

San Francisco Bay Conservation and Development Commission

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DRAFT MINUTES

TO: All Commissioners and Alternates

FROM: Lawrence J. Goldzband, Executive Director (415-352-3653; larry.goldzband@bcdc.ca.gov)

Sierra Peterson, Executive & Commissioner Liaison (415-352-3608; sierra.peterson@bcdc.ca.gov)

SUBJECT: Draft Minutes of February 19, 2026 Hybrid Commission Meeting

1. Call to Order. The hybrid meeting was called to order by Chair Wasserman at 1:08 p.m. The meeting was held with a principal physical location of 375 Beale Street, San Francisco, California, and online via Zoom and teleconference.

Chair Wasserman stated: Good afternoon, and welcome to the second BCDC Commission meeting of the year. My name is Zack Wasserman, and I am Chair of the Commission. I want to thank the Commissioners who are here at Metro Center for appearing in person as well as those who are participating virtually.

Our first order of business, as always, is to show the video. But before that I do want to acknowledge that Sierra, who is ordinarily here and helps majorly to make our meeting run smoothly, is on vacation. So, three BCDC staff have stepped in to fill her shoes, Angela Noble, Sarah Ravazza, and Larry Goldzband. We wish them luck.

Chair Wasserman proceeded to Agenda Item 2, Roll Call.

2. Roll Call. Present were: Chair Wasserman, Vice Chair Eisen, Commissioners Addiego, Ahn, Dumlao (represented by Alternate Pemberton), Eklund, Gauthier, Gioia, Gonzalez, Gunther (joined after Roll Call), Lee (represented by Alternate Kishimoto), Moulton-Peters (represented by Alternate Cox, who joined after Roll Call), Ramos, Randolph, Showalter, Tam (represented by Alternate Gilmore), and Taylor (joined after Roll Call). Legislative Appointees Jesse Arreguin, appointee of the Senate Rules Committee (represented by Alternate Zepeda) and Catherine Stefani, appointee of the Speaker of the Assembly (represented by Alternate Falzon) were also present.

Executive Director Goldzband announced that a quorum was present.

Not present were Commissioners: USACE (Beach), Department of Finance (Benson), U.S. Environmental Protection Agency (Blake), City and County of San Francisco (Dorsey), Department of Natural Resources (Eckerle), Governor (Hasz, VACANT), Business, Transportation & Housing (VACANT), Sonoma County (Hermosillo), Solano County (Mashburn).

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

Captain Maggie Hallahan addressed the Commission: Good afternoon. My name is Captain Maggie Hallahan. I am a licensed Coast Guard captain, and I volunteer as a teacher in the San Francisco Sea Scouts. Thank you for all the great work you do. I am also a Commissioner on California Boating and Waterways, and I am not here in an official government/state way.

So, I am addressing the concerns I have on San Francisco Marina Improvement Remediation Project that is before you with a permit that has been submitted by SFRP to BCDC. It has also been, the permit application has been submitted to the US Army Corps, and that public comment period ends on March 2. The Army Corps does have overview with the US EPA on water; how clean water is.

Our Sea Scout base is right next. So, if you go to the SFRP website, you can see the remediation project on their site. It took us two years for them to even put on the graphic that there is a sewer outfall in an area called Gashouse Cove, which is now called the East Harbor. That is an area that is very close to our Sea Scout base and we have used that area to put boats into the water and a touch and go dock.

SFRP wants to take all of that out and turn it into a kayaking and stand-up board area, and we state that the water will not be clean enough. And so, we have been all the way to the California State Water Board and it is clear that the REC-1 recommendations are not enforced by the California Water Board. The recommendation for paddling and stand-up boarding is not enforced by our state's water boards. The Regional Water Board as well will not make SFRP do testing or clean up the water enough. They can just state people should be able to kayak there, but they are not really keeping the water clean enough.

So, I have talked with your BCDC staff that is looking at this and they say BCDC does not have anything to do with water quality, they just are concerned about dredging.

So, I just would like to submit to you to not create an addendum to a permit that was in 2006 but force SFRP to create a new permit application, which then would put it in the proper hands, which would be a deeper review of the Commission here.

