say, we know 800,000 is the right number or 1.2 million is the right number. And because the environmental document, even though we have some different analysis that is augmenting the document, it was a place where we could say, there has been a conclusion and it has been supported. Steve or Brad may want to add to that.

Regional Program Director McCrea added: We need to know more information to get to the answer of sustainability and that is exactly what this recommendation is trying to achieve. The volume that you have before you is lower than previously permitted volumes, the recommendation that you have before you is lower than previous peak mining.

We have tried to put conditions on the permit that get to a reasonable number that can hold us over until we know more. That is why we have the rolling average, for example, that will be limiting. We also have the numerous measures, mitigation measures, monitoring measures, all the studies that you have seen on the board, the funding for studies to answer questions that have not yet been identified that the Technical Advisory Committee will put together. I would say that we are in a holding pattern and over the next four or five years we are going to learn a whole lot more, and then that information will roll into the next decisions. And I think we will be able to answer that question about sustainability a lot more in the future.

Commissioner Gibbs inquired into permit provisions: And if for any reason it appeared that this number was too high and unsustainable, the reopening and other provisions in the permit would allow you to come back to the Commission and revisit that question. Mr. McCrea stated: That's right. We have the provision in the permit that does allow it to come back if we find information. The Executive Director has the ability to bring this back to the Commission and have another discussion about this.

Commissioner Gorin commented: There was a discussion at the last meeting talking about the difference between relic sand and transported sand and I am trying to get to the same questions the other two, regarding sustainability. And there was the suggestion, I believe, by Mr. McGrath the last time talking about relic sand. I am hearing you say that we do not really have the information yet to determine how much of the volume is relic sand, where would the relic sand be. Will we in the next five or six years be able to get a better handle on that? Ms. Goeden answered: I believe so.

I am going to go back to what relic sand is and where it is. The relic sand would be the sand that is bedded, sitting on the bottom. It is possible that that question is easier to answer than the transporting sand, especially the volume. Because it is sitting there you could potentially take a boring all the way down to the bottom, although it would be extremely expensive, and find out what the quality and quantity is and then do an estimate, at least for Central Bay because there is an established bedrock. For Suisun, my understanding is even three miles down they had not found bedrock when they did a seismic analysis. So I think if we chose that to be a priority to find out the actual volume of sand I think it is possible we could do that. The question of the sand transporting across, which is more to Commissioner McGrath's concern, is the harder one to establish because you have tides and currents moving things around and it changes seasonally and annually and it is going to be a harder nut to crack.

Commissioner McGrath commented: I may be the only Commissioner who understands exactly how anxious the permit applicants are and I am going to help but not entirely resolve their concerns. First I want to start by complimenting the staff. They have taken a very complicated, technical issue and they have not only analyzed it thoroughly, they have engaged

the USGS and cutting-edge science in doing so and they have presented it and communicated it very clearly. You don't always hear me that complimentary but I want to make sure you understand that I recognize really good work when I see it. I agree with the general thrust of their recommendation. I do want to make a few changes to the monitoring program so let me run through my comments as quickly as I can. On volume the staff proposes allowing 1.141 mcy of dredging within the Central Bay. That is slightly less than the Regional Board had. I have no problem with that volume. On term, I agree with the ten-year term for the reasons laid out by Brenda. My own judgment in following this issue for what, about eight years Brenda, is that it will take about ten years for us to be able to understand sediment transport and the distinction between those areas that are relic. I do have concerns on monitoring and I am going to bore you all a little bit but there are two major issues I have. First, while I appreciate and recognize the role of the staff in trying to negotiate towards an agreement capping the cost for monitoring without some clear understanding that we can get the job done for that cap is not, to me, acceptable. I do not favor any more monitoring than needs to be done and I have no information that tells me 1.2 million would not be enough but I think we need to make sure that we can do the job.

I also think that the terms of the language for the monitoring has to state a clear purpose; I have made an effort to redefine the purpose statement and I will read that to you. "In order to determine whether continued mining may be approved, additional monitoring shall be completed that demonstrates…" we cannot get to certainty but we can get to what I am suggesting as a standard here "…a high degree of probability that the areas proposed for leasing are relic deposits that are not in active transport to either the outer coastal beaches or sustaining beaches and in subtidal habitat." So when we engage in a monitoring program I think we have to have a clear goal in mind rather than a price.

I want to talk a little bit about the cost. I have been involved in the dredging business a little bit. The Legislature authorized BCDC to charge $0.07 per cubic yard merely to fund the LTMS. The agencies charge, the Regional Water Quality Control Board, and I don't remember maybe Brenda does, if it was $0.25 per cubic yard or $0.40 per cubic yard simply for monitoring the impacts of disposal. You know, that $0.07 was a 1996 amount. Given the value of the resources extracted, the fact that they are an element of public trust resources that this Commission is empowered to protect and the cost of alternatives for supplies of sand, I think a greater cost for necessary studies, if it is really needed, can be justified and it straightforward meets a nexus test.

As I said, I am willing to cap the exposure of those that seek permits at this time unless there is a clear indication that at least there is a strong likelihood that we can do the job for that.

Then I wanted to dig down into the monitoring program itself. I think the staff has got a solid concept and I think this is important for countering some of the concerns of the Commission about whether or not it is relic deposit. I reviewed again the marine geology reports on the physics of the Bay and they identified, based upon the pattern of wave action and modeling and the bed forms at the bottom, which way transport was occurring. And

developed maps that said, okay, we are pretty sure that in these areas sediment is going towards the outer beaches and we are pretty sure in these areas it is not. The efforts of the staff and the Regional Board were to eliminate those areas with the strongest likelihood of seaward transport, so in that way they are minimizing the impacts for the short term of continued extraction. And I think that is good and I think that is more important than either the term or the precise volume.

But I have to say that the boundaries of which areas are likely to be relic and which areas are likely to be active transport to the resources that we are due to protect are not so precise. So I think we need to drill down a little bit in the monitoring program and I think we can do that in part by indicating what the objective is and when the time comes I will make an amended motion for that. But I also think we need to think about what kinds of techniques we use. Right now the staff has identified two bathymetric profiles, multi-beam bathymetric profiles. There are 13 that were done and used for this work. That is not going to be a significant difference in our understanding. What we probably need to do is actually measure currents at the bottom over a sufficient period of time where we know we have captured the key tidal cycles.

I am not here to tell you that that's what the Commission as a whole should do. I am here to say that there should be a work program developed and probably it should be transparent enough to be brought back to this Commission. And if at that time it is unaffordable or there are strong objections by Hanson, the Commission can hear and take those on. But I am not willing to buy a pig in a poke. It is not simply to improve our understanding of sediment transport, it is to make sure that if we come to the point of renewing these leases we are going to know a lot more than we do now. And that has to be clear in the objectives and that has to be done in a peer review manner.

While I did my graduate studies on sand transport to the ocean, there are a lot of people that have done a lot of work since I was in graduate school. They are a lot better than I ever hope to be and they are around. There's Woods Hole Group, there's the two sediment people, Pat Barnard and Jaffe at USGS, there's Lester McKee at the San Francisco Estuary Institute, there's Bob Bea at the University of California. It pains me to say it, but they are just as good a people at Stanford. We can get a good peer reviewed work program that we know that will tell us what we need to know and it probably needs to do some monitoring of currents at the bottom. With that there is one final thing we have to do because it is key to this. We also have to add one of the elements to what is reported in the dredgers reports and that is grain size distribution. That is a very important indicator for any modeling that you do in the future. I'm sorry it is a little nerdy; I hope I am still you guys' favorite nerd. I do understand this stuff pretty well. I think the staff has got it about 95 percent right. What we do need to do is either have the work program before us or make sure that the work program that is developed, we know we can afford, and give the public and the applicants a chance to comment that it is sufficient or not.