Doing a 2006 change of an existing permit really just makes it so the whole thing gets swept under the carpet. And we are hoping that we can have more people like our own San Francisco supervisor that is on your Commission be able to review it and be able to input. But the way that permit is currently being handled, there is only going to be a staff recommendation later this year and then you will just hit approval.

So, thank you very much for hearing me. It is a deep concern for our kids, and we appreciate you.

Dan Clark was recognized: Thank you, Commissioners and Executive Director. I am speaking about the same project that Maggie just spoke about.

The challenge within the Gashouse Cove where this activity is going is to both

do a necessary thing, which is store hazardous chemicals, and do beneficial use, which is what we desire to be done there and what the Commission BCDC has as an objective.

The slide that you see there is very busy. Just pay attention to the top part. Obviously, it is a cross section. There is surface water or Bay water at the top and sediment at the bottom. The Bay, open Bay is to the left and land is to the right.

The idea of storing hazardous chemicals and having beneficial use is possible as long as there is separation between them and this project actually has two methods of separating them well enough that there is no safety issue with it. On the left, it is not actually shown on this slide, there is a very thin band between the blue and the brown that would consist of what they call an engineered cap, and it is just a couple of feet of clean sand and some armoring on top of it, which allows boats and people and other things to occupy the water above and be far enough separated from the chemicals. Although the water will interchange, but it will interchange less there so there is no safety issue there.

Actually, on the righthand side of this closer to the shore is actually shown what they are doing, which is, it is no clean sand and no armoring, they are just allowing the built-up sediment to be equivalent to putting an engineered cap down. According to the Water Board, there is enough built-up sediment there that there is no issue with that.

So, why am I speaking to you about this today? It is because when you see the issues that are with this permit, and that Maggie just spoke to one of them, the water quality issue, the REC-1 one will never occur in this area, which is what is being planned for the right-hand side of this for the near shore, an activity that would have human interaction with the water. That is just one of the issues.

So, I am speaking to you today so that you know that the issues are other things than safety. Another body, the Water Board, specifically deals with the safety issue. So, you will have to approve as part of this, whatever you do, you are going to have to approve the chemical storage.

And you want to have beneficial use. So, that is possible and it is possible by both of these methods. But when you hear more about this project you will understand better what the issues are. They have to do with what is planned for that shallow area that is on the illustration. That is all I have for you today. I thank you for your time.

Executive Director Goldzband added: Mr. Chair, I just want to say I know that Mr. Clark has been in contact with our staff on this issue and we will continue those discussions, just so you all know.

Chair Wasserman stated: Thank you. There are no other public speakers.

Commissioner Eklund chimed in: Can I ask a question, though, about the speakers?

Chair Wasserman replied: You may ask a question, but we cannot really discuss

a topic that is not agendized.

Commissioner Eklund acknowledged: I know that.

Chair Wasserman continued: Go ahead.

Commissioner Eklund noted: So, their issue is not on the agenda.

Chair Wasserman agreed: Correct.

Commissioner Eklund continued: Okay, great. And will it be coming to us soon?

Executive Director Goldzband answered: It will be coming to you.

Commissioner Eklund continued: It will be. But we do not know when.

Executive Director Goldzband answered: Correct.

Commissioner Eklund asked: Okay. But this year sometime?

Executive Director Goldzband reiterated: It will be coming to you.

Commissioner Eklund acknowledged: Okay. Still no answer, okay. Thank you. I know I was a federal employee for longer than you were a state employee, but I never said that. Thank you.

Chair Wasserman continued to the Report of the Chair.

4. Report of the Chair. Chair Wasserman reported on the following:

A. Commission Meeting Schedule: I want to start off by reminding Commissioners that our Commission meeting schedule includes an all-day meeting on May 7. We expect that we will use all of that meeting because a major portion of it will be devoted to the Caltrans permit application to rebuild the eastern portion of Highway 37, a complex and challenging issue. So, staff plans to send a note to all Commissioners and alternates and your schedulers to remind you to please hold that full day for us.

B. New Commissioner: I am also pleased to let you know that the Regional Water Quality Control Board has selected a new Alternate, Alexis Hacker-Strauss, a veteran water policy expert, who will serve on the Commission during those times that Commissioner Gunther is unavailable.