Ms. Goeden responded: Thank you for the compliment. We greatly appreciate it because my entire team has worked very, very hard and filled me in on a lot of things that I didn't fully understand myself so thank you for the compliment, we greatly appreciate it.

But I did want to just push back a little bit on the concept of not caring about relic sand. Not so much because it is relic but because understanding what changes happen on the Bay floor I think does potentially make a difference to transport and we really do not understand that. So if we drop down 12 feet, 16 feet, 5 feet, what difference does it make? I think that is a question that is relevant and I think it may have some implications on sediment transport. If you create a hole and the sand goes in rather than through, I think it is important to consider that as well. So just a little push back on something that I think we still need to consider.

Commissioner Zwissler inquired: I sort of had a similar question but I will just ask it more directly. How did you come up with the dollar amount for the studies? Ms. Goeden replied: I am going to let Brad answer that question. I can tell you that it is approximately $0.80 a cubic yard, which is a little more than the dredging fees. Mr. McCrea added: Remember at the last public hearing Commissioner Sears asked this question and the answer was we are proposing $250,000 for studies. Executive Director Goldzband clarified: That was the answer of the applicants. Mr. McCrea continued: Correct, that was the answer of the applicant. Mike Roth announced that $250,000 was the proposal. The staff believes that is not nearly enough to do the work that is needed to be done. We have not identified the management questions, we do not have a work program developed yet, but we know it is going to take more money than $250,000. We threw out a number that was more; they came back with $750,000. We negotiated a $1.2 million funding stream. I will say that a fixed cost for studies is very important to the applicant and to the sand mining companies, as you can imagine. The idea of an open-ended number was something that they were not open to in our discussions with them. Although some might question whether $1.2 million is enough to get the work done that we need to get done, others would say that's plenty. Again, the Technical Advisory Committee and the Science Panel will figure out the best way to spend that money.

Commissioner Zwissler offered anecdotal observations: In my experience what I would suggest is whatever number you came up with, the consultants and the specialists would ensure that you spent every penny of it. I was even going to ask if it is a $750,000 study is there a refund provision but I guess that is kind of silly. Mr. McCrea agreed: I think your former comment is right. We expect that the scientists and the Technical Advisory Committee will figure out how to spend this money.

Commissioner Zwissler added: Let me just parenthetically say that I agree with the concept that it is not a good idea to have an open-ended or uncertain amount in a permit that we authorize. In terms of the impacts, what I am struggling with is on page ten, in terms of the reopener, it talks about if there is a finding of "substantial depletion" that there could be a modification of the permit. How do we decide what a substantial depletion is if we don't understand the baseline questions? Ms. Goeden commented: I think that is a really good question which points us right back to the studies. Because we do not believe we fully understand the baseline and so we cannot today say what a substantial depletion is. So we need to kind of step back, talk with the experts, figure out more what it means, depending on does it matter if two acres is deeper in one area, does that all of a sudden create a salinity sink of some sort or dissolved oxygen problem or is it not substantial? If we are taking sand out of

transport completely so that it only refills Central Bay, that could be a substantial depletion because sand is not contributing to the coast. Commissioner Zwissler asked for clarification: Who makes that judgment as to the substantiality? Ms. Goeden replied: The Commission.

Mr. Goldbeck added: You will also have your benthic survey, when that is done as well, to start trying to get a handle on the critters that are down there and the potential impacts of this kind of depletion. And you will also have another one of the multi-beam surveys to start to see the changes, seeing if they are intensifying or how they are moving along. But again, we do not have perfect knowledge.

Ms. Goeden continued: So the idea would be that as the studies progress and we get more information we will come back to the Commission and report findings so that you can think about what is now known in comparison to what was not known and what the proposed mining is. If it continues to be at that level, does it make a difference, or does it not? I don't know that we are ever going to have perfect knowledge but we are going to have better knowledge to consider the impacts.

Commissioner Zwissler pressed for more clarity: I guess what I am just trying to understand is in terms of our policy and how we deal with matters like this. Are we saying this is a perpetually open-ended issue or does the applicant ever get certainty that they have a permit that they can rely on?

Ms. Goeden replied: It could be a perpetually open question. In the best of all worlds, right, we study the sand transport and the relic sand and we find out, aha, we are wrong, sediment supply to the Bay is not decreasing, it is actually increasing. Or maybe we have started to remove dams and we have started to see the sand supply replenishing and now there is enough that the Bay is not having impacts and the mining does not seem to cause a dent. If you look at Suisun Associates' lease, that one in the two multi-beams that we have there is a very, very small area of erosion that has been shown through the mining, but other than that it is stable. If you look at Middle Ground it is not exactly the same story nor is it the same story in Central Bay. But things do change. We could have a number of really rainy years that produce a lot of sand. We have not seen that in a long time but there is potential.

Commissioner Pine inquired about the revocation clause: My question also went to this modification or revocation of the permit clause. There is great concern, of course, about the depletion of the sand on the outer beaches. But when you read this through this language, Section (1) says "substantial depletion of sand such that the sandy deep water habitat is not being conserved." That seems to speak to the place where you are doing the mining, not where the sand is going. And then (2), "significant adverse impacts to the Bay…" I just want to be sure that if we find out that this really is having a material adverse effect on deposits of sand on beaches outside of the Bay that that's a ground for us to revisit that. It was not really clear to me that says it.

Ms. Goeden suggested: That is a really good point and you might consider a friendly amendment to say something along the lines of sandy deep water shoals, beaches or tidal flats, which are all things within the BCDC policy. They are different policies but they certainly are called out in the different policies. Commissioner Pine stated: I would make that friendly amendment.

Commissioner Vasquez inquired: About 45 minutes ago I had a clear question but as things progressed it got a little more confusing in my head. It was about the $1.2 million. I understand that was a negotiated amount but I too do not like an open-ended check that allows for and as was stated, if it is $1.2 million it is probably what is going to be spent. Do the miners have any say in those studies as to what is going to come forward? So they could, I won't say "argue" but say maybe "that has already been studied, why are we studying it now?" Ms. Goeden commented on process: We have one condition regarding the development of a Technical Advisory Committee. And the Technical Advisory Committee will include a permittee representative of their choice and the representatives from the different agencies who have a stake in the issue studied. So if it was the benthic ecology community you might expect the resource agencies, BCDC and the Water Board and the applicant all to be present and then scientists who understand those particular issues. As far as the sand transport study, they would also have an applicant or a permittee representative there and then similarly the resource agencies. I am not sure that some of the ones that are more interested in fish would be at the Sediment Technical Advisory Committee but the applicant certainly would be represented, and then of course scientists who have a good handle on the subject matter.

Commissioner Vasquez inquired further: So how is the collection of that money going to occur? Is it over the ten year period? Is it based on studies? Ms. Goeden explained: If you look at Special Condition G in the Central Bay recommendation, it lays out the total amount for each permittee. So in each permit the number is different because it is $1.2 million total for all three. And then it lays out a schedule of four payments on an annual basis for the next four years. The money is going to be deposited with the San Francisco Coastal Conservancy. They have a coastal trust fund and they would be responsible for the contracting. Brad checked in with them; they have agreed to do this. They would distribute the funds as the funds are needed to be spent.

Commissioner Vasquez added: In the left hand column of the Increasing Certainty PowerPoint slide it said "additional scientific information contributions." What have they contributed already in dollar amounts in addition to this contribution?

Ms. Goeden replied: The benthic ecology study has not been done yet but they have committed to up to $275,000 for that. The multi-beam surveys, which we have been doing for the last few years, two sets of five years so far, are usually on the order of about $175,000. Mr. McCrea stated: Commissioner, I think an easy way to say this would be that there is the $1.2 million that is in funding that you have been talking about. If you add in the other studies it is up around $2 million. And then if you add in the mitigation and monitoring measures that they are also on the hook for we are talking about closer to $3 million.

Commissioner Vasquez continued: That would have been nice to maybe have had a column as to what has already been committed to and this is in addition to. So we are looking at, from the miners, $3 million over the next ten years, or sooner I guess. If I was negotiating for them, and I am not, at the $1.2 I would ask that we change it to "up to." Ms. Goeden responded: I believe that language is in the recommendation.

Commissioner Pine inquired: One more question to help my understanding about the relic sand versus the active sand. The sand that we are actually digging out of the bottom of the Bay, for the most part that wasn't going anywhere but there is sand always moving through the Bay. And I guess that is the sand we are most concerned with, isn't it? That is the transport sand. Or is there actually sand kind of swept off the bottom of the Bay even without the mining? I guess I do not understand what is the transportable sand?

Ms. Goeden offered an analogy: So if you think about the floor here. Relic sand would be what you are standing on. And then if you were to put sand dunes. Just imagine you are not in the water but you put sand dunes on top of them. Because we are pretty familiar with sand dunes; we have seen them at least on television. But when the wind blows sand is rolling and it continually rolls, it bounces, it slides. Sometimes if a really big windstorm comes more of it moves at once. In just regular, everyday wind some of it is just slowly moving, but it is moving. It is pretty much the same thing in the water except for instead of air moving it you have water moving it and when you have bigger pulses of water you have more energy so you are pushing more sand. So you might expect in times of heavy rains and big water outfalls you might push more sand and it might come a further distance. Other times when it is just regular, everyday water, just tides moving in and out, it would just be kind of moving at a regular rate.

Executive Director Goldzband asked Ms. Goeden to elaborate: And now make the distinction, please, Brenda, between that which rolls and goes and that which stays. Ms. Goeden offered additional examples: It's like a layer. I guess maybe if you have a cake, right, if you took a knife and tried to move the frosting on the cake you could move the sand layer that is in transport. Whatever the force is that is moving it, but the cake you are not moving unless you really dig in, right? You could take your fork and pick up that cake and push it but the frosting is what moves easily.

Acting Chair Halsted asked: Which of the sands then are the ones we worry most about depleting? Ms. Goeden answered: Well, it depends on what impact you are looking at but I would say the one you are most worried about depleting is those in transport because it is feeding the beaches along our shore, it is feeding our shoreline, it is feeding the coast. It is probably easier to impact that than it is to the bottom except for if you are just digging it out, right? So if you take all the stuff that is in transport then you are down to what you can dig out. Acting Chair Halsted commented: My impression, again very layperson level and having tried to read everything but not sure, is that the ones in transport are the ones probably considered more valuable by the miners; is that correct?

Ms. Goeden replied: I think that might be a little bit of a stretch. I think it depends because there is coarser grain and finer grain and it depends on what their need is.

Mr. Goldbeck further clarified: They are going for a certain size/class of sand. What may be moving may have been relic sand. Acting Chair Halsted added: So the size does not pertain to moving or not. Mr. Goldbeck agreed: Correct. I agree with Brenda's comments but as she said earlier, your policies call for you to conserve the sandy deep water shoals and minimize impact. So even if the material was relic that does not necessarily mean you do not care about it, but you are probably most concerned about the material in movement.

Ms. Goeden added: Because the policy talks about both Bay bathymetry, which is the bottom, and sediment transport.

Commissioner Scharff shared his understanding: Just so I understand. The plan in my head seems to be that what we have said is we are giving a ten year permit primarily because what we are looking at doing is getting enough information to understand this properly so we can reevaluate in ten years. And the reason we are not doing a five year permit is because we are not going to have the information within five years. Is that a fair statement?

Ms. Goeden agreed: I think that is pretty fair. Mr. McCrea added: And that is part of the equation. There is also just process in processing a permit application and there is another Environmental Impact Report that probably has to get prepared. So for a number of reasons a ten year term seems reasonable.

Ms. Goeden stated: The State Lands Commission and Commissioner Pemberton can speak to that. They said in their EIR that in ten years they would need to revisit the CEQA question. So that is actually two years shorter than our ten year permit so they will be going through that process toward the end of our permit, which will hopefully give us additional information as well and help our process. Hopefully for them it will be shorter this time too.

Commissioner Scharff inquired about the work plan: Commissioner McGrath raised a number of questions which resonated with me. The question was, are we going to have the information? What you said, and I am just trying to make sure I understand this, was that we still need to do the work plan. And that the $1.2 million may cover that work plan or may not cover that work plan. Is that a fair statement?

Ms. Goeden replied: That is fair. We did actually spend a fair amount of time, Heather Perry, our Sea Grant Fellow, made a lot of phone calls to researchers and consultants to try to figure out how much it would cost for different things and we kept coming back to, well we need to prioritize, we need to identify what the scope is. In the time that we had before the permit authorization was up for approval we didn't have the time to really develop a work plan. So while we did make a pretty good effort and we have a pretty extensive chart of things that can be done, we do not have a price tag or a time line or things completely scoped out.

Commissioner Scharff continued: I liked your little chart with the more certainty, the less certainty, how we look at that. You said you started with a higher number than $1.2 million. Was that number your best guess as to what it was going to cost and then you negotiated down basically from there? I guess what I am trying to get to is, there is obviously a different range of numbers if we use the $750,000 for that number. We would be less certain that we would be

able to get the work done than if we had up to $1.2 million. If we had $2 million we would have more certainty that we would get the work done, but it is up to that. So I guess my question is, where on that continuum are we at 100 percent certainty we can get the work done to 50 percent certainty we can get the work done? Where on the continuum does that $1.2 million fall? I realize you negotiated it but as a Commission we are not bound by the negotiations and I assume we should do the right thing in terms of what we think is certainty. So what other numbers are out there that might make sense as opposed to $1.2 million? Say we said $1.8 million; where does that move us in the continuum? Or have you not thought about it that way? You obviously threw out a number that was higher than that, you said that. Mr. McCrea responded: The reason we threw out a number that was higher, and you just said it, is because it certainly provides more certainty than $250,000, which was the proposal. We don't know exactly whether $1.2 million is enough or not. But we are comfortable that it is a reasonable number to get scientific research done. The decision is yours whether you think it is reasonable. Sorry we do not have more charts or pricing on what studies cost for your deliberations. I can tell you there were numerous conversations with the applicants and some hand-wringing around this conversation.

And I will tell you that the volume, I guess if you are a business person what you can afford depends on what your revenues are. So if you are talking about 300,000 cubic yards of volume well then that has, you can only afford so much. And as you can see, a lot of these numbers, we originally had this set up where it was mostly front-loaded and then we realized, well, it is going to take time for the Technical Advisory Committee to get set up and maybe it is just not reasonable to have all the money up front. So we have four friendly installments beginning this December and every December there will be equal amounts put in. That is the best we could do.

Commissioner Scharff asked: So changing the topic a little bit. What was the sentence again that was added to the legal disclaimer? Ms. Goeden replied: If you look at the Central Bay recommendation. It is the very last special condition and it is N, Liability for Costs and Attorneys' Fees. What happened is we were furiously drafting and passing around notes and we missed one sentence; so I got it in mine and they didn't get it in theirs. But the sentence reads and it is there for you in this one: "The permittee's obligation to reimburse the costs and attorneys' fees incurred by the Commission shall terminate if the Commission, in exercise of its independent authority, takes a position in the litigation that is adverse to the permittees."