C. General Comments and Announcements: I do not have a whole lot more to report. We are in a struggle for democracy day by day in this country. I would very much like to report to you that it is getting better. I do not think I can do that. But having said that, there are signs of hope to me. There are continued, significant and growing pockets of people who are standing up in their local communities. There are local courts who are standing up for rights, including the right to actually have science tell us what we should do, and there are a number of people in the current federal administration who do not appear to believe that to be the case.

Indeed, repeatedly we hear when facts, scientific or statistical, are reported and they are not liked, the answer is to censor, to accuse, to silence, and indeed in some occasions to fire those who want to bring those facts and science to light. But again, there are pockets, and I hope that those of us who are here are part of those pockets in our own individual way to stand up for the principles that have made this country a great country.

Commissioner Gunther added: I had just two things from the Department, it-may-happen-faster-than-we-thought. Recently a team was able to drill in northern

Greenland and reach the rocks below the ice sheet. They have a method by which they can determine how long it has been since the rocks were exposed to sunlight. It is very difficult. There are actually more rock samples from the moon than there are from the northern part of the island of Greenland. They were able to retrieve samples and do the analysis, hoping that these rocks maybe had not seen the sun for 100 to 1,000 years. But the answer was, unfortunately, 7,000 years. And this just goes to show how not on our scale of our lifetimes, but the ice sheets on this planet are remarkably dynamic. And once we start pushing them in one direction they might shift very quickly. If that happens, of course, if that area is exposed to sunlight again, we are going to have much higher seas than we currently do.

I also just wanted to follow up, Mr. Chairman, with your comment, just to note that as I have watched what has been going on in Minnesota, I have just been extraordinarily proud of my fellow citizens there. Not just the protests, but the communal response, and I have felt like that has reflection for us here. What we are trying to do here as we approach sea level rise is maintain and build a communal response to the problem. I think that we are, so far, very successful when people in this community are working in good faith. Everybody might not have the same answers to the problems, but we are all thinking and we are all looking at objective evidence and trying to figure out what we are doing. I think that it just shows this is something that I think we need to nurture and maintain over time and it can have a big effect. And I think that a similar kind of thing is happening in Minnesota and it is very exciting to see. Thank you.

Commissioner Showalter commented: Mine is really sort of a comment and an announcement. Tomorrow we are having the grand opening of Pond A2W. That is one of the South Bay salt ponds that is being restored. All of the work to allow the waters from the Bay to come in and go out so that the tides can bring in the sediment has been done.

We are also going to have part of that project be 1.2 miles of additional trail right out into the Bay. So, I hope all of you will come down to Mountain View and visit me and I would be glad to give you the cook's tour on this project.

But the reason I brought this up is not because of that, although that is part of it, but I am really excited about this, I have been working on it for 15 years. But when I look at this project it does give me hope. We have a federal landowner, we have a city landowner, we have state and federal agencies that are part of the permitting, BCDC, of course, being one of them. We even have a nonprofit, Ducks Unlimited, contributing to the construction.

I just want to say that when we look at the environmental community, when I look at this project, and I look around at the environmental community, we know how to collaborate. We know how to do it. We do it. We have been doing it for decades. I

think that we should recognize that this skill set that we have is particularly rare and valuable. But I just wanted to share about how this gives me hope, this project, that it has been completed, and that all of those partners are still actively engaged and delighted that it has come to this point. Thank you.

D. Next Meeting: Chair Wasserman continued: At our next meeting on March 5, we will have at least three votes and consider other interesting issues as well. We expect to have a public hearing and vote on what may well be the final draft, we hope it is the final draft, of the permitting reform regulatory package.

We will have a discussion and vote on the environmental justice outreach methodology that Caltrans and MTC will use in determining a future alignment of the Richmond-San Rafael Bridge, an issue which this Commission has required them to report back on when we consider their application to realign the Bridge design.

And a briefing on Sacramento and Washington, DC legislative action.

E. Ex Parte Disclosures: That brings us to the time for ex parte disclosures.

Commissioner Randolph reported: Thank you, Mr. Chairman. I had a conversation earlier this week on Tuesday the 17 with representatives of Martin Marietta and Lind Marine about the pending application to renew the permit for sand mining in the Bay, and notes on the conversation have been filed with the Commission.

Executive Director Goldzband interjected: If I may. Per the Commission's regulations, we have posted Commissioner Randolph's notice and his notes on this agenda item, so it is available for the public.

Chair Wasserman asked: Are there any other ex parte reports that Commissioners wish to make? I see no hands.

Chair Wasserman continued to Item 5.

5. Report of the Executive Director. Executive Director Goldzband reported: Thank you very much.

On this day 84 years ago, February 19, 1942, President Franklin Delano Roosevelt ordered that all Japanese Americans on the west coast be detained and interned at camps throughout the American west. Over 100,000 individuals, at least two-thirds of whom were American citizens, were placed in concentration camps through 1944. The President's order was found constitutional by the U.S. Supreme Court in the *Korematsu* case in 1944, although the due process question was not. Almost 45 years later, the Congress approved and President Reagan signed the Civil Liberties Act of 1988, which included an official apology and a payment to each living former detainee.

Two camps were located in California, Manzanar and Tule Lake. The Manzanar camp has been preserved as an historic monument to this gross violation of civil liberties, and I urge you to visit it on the Eastern side of the Sierra Nevada. I am sure that many of us know individuals who either lived at such a camp or are descendants

of those who did, and who displayed such physical and emotional strength.

I am sad to report that Andrew Chin, who has tirelessly led BCDC's efforts to keep up with emerging technologies for over twenty years, will be retiring next month. Andrew has the ability to talk both tech and non-tech, and I discovered that firsthand during my first week at BCDC. To fill his shoes, we plan to hire Xia Vang as our new IT manager. Xia is a Hornet, having graduated from Sacramento State University with a degree in Managerial Information Systems and a minor in Information Security and Computer Forensics. Xia supports 30 staff at DHCS, and is responsible for the maintenance, operations, and support of IT systems related to Client Technology, Hardware Management, Telecommunications Management, and Mobile Device Management.

His first task at BCDC will be to hire a third IT professional, a first for us. That upcoming third IT professional will work with our staff closely on a few issues, including our upcoming selection and implementation of BCDC's first enforcement, regulatory, and planning database. You will hear more about that exciting development later this afternoon.

Our planning team began a three-part series of webinars last week to assist local governments, project planners and deliverers, and other stakeholders to better understand how to create local government shoreline resilient plans under our Regional Shoreline Adaptation Plan.

The first webinar happened on February 11, two others are scheduled in March and April. You each have received a notice of the webinar series. Planning Director Jessica Fain will notify you again about the upcoming webinars and directions to download the recorded meetings.

In a related note, the city of Mill Valley in Marin has formally notified the Commission of its intention to create a local shoreline resilience plan. This is the sixth plan that has been initiated formally, and Mill Valley is the tenth jurisdiction to initiate such a plan.

I am also happy to announce that the State Coastal Conservancy approved at its meeting this morning two very important programs that have the potential to contribute mightily to Bay shoreline resilience.

First, the Conservancy approved its contribution to the U.S. Army Corps of Engineer's Planning Assistance to States Partnership Project that will foster collaboration among federal, state, and local partners to identify and advance Bay shoreline resilience projects based on flood risk, community vulnerability, and potential for nature-based solutions. The project will support and complement the development of local resilience plans required under SB 272 and the RSAP.

In addition, the Conservancy Board approved a research project to be undertaken by the Bay Area Council to explore how redevelopment of waterfront areas can generate new revenue streams for shoreline resilience and identify and evaluate innovative financing mechanisms that could provide the private sector with

incentives to participate in public-private partnerships along the Bay shoreline.

Speaking of such research, I am pleased to let you know that BCDC is working with four Northwestern University graduate business and engineering students to analyze existing governance and financing mechanisms throughout the United States and beyond that have led to new types of project development programs.

Northwestern's "*Abrams Climate Academy*" students will focus on three tasks: to identify and unlock Financing and Partnership Models; identify stakeholders and engagement opportunities; and design pilot archetypes for innovative solutions. The students are from Kellogg Business School and McCormick Engineering School. We will ask the students to brief the Commission as they move forward in their project.