Ms. Tiedemann offered advice: The general provision is one that we are increasingly putting in state permits. I think it is in the State Lands Commission lease, the Coastal Commission puts it in its major permits and it was in the Potrero Hills permit that this Commission approved. The purpose of it is if the Commission is sued based on a permit decision to approve this permit the State of California incurs expenses defending its decision. We could simply allow the permittees to defend the decision but we do not do that because they may not make the arguments in the same way that the State of California chooses to make those arguments. But we do not want to incur state expenses for defending the permit and we do not want to expose this Commission to liability for payment of attorneys' fees to a party

who challenges the permit if that challenge is successful. The final sentence that was added is a sentence that relieves the permittee of the obligation to reimburse the State for its legal costs defending the permit if we take positions in the litigation that are adverse to them and tank the permit. It might sound unusual that that would occur but it can occur and they will not reimburse the State if that occurs.

There is also a provision in that condition that we retain sole authority regarding how we defend the permit. So if that should occur for some reason we will make the arguments that we have to make but they will be on the State of California's nickel and not the permittee's nickel. This Commission does not pay us by the hour for our work so it really is a provision to entitle our office to recoup fees for our time defending this permit. But that is why it is there.

Commissioner Scharff clarified: My actual concern went more to that I was concerned that that last sentence actually would limit our ability to exercise the litigation the way we would like to. Ms. Tiedemann answered: No, it does not.

Commissioner Scharff voiced his concern: My concern is that we may take positions that while not adverse in the classic sense may disagree with their approach to it and then we would fight over the term "adverse". It would not be that we are trying to tank the permit but we may be making an argument that they disagree with. And they may say that is adverse to us because when we go to renew the permit ten years from now it may create a problem for us. And therefore it is adverse and therefore we are not going to pay for the fees and therefore you do not make the same arguments you would have made. I guess I, at the very least, would like to see the words "substantially adverse". I would actually like it to be stronger than that where it indicates that you are arguing against the permit. That it is not just an adverse position but if you were to argue for revocation of the permit they would not have to pay. Ms. Tiedemann replied: I think it is an excellent suggestion to add "substantially adverse" to the permittees' interests so I think that that's fine. I can assure you that our office would not make arguments that we think are appropriate arguments on behalf of the Commission simply to recoup fees from the permittee. That has not happened and it would not happen.

Commissioner Scharff clarified: I did not mean it in that way, I meant it more that they would try and put pressure on you not to make an argument. Ms. Tiedemann added: They certainly will do that no matter what. Commissioner Scharff continued: But their argument would be that we don't have to pay you fees if we do that and I wanted to not give them that leverage if possible, that was my concern. Ms. Tiedemann reiterated: I think your suggestion about adding the word "significantly" or "substantially" adverse is a good one. Commissioner Scharff added: When the time is right I will make that as a friendly amendment.

Commissioner Pemberton had a request: I don't have any questions, I just have a comment. I just would like to request for the technical advisory committees, that the State Lands Commission be a member of the committees when they are created.

Commissioner Bates had concerns: First of all I want to join the chorus of thanking the staff for what I consider to be excellent staff work. It is very clear and I think a lot of complex issues are presented in a way that people can actually understand them, so I take my hat off to

you. The concerns I have are two. Commissioner Nelson, I was concerned about the five years, I am glad you raised that. I am now satisfied that it does not make sense to do five, I appreciate that. Commissioner McGrath, I also appreciate your comments and I am trying to understand where we go with your comments. My concern may be aligned with yours is that once we have these studies, once we look at all this data, it is going to be questionable, correct? Where do you say, you have gone too far, you have done too much. It is going to be a huge argument. You are going to have their experts arguing with our experts and there is no determination that you have gone too far or we have done too much or it is really causing damage. It is a question of relativity, right? At what point do you say, you are over the line? As Commissioner McGrath said, you are over the goal line. So I don't know how we solve that but I think that is a real problem.

I would like to have some thoughts from the Commission staff about what they think about that. At what point do we say, "It has to go back to the Commission, the Commission has to look at this because you have made so much that it triggers us to get it back here." I don't know how that trigger works, so if you could explain that. Then the other part of it is, I am wondering about the monitoring and the question of the dollars that got raised by a number of people. Is there any reason why we can't open that issue up? In other words at some point you say, "We have these studies and the studies are not consistent with what we thought, we need more" and at that point trigger an opening to say, "Yes, we need more money and we are going to ask you to pay for it." Is there a way to handle that in this permit?

Mr. McCrea revisited previous comments: I'll reiterate what I said before that we thought long and hard about how the funding could work. I am going to answer the second question, how this funding could work. The certainty for the applicant to know what they are in for was at the middle of all of those discussions. I am sure in the next half hour we could find a way to do it, whether we could get the applicant to agree to that or whether the Commission as a body feels that is reasonable, I am not sure. But that would be something that we would be doing on the fly because we have not crafted it.

Commissioner Bates added: We come back with a report that says it looks like it is doing more damage than we thought it was so we have got to be concerned about this. At that point, obviously, if we were going to terminate the agreement, because we have that power, I gather, to do that, we could negotiate at that point. I'm sure the applicants are going to say, yes, we'll pay for other studies. I'm sure at that point that might occur. Ms. Goeden addressed the reopener clause: In the reopener clause it is not just come in and revoke the permit, it is modify, suspend or amend. So we could, there is certainly the ability under Modify to add additional studies, add additional funding. The condition goes on to say "if the applicant does not agree." But it leads it back to the Commission and the Executive Director to determine the need. Commission Bates added: That is reassuring if we actually have that ability.

Executive Director Goldzband expounded: Not only does the Commission have the ability, the Commission, I would argue, has the responsibility. And it is the responsibility of the Executive Director working with staff to identify when issues come up, the severity of those issues and to determine whether the severity of those issues demand that the Commission

actually take a look at it. I guess I would answer it one more way, Commissioner Bates. One of the things that I remember from the last meeting, if I remember correctly, face-to-face that we had with the applicants, was we sat down with a calendar and sort of figured out when the best times were for the applicants to come back to the Commission to brag about how great they are doing and about how marvelous the scientific studies are and about how much all of us are learning from them along with whomever else comes.

The first thought out of somebody's mouth was probably mine, and of course it is usually incorrect when I do that, 99 percent of the time, I'd say well let's just do it every two years. And Steve, as he should and as he does says, no, let's actually think about this and figure out when the actual studies are. So we know when some of those studies are so we have a plan and a calendar to actually get folks back here.

My response to Steve then was, look, I don't know enough to know what the Technical Advisory Committee or the Scientific Panel is going to do over the next zero to five years, but I know that, A, they have to do it quickly, and B, it has to be in priority order. So the more information we can get during those five or six years, the better off we all will be and we will have a report back to you at various times that are picked that are very much dependent upon when that information is coming in so that the Commission will have the opportunity to go through all of this once again because you haven't had enough pleasure in doing so and be able to figure out what it is you want to tell us. We will also come back to you at the same time with staff recommendations on that saying, here is what you ought to pay attention to, here is what you ought to look at and so on and so forth.

Commissioner Bates concluded: Good, that is also reassuring. Is there a planned time you will come back? Is it after each of the studies? Ms. Goeden replied: If you look on the Central Bay recommendation, page 8, Item 4, it says Study Reports and Review. The first time we are going to come back to you is theoretically in October 2016. The two items we hope to bring back to you, and it lists them here, are the results of the effluent study, if it is done, and we think it should be done by then, and then also the work plan. So we have got those two first items teed up. Then we have another due date in October 2018, which corresponds with at least one set of the multi-beam surveys and potentially the results of the benthic study. So we know at least two, two-year periods where we believe we will have some results. But then you will notice at the very end of that special condition it talks about if the TAC needs to extend the timeframe, we will. Because we believe these things can be done in this period of time; there is some concern from the applicants and others that the TAC might spend a lot of time wrestling. So if they advise us that it should be later we will let you know it's later but the idea is that we are trying to hit October in the next two years.