I would like to spend a couple minutes now to talk about BCDC's Enforcement Program. You may have seen the somewhat lengthy and comprehensive report on the local ABC news earlier this month on problems in and around the Oakland/Alameda Estuary, which has long been a challenging area due to abandoned and derelict vessels, environmental harm, and ongoing impacts to public access. Despite a great deal of work by BCDC and Oakland a few years ago, it became clear last year that traditional enforcement alone was not producing lasting results. To avoid expending resources that would have only had short-term benefits, our Enforcement Team made a deliberate decision to shift its approach.

So, last fall our Enforcement Team spearheaded a grassroots, community-based engagement and coordination model instead, grounding that work firmly in BCDC's enforcement authority. Since October, our staff have met semi-monthly in person with more than thirty stakeholders to discuss the Estuary holistically, with a focus on Union Point Park and the Jack London Aquatic Center. These meetings bring together residents, local businesses, nonprofit partners, agency partners, and the Oakland Police Department to develop solutions, coordinate actions and share information.

Many of the solutions have been community-driven. For example, businesses in the area have stepped up and worked together to develop access-control and security measures to support the police. This collaboration has strengthened trust, increased follow-through, and has enabled more targeted, strategic, and effective enforcement. This could not have occurred without our Enforcement Team's work in collaboration with dedicated community members, including those from the Jack London Aquatic Center.

Isabel Chamberlin, our relatively new Enforcement Manager whose team has really come together on this project and others, will brief the Enforcement Committee next week on the program's new enforcement strategy and on this issue in particular. We will follow up that discussion with an enforcement agenda item at some point this coming spring.

Finally, Commissioners, it turns out that the reservations staff of the Italian train system know a great deal about the Bay Area. Sierra, as you know, is in Italy, and her original train to Milan was cancelled. When she spoke to the Italian gentleman who was rescheduling her, he asked whether Sierra knew about CalTrain. Of course, Sierra being from Palo Alto is very familiar with CalTrain. She then learned that

CalTrain is borrowing some of the Italian trains of the type that she would actually be riding on in Italy, and he even pulled up a picture of one of them. Let's hear it for Italian-American relations.

With that, Chair Wasserman, I am happy to answer any questions.

(No questions were posed to the Executive Director.)

6. Consent Calendar

a) Approval of Minutes for the January 15, 2026 Meeting

Chair Wasserman reviewed the items on the Consent Calendar and called for public comment.

b) Commission consideration of contract with the San Francisco Estuary Institute on Shoreline Plants Design Guidelines

c) Commission consideration of contract with Aquatic Science Center

d) Recommended Enforcement Decision, including Proposed Stipulated Cease and Desist and Civil Penalty Order CCD2025.007.00, in Enforcement Matter ER2018.015.00

(No members of the public addressed the Commission.)

Chair Wasserman asked for a motion and a second to adopt the Consent Calendar.

MOTION: Commissioner Eklund moved approval of the Consent Calendar, seconded by Commissioner Cox.

VOTE: The motion carried with a vote of 17-0-0 with Commissioners Addiego, Ahn, Pemberton, Eklund, Gauthier, Gioia, Gonzalez, Gunther, Kishimoto, Cox, Ramos, Randolph, Showalter, Gilmore, Taylor, Vice Chair Eisen and Chair Wasserman voting, "YES", no "NO" votes, and no "ABSTAIN" votes.

7. Commission Consideration of Administrative Matters. Chair Wasserman asked if there were any questions for Regulatory Director Harriet Ross regarding the Administrative Listing.

(No members of the public addressed the Commission.)

(No questions were posed to Ms. Ross.)

8. Public Hearing on Bay Plan Amendment 1-25, a Cartographic Update to San Francisco Bay Plan Maps. Chair Wasserman announced: That brings us to Item 8, a public hearing on Bay Plan Amendment 1-25, a cartographic update to San Francisco Bay Plan Maps.