Commissioner Bates voiced his support: Again, I want to say that with this information I am prepared to support the motion with the various amendments that have been proposed. I want to congratulate the applicants too, the miners, the companies that are involved here, for working with us. Hopefully we will all end up with a product that we all like and can work together positively in the future.

Commissioner Randolph commented: If you could go back for just a moment to the distinction between relic sand and sand in transport. Is the distinction that the relic sand is perhaps deeper and is not as scoured by the water coming through? Or going to the cake, is it more compressed so it doesn't move and the transport sand just moves across the top of the compressed sand?

And there is a second question behind that, which is, thinking about the sand outside the Golden Gate itself. It would make sense to think that if the relic sand is more compressed and if you extract some the sand coming down, moving across will fall in and fill it out, and doesn't move or doesn't move as quickly out the Golden Gate. So will the studies or the monitoring specifically address the question of what is the impact of the extraction at the sites that is being extracted of the relic sand on the subsequent movement of the transport sand as a specific item to be monitored?

Ms. Goeden replied: I would like it to. Whether or not the Technical Advisory Committee decides that that's the most important thing to figure out is yet to be determined. But to your first question, remember back at the end of the last Ice Age, San Francisco Bay was a river. The Golden Gate was a canyon and the river was moving through. The sand that was deposited, was deposited as part of that river system and then sea level came up and covered it over and then the mud started settling in. Not in Central Bay because water is moving really fast there. So the relic sand is the sand that was part of that river system. It probably is more compressed simply because of gravity and sediment settling over the top of it over time and it being there so long. So I think it is both old, compressed, not moving for both of those reasons, because it is in a canyon so it has got walls on either side that are bedrock.

Commissioner Randolph suggested: I would suggest that the Technical Advisory Committee specifically consider monitoring the impact of the extraction of that relic sand on the movement of transit sand. Commissioner McGrath made a clarifying point: Let me add one point, which I think can be confusing, the Gate is not a uniform bed where everything is the same. It is a big U and the velocities of the water that move the sand are different in different places. So if you find a place where the velocity on peak ebb current is 3 feet per second and it is 8 feet per second in the center channel, then it is likely that the sediment underneath that 3 feet per second current is relic sand, it is not likely to move.

There is a secondary question of, if you dig a big hole there and some sediment comes down from the Delta, will it fill in that hole rather than go out to the beaches. But the general distinction is, you want to look for places where the velocity is lower, which means the sediment left, as Brenda said, is still there.

Commissioner Gilmore asked for clarification: I want to echo everybody's comments about the great job that staff did and I also want to compliment the applicants for the willingness and the cooperativeness to work with staff. I am going to get away from the whole sand issue for a second because I thought I caught something and I just needed some clarification. This is on Item 10, I thought I heard during the staff report one of the conditions was if you find any abandoned vessels it is the applicants' responsibility to remove them; did I

hear that correctly? Ms. Lydon replied: So that was specifically related to mitigation for effects to essential fish habitat, which the applicant has agreed to provide funds to the estuary cleanup program for the removal of marine debris. It could be creosote pilings or other various types of marine debris such as vessels. But there is a specific dollar amount that they have contributed. Commissioner Gilmore continued: That is what I wanted to know. So they are contributing a specific dollar amount, regardless of the amount that it may take, for instance, to remove an abandoned vessel? Ms. Lydon replied: Yes.

Commissioner Addiego commented: When the science gets deep, as it sometimes does on this body, by necessity I turn and rely on Commissioner McGrath. And he certainly had all of my attention at the last meeting when I think he led off with something along the lines of, the days of sand mining are ending or limited on San Francisco Bay, which intuitively I think is correct. Conceivably the best science, the best scientific studies might be done at the same time that sand mining ceases. So it would be a wonderful scientific program to not dredge or not mine for ten years and see if the Bay heals or where the sand goes. But then there would be no funding for that mechanism. Now that I've got Hanson and Lind's attention I wanted to thank them. First of all, let me echo I think the staff was brilliant on this one. The way they negotiated and Hanson and Lind's willingness to perhaps fund the demise of their industry, ultimately, is remarkable. I am quite satisfied with the motions that have been made and the two friendly amendments. I did not think it would be that easy to get to this level of support for continuing sand mining on the Bay for ten more years.

Commissioner Gioia commented: This has been a good discussion. I know the staff has worked really hard on trying to come up with a permit that has some certainty but also leaves some flexibility going forward. With all due respect to Commissioner McGrath, former Port of Oakland environmental steward, that even Commissioner McGrath doesn't have all the answers, right, on this issue. That's why the scientific studies are required. The way I am hearing it, and I want to make sure I understand this, because you talked about it, but you did not go into detail, maybe you can summarize it more. The way I understand it so far is that there is the ability within the ten year period to be able to revoke, suspend, modify the permit, based on the scientific studies that will be done during this ten year period. It is not like we are going to wait until the end of the ten year period when the scientific studies are done, we are going to wait until ten years. We have the ability either through the Executive Officer or the Commission to make modifications. I think someone mentioned if at that point we were unclear about needing additional data we could require as a condition of keeping the permit in effect at that time to have the applicant pay for more studies. While we have set an amount today that has some certainty it does not mean that five years from now we have seen the results of some studies that say, if we are going to keep the permit in effect as it is written we are going to require you to pay more to fund some studies. Can you talk a bit more about just the process, not the issues about the sand, but the process we would go through as a Commission or the Executive Director in any modification, amendment of the permit within the ten-year period based on scientific studies. I realize we are not going to get scientific study results for several years; they take time to be meaningful. Can you talk a little bit about the process?

Ms. Goeden replied: What I think is reasonable is we would go forward with developing the TAC. It would consist of the applicants and all of the regulatory agencies. In the case of the benthic ecology study we would develop a work plan for it and then it would go out an RFP process and then the work would be done. Once the work is done, it would be reviewed by the TAC. We would also very likely ask for peer review. And then we would bring the findings to this group because it is part of the reporting process. Depending on what the findings are, if the findings say, you know, we have looked at the mining area and it seems like everything regenerates within a couple of months or a year and the resource agencies seem to think that is okay or the mining has limited area and the remaining area seems to be functioning well; the Commission may recommend just continuing on.

If it turns out that in the Benthic Study, for example, seven-gill sharks, their nesting area is right in the middle of one of the lease areas, and because we had not examined it before we didn't know. We realize that this is one of the most important areas for the seven-gill shark in the Bay. We might at that point say, that is probably not a good place to be doing mining so we might consider limiting the mining in that area, meaning, let's go to a different part of the lease, stay away from that area. We might recommend closing down mining in that area. One would hope, that the entire Bay floor, for the mining industry's sake, there is a place where it is okay to continue mining. We would take the results of the study and we would consider what it means in the overall Bay perspective in sand deep-water shoals and we would make a determination at that point. We would bring it as a staff discussion to the Commission. Either that, or the Executive Director could say, I love Seven-gill sharks, this is a significant impact and I'm just closing it down; but he would probably report it out to the Commission. I can imagine a process like that. Commissioner Gioia continued: If the scientific studies show that maybe the volumes were higher than they should be, there could be an adjustment of the volumes in the future? The ability to be flexible on the volume is there?

Mr. McCrae stated: We are actually referring to some of the other amendments. With regard to the modification or revocation of the permit, the only thing I would add is that this Commission will play a critical role in any decisions that are made around modification. The last sentence of that does say, "Unless the permittee requests and agrees to amend this authorization to include measures that the Commission or Executive Director find will avoid or fully mitigate significant adverse impacts caused by this activity." So there opportunities, and that is the modify piece of it. If it is to revoke the permit, it has been authorized for many, many years. It is not something that would be taken lightly.