We will hold a public hearing on an amendment to the San Francisco Bay Plan Part V: The Plan Maps. The amendment would update maps and data citations to improve clarity, accuracy and accessibility under the Americans with Disabilities Act. The amendment is for cartographic purposes only and will not result in any policy changes to the Bay Plan. The Commission will not vote on this proposed Bay Plan Amendment today. The public hearing is to gather thoughts about the proposal from

Commissioners and the public. Todd Hallenbeck our Geographic Information Lead will start the discussion.

GIS Specialist Lead Hallenbeck addressed attendees: Thank you, Chair Wasserman; and good afternoon, Commissioners. I am Todd Hallenbeck, your GIS Specialist Lead. Sorry I am not there in person, but I am very, very snowed in up in Tahoe right now with my kids.

On September 18, 2025, the Commission voted to initiate a Bay Plan Amendment to revise and update the maps at the end of the Bay Plan. This amendment is limited. It is for cartographic purposes only and will not result in any policy changes to the Bay Plan. Since the initiation of the Amendment, we have been working to improve and finalize the new, revised maps and I will go through that process shortly.

On January 16, 2026, you were mailed a Staff Report and Preliminary Recommendation, and the public comment period began for the Amendment.

First, today I will provide our goals for the Amendment, some background on the Bay Plan Maps, overview of the updates being made to the maps, and then I will go through some of the examples of changes and respond to the Commission comments that we heard during the initiation. These map updates presented today are the result of a lot of hard work from lots of BCDC staff and summer interns. Importantly, I want to thank Viktoria Kuehn for doing a lot of the heavy lifting for assembling these maps and the various data sources, as well as Ashley Tomerlin and Yuri Jewett for much of their very thoughtful design review.

There is no vote today, as this is just a hearing for the changes.

And then after this meeting we will take any comments from Commissioners and the public, make any necessary refinements and bring the final maps for a vote in April.

So, the goal of this Amendment is to improve the maps to help us better communicate and clarify BCDC policy and jurisdiction.

We developed these maps so that they could be easier to read, more esthetically pleasing and also more ADA accessible in keeping with some of the current best practices for cartography.

We are updating the data sources to better reflect current shoreline conditions.

And this Amendment will ensure that we can more efficiently update these maps when Bay Plan Amendment-related map changes occur in the future.

This here is an example of the amended Map 4.

It is important to note again that the cartographic updates will not modify any of the Bay Plan policies or PUA boundaries.

As a little bit of background, as described in the McAteer-Petris Act, the San Francisco Bay Plan is a comprehensive plan containing statements and maps that shall constitute the plan for the Commission to use to establish policies for reviewing and acting on projects. These maps serve a number of important functions for BCDC

regulatory and planning activities and are used in making permit decisions.

The Bay Plan includes seven maps in a separate section at the end of the Bay Plan. If you are in the room with us, we have some of the physical copies that I think are just passed out, as well as copies of the Old Bay Plan.

If the Commission approves these new maps we intend to make new high-quality physical copies of the Bay Plan, which will also incorporate the Amendments you have made over the last few years.

The maps identify the Bay Plan designated Priority Use Areas or PUAs. PUA designations include Airport, Port, Water-Related Industry, Waterfront Park, Beach, and Wildlife; and identify the types of activities that should be prioritized for shoreline areas to reduce need for future Bay fill. The boundaries of the PUAs are described in the Commission's Resolution 16.

The Bay Plan Maps also include enforceable geographic-specific Bay Plan Map policies in this map shown as these black circled numbers. There are also advisory notes and suggestions which are white circled letters, and you can see those on the example of the existing Bay Plan Map 4.

These maps are regularly updated through Bay Plan amendments. Most recently such as those associated with Howard Terminal, India Basin and North Contra Costa.

This update is the latest in a series of efforts BCDC staff have made to improve BCDC's mapping tools. In 2023 we used local parcel data to refine and correct the Commission's Resolution 16, which provides those official boundaries of the Priority Use Areas within BCDC's jurisdiction to reflect the current on-the-ground conditions.

Following that update we digitized PUA boundaries in a Geographic Information System, or GIS. In 2023 BCDC staff made this data publicly available through an online mapping application to support transparency of the Commission's laws and policies. This application has been viewed over 3,500 times since we launched it, and it is used by applicants and staff to make decisions about projects.