Commissioner Gioia added: That is a more likely possibility, is the modification of volume and conditions and where to mine. Mr. McCrae agreed: Certainly. As was stated just a few minutes ago, it will grow out of this updates that the Commission is getting. As the science is being done you are going to be getting updates. Commissioner Gioia added: To me this is the backstop. One of the most important points to me is that the backstop for the decision we are making today is that we are going to get more information and have the ability to make changes as we go forward. We don't have to wait the full ten years.

Executive Director Goldzband added: When we agendize these issues in October or whenever it is going to be, the staff will summarize, staff will recommend. I'm sure that we will have the scientists who have done whatever they are going to be doing here at that time to present and answer questions. I just want to make sure that you know one thing, whenever anybody gets a PhD from an accredited university who is a scientist, on the back of the diploma there is a stamp which says, always start a presentation with the words, "We need to do further studies." Even though I make light of that, I will tell you that it will be our role as BCDC staff to get as much certainty as we can from the folks on the TAC and from the folks on the scientific panels. I cannot promise you that you will be given a stark choice. We will certainly do our best to make choices as clear as possible and in as fair and transparent way as possible.

Commissioner Hicks commented: Brenda, thank you and your staff for all your hard work. I think you are doing fabulous and I have no further comments or questions.

Commissioner McElhinney commented: I also want to thank BCDC staff. I think the teamwork with the applicants was really phenomenal. We understand that these regional, local resources will help us in the construction industry throughout the Bay Area. I am really impressed with the innovation of combining the research plan and the applicants' commitment to that. The ten years from the construction industry perspective gives credibility and reliability to the companies. I see that as a plus. Thank you.

Acting Chair Halsted commented: We all feel this is a pretty important permit discussion and we really value the work the staff has done as well as the cooperation of the applicant. It sounds like we might be able to move on to receive any friendly amendments to reflect the concerns that have been made.

Commissioner Vasquez commented: I just wanted to ask the applicants because there have been some friendly amendments if we could have them respond to them. Mr. McCrae stated: I have a couple of things jotted down. Maybe we should summarize what we have in front of us as amendments to the recommendations.

Commissioner Vasquez stated: I want to thank Brenda. I think you have been up there over two hours. I am thoroughly impressed in your ability to take all these questions on the fly and to answer them as best you know how.

Mr. McCrae continued: I am working off of Agenda Item 8. Executive Director Goldzband added: We will assume that any amendment to Item 8 would also be applied to Item 9 and Item 10. Mr. McCrae agreed: That is correct. On page 7, "The State Lands Commission will be identified as a member of the Technical Advisory Committee." On page 10, Condition I, this is the, Modification or Revocation of the Permit, there is a, the sandy deep-water phrase was changed. Ms. Goeden stated: This was changed to include, beaches and tidal flats. Mr. McCrae continued: On page 12, Condition O, Liability for Costs and Attorney Fees, the last line, "Litigation that is significantly adverse to the permittee" will be added. Ms. Tiedemann replied: "Significant" is fine. Mr. McCrae continued: Those are the three that I have.

Commissioner McGrath had another friendly amendment: On page 9, under the, Mining Activity Reporting. I am on Item 8 but it would apply to the other one in the same place, to add, after H, Item I, "grain size distribution." That is typically reported as percent passing a given sieve diagram. It is critical information to what is actually happening on the bottom.

Acting Chair Halsted continued: We should consult with the applicants to determine whether these amendments are acceptable on Items 8, 9 and 10. Mr. Roth replied: Mike Roth, Hanson. I accept all of the amendments on eight and nine. And I'm not involved in 10. Mr. Butler stated: Bill Butler, Lind Marine. On behalf of Lind Marine I accept the amendments for our part of Item 9 and for Item 10.

Commissioner McGrath commented: On the $1.2 million, I would like to know that it was enough but I also think the discussion was clear enough here that everyone tends to agree that more needs to be done. The applicant will probably pay attention. Commissioner Nelson followed up: On that same concern. There is still a substantial amount of scientific uncertainty around these issues and we need to make sure that we are going to get those questions answered so that when this applicant is back in ten years, we've gotten those answers. If we discover that it takes $1.8 million to get the job done and the applicant has committed to $1.2 million and we are left with a gap that puts us potentially in the situation where we can't answer the sorts of questions we need to answer; I simply wanted to make sure that it was clear that the Commission still has the ability to reopen the permit and I would say very clearly that, at this point, I don't think we can determine right now that $1.2 million is inadequate nor can we determine that $1.8 million is adequate. There is no end to this dynamic. I certainly understand the applicants' desire to have a number and not to have that completely open-ended. I also want to make sure that it is very clear that at the end of the day the applicants need a number. What the Commission needs is to make sure that we have the information we are going to need to make decisions. I am fine supporting, reluctantly, but fine supporting where we are at today. If we learn that that number is substantially short of what we need, I would urge the staff to bring that back to us so that we can decide what course to take.

Executive Director Goldzband added: On behalf of the staff, we understand. Commissioner Gioia added: As the maker of the motion, I will accept these amendments to the motion I made, for all three. Commissioner McGrath voiced: Seconded.

Commissioner Scharff had a question for legal staff: I just wanted our legal counsel to confirm that what Mr. Nelson said is correct; that if we do find that we need more money that that is a basis under the permit to open it up. Could we get sued about that issue or is it pretty clear that that is a basis for opening it up? Ms. Tiedemann counseled: This is a very good question because the way the modification or revocation of the permit condition is written; there are certain thresholds, showings that have to be made before the Commission can reopen the permit. It cannot reopened simply because the studies cost more money. There would have to be some sort of result of a study that shows that the authorized activities are resulting in substantial depletion of sand or significant adverse impacts on Bay resources. So it is not as simple as Commissioner Nelson stated. Mr. Goldbeck added: It wouldn't just be through the studies in the permit but any other information that came to staff that showed that

there were significant adverse impacts. Commissioner McGrath added: As the Regional Board's representative, I appreciate the comments of my fellow Commissioners. There is a valid concern that an open-ended budget might just end up being much greater than it needs to be. The Regional Board does have authority to require monitoring for those things that involve discharge. Their authority does extend to the ocean. None of that authority can or should be used arbitrarily.

As we proceed, the staff has made a very good case and set up a process by which a Technical Advisory Committee advises as to what the most important things are and that the funds be addressed on that. And if at the end of that period of time there is a shortfall, I am pretty sure that there will be a mechanism and a cooperative level by the permittees to continue to do the necessary studies. There is, if the evidence is clear, authority to require that.

Commissioner Gioia commented: If the permittees agree. The way I read this paragraph, we would have the ability, if we believed that additional studies were necessary to understand the impacts and what would need to be mitigated; that we could require them because the alternative would be to look at imposing a condition that the permittee would not want to have imposed. Ms. Goeden added: Another mechanism that you may have which is, if they come back for another permit in ten years and we have identified studies in this process that have not been done, and they know haven't been done; we can easily require that as a filing requirement for the permit as information needed to analyze the project.

Commissioner Gioia replied: I was just trying to address the issue of studies that we think would be necessary within the existing ten year permit based upon the results of the first studies that are done. Commissioner McGrath added: Commissioner Gioia, there is perhaps a more open-ended condition in the Regional Board permit. I don't want to be in the position of advertising a wide-open budget when it may not be needed. The best thing to do is accept the structure that the staff has set up. When we get input from people along priorities and then we figure out what to do. I think this is a pretty good first step.