I want to highlight a few of the cartographic issues that this update will address.

Example A here shows symbology in the map that is unclear. Here scenic drives and waterfront parks and beach share the same green color.

Example B shows SF Bay Trail. That is not explained in the legend and is from an outdated data source.

Example C shows labels that are obscured by the symbology and not ADA compliant.

Example D shows how the maps inaccurately show jurisdictional information, which should end along the line between Point Bonita and Point Lobos.

Finally, since the current maps are not in a GIS, it is hard to ensure consistency with our published GIS data and update them efficiently as the Commission considers future map changes.

Since this is a limited BPA or Bay Plan Amendment, I want to highlight the

specific things that are being updated.

These include improvements to the accuracy of the maps using updated data sources for our base map. This includes the recently released Baylands Habitat Map from SFEI representing the extent of tidal marsh and Baylands. The previous maps leveraged data sources from the mid-1990s.

One of the exciting updates to the data sources being used in these amended maps is the inclusion of a draft BCDC jurisdictional map that takes advantage of best available science related to tidal marshes, tide levels and other jurisdictional areas such as legal boundaries, certain waterways and salt ponds and managed wetlands.

Most importantly, we will be using these updated PUA boundary GIS data that was published in 2023 in the amended maps.

For improvements to legibility and clarity, we are updating the symbology of PUAs, adding labels for all the PUAs, and increasing the font size to improve readability.

Many of these improvements allow us to better comply with accessibility requirements related to contrast and readability.

It is important to clarify that this Bay Plan Amendment does not change the PUA boundaries, any associated Bay Plan Map policies, suggestions or notes, or any substantial changes to the categories of regional resources mapped, aside from the data sources that are being used to represent those resources.

Now that we have talked about the category of changes that we are making in these amended maps I will show some examples of an existing map on the left, an amended map on the right. This is Bay Plan Map 1 showing the San Pablo Bay.

Most notably, you can see changes to the symbology of the Wildlife PUA and the Tidal Marsh Baylands. These are more consistent with state and federal mapping conventions. The label font sizes are larger for improved clarity, and we have included PUA numbers to allow people to easily connect the areas they see in the maps with the PUA boundaries described in Resolution 16.

This is Map 5 showing the Central Bay. You can see how the symbology of the Scenic Drives contrasts better with the Waterfront Park Beach PUAs, particularly in the Marin Headlands. You can also see how the amended maps better visualize the western extent of BCDC's jurisdiction.

These are still drafts and we are still making changes. For example, we did recently identify a regional data source from Caltrans that better represents some of the railroad connections like SMART and we will be updating that data set prior to coming back to you. So, just to say that comments and feedback are welcome at this time as well.

In the latest set of updates, we addressed several of the comments we heard during the initiation. Commissioners expressed desire to ensure that we carefully consider the visual appeal of the maps. We had our professional design staff conduct multiple rounds of review, including suggestions for how we could improve the

hierarchy of information, reduce clutter in the map, and ensure alignment of our symbology with other design best practices and conventions.

Commissioners also noted inconsistencies between the symbology used in the existing Bay Plan Maps and BCDC's interactive online maps. So, we have updated our online mapping application with the symbology from these amended maps to give users of each resource a more consistent experience.

One suggestion was also to help guide users with the inclusion of an inset map of the Bay Area to show where each Bay Plan Map covers. If you have the Staff Recommendation you can see in the Appendix that the Bay Plan Map section does include a map index at the beginning to help orient users to the geographic coverage of the individual maps.

And then finally, Commissioners asked staff to confirm that the data sources selected for the amended maps represent the best available regional data. As part of the map updates, we have reviewed and looked to ensure that the amended maps reflect the most accurate geographic information available. We identified authoritative regional sources of information that form the base map of the Bay Plan maps, including resources like SFEI's Baylands Habitat Map.

The refined and more accurate boundaries of the Priority Use Areas that we digitized in 2023 were based on a very extensive review and use of local parcel data and research that we conducted in 2022 and 2023.

When individual Priority Use Area boundaries are being considered for boundary changes via a Bay Plan Amendment, that is when we would do additional analysis and request and analyze local data from local jurisdictions to help with that decision.