Commissioner Gibbs commented: It looked like we were headed for a vote at 3:30 which ideally would have been the time I needed to leave to catch the flight I have to. I just wanted to express my support for this measure and the amendments. I believe it is going to pass. I wanted to echo all the thanks to the staff and thank you also to the applicants and wish them good luck in this venture. Thank you. (Commissioner Gibbs exited the room). Commissioner Nelson commented: I want to pursue this just a little farther. Thank you for that clarification Chris. It seems to me that there are two options that might address the concern that I have been thinking about. I am not suggesting simply eliminating that requirement. One option is to amend that revocation language that says that the authorization could be modified, suspended or revoked if it is determined that the science program included in this is inadequate to answer the questions that the Commission has determined needs answers to. This would be one optional approach, to simply add an additional condition. And that would require the Commission to make a determination that the science programs supported by this permit won't answer the questions we need answered.

Another approach would be, and that is to simply make it clear in the record that additional answers will be required as a filing requirement before the applicant can come back for the next ten year application. Does the staff have a recommendation regarding either of those two approaches?

Mr. McCrae responded: With regard to the second one, we cannot dictate that as a filing requirement in the future,

Mr. Goldbeck added: The filing requirements are set out in your regulations.

Mr. McCrae continued: With regard to the first one, I think it could be argued that it is still an open-ended budget. It gives the Commission the discretion to choose the amount that is needed. If you wanted to go down this path this afternoon that perhaps you identify a number. Commissioner Pine commented: I feel confident that the structure that we have will work. Hypothetically, if the team thinks, it looks like it's going to be $1.5 million and the applicant, I'm sure, would take a look at that and give it some consideration. They may or may not provide any more funding.

At that point you know how much money you have, maybe it goes to $1.3 million and you go out and start doing the work. If there are some things that are not looking right then you have the tool of the cost to ask for more funding. And the applicant too is going to be thinking down the line to the ten year point that, this scientific panel really wants to know a little bit more; even if this clause is not revoked, it really is in our interest to try to get these answers. I kind of think it will sort itself out.

Commissioner Sears commented: Section 4 on the Study, Reports and Review provides that certain reports are to be provided no later than October 1, 2018. It seems to me that that provides us with a moment when there is an opportunity to look at those reports. One, we want to make sure that we get them. And two, it is an opportunity to look at the reports and see if, in fact, we are getting the kind of information that we assume will be productive. Is there some language that can be put in here about an opportunity to review the quality of reports to ensure that, and maybe that's implicit and it is already here but I'm trying to figure out a way to have an opportunity to look back maybe a kind of reopener that we don't have to wait until ten years to find out that there – I'm trying to deal with the modification or revocation language which specifically says, that whatever the termination is, it is entirely through the monitoring reports. If we end up with reports that now provide the information that we need then that is sort of a meaningless clause.

Executive Director Goldzband suggested: I think that this discussion revolves around two issues. The first is, the content of what the TAC and ultimately the Science Panel needs to do to get you, the Commissioners, the information you need; and that is, both the long list or short list of whatever that is and that list in the priority order. And then second, to determine from that list based upon the recommendation of the TAC and BCDC staff whether $1.2 million will cover all of it or part of it. If that is correct, then I suggest this; that we as BCDC staff tell you that eight months after the adoption of this permit, and then sixteen months after the adoption and then sometime between eight months and sixteen months after the adoption of this

permit, BCDC staff comes back to you with the work plan, with the estimated amount of money that it will take to accomplish that work plan and will have worked with the applicants during that time to ensure that we can give you a recommendation about how you should react to that work plan which will include not only substantive issues about what the work plan includes but also a recommendation as to how to make sure that that work plan is actually completed, from both a logistical and financial process.

That way I think you all get what you need and it provides staff the ability to work with the applicants to make sure that they are working through this process. And I say that based on one piece of context. Commissioner Addiego remarked in sort of jest that the scientific studies could put the sand miners out of business. I look at it as the other way around which is, that the scientific studies are a capital investment by the applicants to either ensure or somehow create the ability for them to have some type of certainty going forward for the next ten to thirty or however-long years it is. So it is up to, in great part, them, to actually look at this and help us figure out how that capital investment works. You all need to hear from the applicants. This is how I tend to look at it.

I don't know that you need to put that in the permit. I think that if it is on the record and the applicants agree that that is sort of how the process should work and we can work through it, I think that is good enough for me. I don't know if it is good enough for the Commissioners and I don't know if it is good enough for the applicants.

Commissioner Nelson commented: I want to thank the staff for that recommendation. It does not give the Commission as much leverage as a reopener but I understand the intention there and I appreciate it and I will not offer the amendment I was going to offer. Commissioner Bates offered a hypothetical: Let's just say a hypothetical. We have the report, the first report. The scientists have come forward and we need to make a determination that we need to go beyond and we need more money. At that point what is our actual leverage at that point? Are you saying that we have to make certain findings in order to modify the lease [permit] and what are those findings? Ms. Tiedemann advised: The staff reached a negotiated number as far as funding of studies. The modification and revocation conditions of the permit, is a different beast than the funding for the studies. What they provide is that if in the course of the activities authorized by the permit or through the studies the Commission learns that something catastrophic is happening with respect to the activity — and that's not the exact words in the condition — but you learn that this is worse than we thought, you can reopen the permit. You are not authorized to reopen the permit simply because down the line you determine that more money is needed for the studies. I think it was Commissioner Zwissler who said at some point in his comments, what kind of permit does the applicant get today and what sort of assurance does the applicant get about its permit? There has to be some sort of certainty that you have gotten a permit to do some things and barring some new, significant knowledge about the impacts on the resources that this Commission protects, that permit isn't going to be arbitrarily upended or reopened.

Commissioner Bates voiced his concern: I guess my concern is if we find some circumstance that we figure is really a major problem, then it seems to me that at that point in time if we go to the applicant and say look, we have choices here. We need to study this more and we need to understand what is really happening here. They would be crazy not to fund that because the alternative would be at that point they have put their whole lease [permit] at risk, their whole ability to go forward, their whole ten years at risk.

I think we may have more leverage than what may be not being described here. Because if there is a catastrophe, something is going wrong, they are going to want to find out what the heck is going on, how they can shift the sand mining someplace else, what else they can do. I think at that point they are going to be more than happy to step forward to try to figure out how to avoid this catastrophe.

Commissioner McGrath concurred: I think Larry has hit the nail precisely on the head. I was prepared this morning to come in and say, let them have ten years to terminate their operation without any monitoring. I think it is the question of whether or not any further extensions will be allowed. Now I think it is really important for the record, because there might be possible litigation, to make it clear that that is not an irresponsible activity. That the active sediment in San Francisco Bar and Ocean Beach what is at risk. I don't think it is responsible to say, well, it is already at risk, we shouldn't worry. We should worry. But there's millions, probably hundreds of millions of cubic yards in that system. We need to get the system right eventually and to not continue stripping sediment out of it. But ten years of sediment, 10 million cubic yards in that context, is not a big deal, it is not an irrevocable impact.

Continuing with knowledge that the mining will continue to disrupt sediment transport to the beaches I think would be irresponsible. So I think Larry nailed it exactly correct. This will come back in ten years. And if it is not clear that it is not disrupting sand transport to the beaches, they are going to have real problems and I think they get that. So I think it does not need any further activity. My fellow Commissioners have convinced me.

Commissioner Scharff commented: I just want to make sure I understand. I want to repeat what Commissioner McGrath said the way I understood it and if I am misstating it, let me know. What I am hearing him say is, if we do not have enough money at the end of the day to have the information we need to make a determination over the next ten years. We put $1.2 million in. If it turns out that we really need to spend $2 million and the applicant is unwilling to do that, which is your sort of off-the-record, let's talk to them about it. If they are unwilling to do it, they come back in ten years, we don't have the answers. We don't have the answers that we need. Commissioner McGrath, you are saying that you believe that people will just shut down the sand mining. I actually don't necessarily think that. To shut down sand mining would be a big step. It would have huge economic ramifications, those kinds of things. I don't think that necessarily the Commission would go there. I understand you think it might go there but I don't think it would, actually. So I am actually a little concerned that the applicants will not do the thing they should, I would hope you would, which would be to spend more money to get the information that we need to get. Because whoever is sitting here in ten years will be in the same position we are now. And we are not choosing to shut down the sand mining. We are not

saying we are going to take the least harm principle to the Bay because there is a lot of harm to the economy if we were to shut down sand mining. I think we need to have a better mechanism and that's why I actually wanted to hear Commissioner Nelson's amendment. I think we need a better mechanism that if we are not getting the answers we need that within ten years we have the answers. I just wanted to throw that out there.

Acting Chair Halsted continued: Is there any further discussion? If there is none, we have several motions on the floor. Commissioner Zwissler called the question: We have a motion and a second. Acting Chair Halsted replied: We need to take them serially I believe. First we would be voting on Item 8, BCDC Permit Application No. 2013.004.00, Hanson Marine Operations. Thirteen votes are needed to approve the application. The federal representatives cannot vote.

Commissioner Addiego commented: Chair Halsted, before I vote. Each of these items has three friendly amendments?

Acting Chair Halsted stated: The amendments as articulated before. They are consistent. Ms. Goeden added: There are four. The fourth one is that the grain size distribution should be reported back annually.

VOTE: The motion to approve Item 8, BCDC Permit Application No. 2013.004.00, Hanson Marine Operations, carried with a roll call vote of 17-0-0 with Commissioners Addiego, Bates, Gilmore, Scharff, Gioia, Gorin, Pemberton, McGrath, Nelson, Pine, Randolph, McElhinney, Sears, Vasquez, Hillmer, Zwissler and Vice Chair Halsted voting, "YES", no "NO", votes and no abstentions.

VOTE: The motion to approve Item 9, BCDC Permit Application No. 2013.005.00 md, Suisun Associates, carried with a roll call vote of 17-0-0 with Commissioners Addiego, Bates, Gilmore, Scharff, Gioia, Gorin, Pemberton, McGrath, Nelson, Pine, Randolph, McElhinney, Sears, Vasquez, Hillmer, Zwissler and Vice Chair Halsted voting, "YES", no "NO", votes and no abstentions.

VOTE: The motion to approve Item 10, BCDC Permit Application No. 2013.003.00md, Lind Marine Incorporated, carried with a roll call vote of 17-0-0 with Commissioners Addiego, Bates, Gilmore, Scharff, Gioia, Gorin, Pemberton, McGrath, Nelson, Pine, Randolph, McElhinney, Sears, Vasquez, Hillmer, Zwissler and Vice Chair Halsted voting, "YES", no "NO", votes and no abstentions.

Acting Chair Halsted announced: Congratulations to the staff, to the applicant and to the Commission on their excellent work. Ms. Goeden added: I just wanted to offer my sincere thanks and my staff's sincere thanks for all your thoughts and comments. This has been a really great process and we really appreciate it.

11. **Staff Report and Recommendation on Pending Legislation**. Acting Chair Halsted announced: Item 11 is a staff report on pending legislation. Steve Goldbeck will make the recommendation.

Chief Deputy Director Goldbeck presented the following: You have before you a staff recommendation on pending legislation dated April 10, 2015. It includes a number of bills that could affect the Bay or the Commission. I will just talk about the bills that we are recommending that you take a position of support on.

Senate Bill 379 is called: *Land Use General Plan Safety Element*. It was introduced by Senator, Hannah-Beth Jackson. The bill would require when local governments housing elements be updated that the update address climate change adaptation including a set of goals, policies and objectives based on the most current information available regarding climate change adaptation and resiliency.

Staff believes that this would help. Local government is where a lot of this planning needs to be. We believe this would be a great step in terms of ensuring that as the local governments do general plan amendments that they address climate change adaptation.

The bill does not include costs. There would be extra costs associated with this for local government. The cost of planning for adaptation is far less than dealing with the outcome of not planning.

The status of the bill is that it has passed the state Senate Government Policy Committee and it is moving on to the Senate Environmental Quality Committee.

The second bill is SB 17, *Hazardous Materials Response and Restoration Sub—Account.* Senators Mark Leno and Loni Hancock sponsored this bill. The bill was written in response to the "mystery goo" spill that happened in San Francisco Bay. It impacted and killed a lot of shore birds in San Francisco Bay. The State Oil Spill Response Trust Fund is supposed to pay for the response and the cost of dealing with taking the birds to the rehabilitation centers and hopefully can come back to living on the Bay. In this case because of how the current law works, since the spill turned out to not be petroleum oil, the fund could not pay for it.

What this bill would provide for would be to allow the lending of a half—million dollars annually from the Trust Fund into the State Hazardous Materials Response and Restoration Sub-Account so it could be used to reimburse the costs of responding to these kinds of spills.

And if a responsible party could not be determined within ten years, the funds could be repaid from the General Fund so that the account would not become empty just because we couldn't find the responsible parties.

Staff believes that this is really important to address this shortfall that was never intended in the law and provide for these kinds of non-petroleum oil spills.

The bill has passed the Senate Natural Resources Committee and has been referred to Senate Rules.

The third bill that we are talking about is, Assembly Bill 746, *San Francisco Bay Restoration Authority* by Assemblymember Phil Ting, and there is a letter in your packet from the Assemblymember in favor of you supporting the bill.

The San Francisco Bay Restoration Authority is set up to raise and distribute funds for the restoration, enhancement, protection and enjoyment of Bay wetlands as wildlife habitats. You have Commissioners Pine and Gioia on the Authority. This bill would extend the life of the Authority since the funding is taking some time to come through. It would also do some technical amendments to the bill.

The staff recommends that the Commission direct the staff to work on all three of these bills and take a position of support. The bills are still moving through so there are some changes that will be made but these three bills you should take a position of support on right now.

I'd be happy to answer any questions on these three bills. We also have another number of bills that the staff will continue to follow.

Chair Wasserman continued: Any questions for Steve?

Commissioner Addiego commented: I have no problem supporting this. In the future, in the case of the housing element, my local municipality has probably already approved theirs so there will not be any impact. Where there might be impact, it would certainly be kinder to have advance notice of what is going to be proposed at the meeting.

Chair Wasserman added: I was going to have a discussion with Mr. Goldbeck and our attorney after the session about that. I agree with you.

Commissioner Nelson stated: I am comfortable with the staff recommendation. I just wanted to flag AB 1362, Mr. Gordon's bill regarding Prop 218. Over the long term as we are wrestling with how we are going to go about implementing adaptation efforts around the Bay, that is a particularly important issue. I wanted to flag my interest in that one.

Mr. Goldbeck replied: That is correct, but the constitutional amendment that would have to effectuate it, has not been introduced yet. It is a little premature to take a position on it.

Chair Wasserman inquired: Is there a motion to approve the staff recommendation on these three bills?

MOTION: Commissioner Vasquez moved approval of the staff recommendation for Item 11, seconded by Commissioner McGrath. The motion carried by a voice vote with no abstentions or opposition.

Chair Wasserman added: And that motion includes the staff recommendation to work on the others. Thank you.

12. **Adjournment.** Upon motion by Commissioner Zwissler, seconded by Commissioner Nelson, the Commission meeting was adjourned at 4:19 p.m.

Respectfully submitted,

LAWRENCE J. GOLDZBAND
Executive Director

Approved, with no corrections, at the
San Francisco Bay Conservation and
Development Commission Meeting
of April 16, 2015.

R. ZACHARY WASSERMAN, Chair