In addition to the Commission comments that we addressed that I just listed, we have not received any additional public comment as of today.

The initial Brief Descriptive Notice and Staff Report indicated a possible public hearing on November 20. However, based on the Commission feedback and the time we needed to make those updates, the public hearing was rescheduled for today, February 19.

We have also released a draft Environmental Assessment for the Amendment, which is required by our regulations. This cartographic update is not a project subject to CEQA because it does not have the potential for either a direct physical change on the environment or a reasonably foreseeable indirect physical change on the environment.

After this public hearing the Commission staff will make any needed further revisions and address any public comments before circulating the final materials ahead of a Commission vote, likely on April 2.

Since this is a map change, the McAteer-Petris Act states it can be approved with a majority vote, whereas most Bay Plan Amendments require 18 votes for

approval, though there will be no vote today.

After the vote BCDC will submit the Amendment to the State Office of Administrative Law, which reviews our process to ensure we followed our regulations for amendments.

When that is approved and it becomes effective, we will proceed with printing physical copies of the Bay Plan and distribute those. We will also submit the Amendment to NOAA to have it certified as part of our Coastal Management Program so it can inform our federal consistency reviews.

That is the end of my presentation, and I am happy to take questions.

Chair Wasserman continued: Thank you very much, Todd.

We will now open the public hearing. I am going to start with asking for clarifying questions from Commissioners.

Commissioner Gioia spoke: Before I ask a couple of specific questions just a general question. Are there published standards or guidelines on ADA guidance for maps like this and where are they from? Is it one single guidance or is it just sort of best practices?

Mr. Hallenbeck answered: There are best practices that have been developed and those include some of the conventions around font size, color, contrast, those considerations, but they are published from multiple sources. In the GIS and mapping community there is continual development as approaches to meeting those accessibility requirements are improved.

Commissioner Gioia acknowledged and continued: Got it. So just a couple of specific questions. It looks like in the new map there is this new category of Commission Suggestions. These numbers. What are those? They are not on the existing map. I am looking at Plan Map 4. The white numbers called Commission suggestions. What are those?

Mr. Hallenbeck explained: The Commission Suggestions are a further section of the Bay Plan Maps beyond the policies and they are listed. They do not exist for every single Bay Plan Map, but they are --

Commissioner Gioia continued: For the Commission? If they are not in a policy just what are they? Because it is something new that I do not see on the existing. I am just trying to understand it.

Long Range Planning Manager Buehmann interjected: It is not new. They are in the existing plan. I am not sure which one you are looking at.

Commissioner Gioia asked: The map shows them. Am I missing something?

Mr. Buehmann responded: Maybe.

Commissioner Gioia acknowledged: Oh, I see, okay.

Mr. Buehmann stated: It is on a separate page.

Commissioner Gioia asked: It is on a separate page, but it is not delineated on the map. Am I missing it?

Mr. Hallenbeck answered: The maps, one of the improvements that we have made to the maps is actually specifying what those numbered symbols are, which was not part of the legend or information communicated on the maps to indicate that.

Commissioner Gioia clarified: I am looking, for example, I am just trying to understand. Richmond Harbor Channel next to Brooks Island it says 45. On the existing map it does not have 45.

GIS Specialist Kuehn chimed in: Hi, Viktoria Kuehn, GIS staff. I think the numbers that you are looking at are actually the Priority Use Area numbers. Which if you look on the Bay Plan map at the bottom, we just added some legend descriptions for some of the symbology choices that we added.

Commissioner Gioia continued: I am dense today; let me understand this. So, I see all these numbers, 45, 43, 44. I do not see them on the existing map. So, what are those? And on the bottom it shows Commission Suggestions. Is that what those are? I do not know.

Ms. Kuehn clarified: If you look in the new map for Bay Plan Map 4, those numbers that you are referring to are there, rather than trying to label all of the PUAs directly on the map.

Commissioner Gioia noted: So instead of saying Brooks Island it says 45?

Ms. Kuehn agreed: Forty-five, correct. And then those in the additional page that will be added to the Bay Plan, they are numbered and written out there.

Commissioner Gioia observed: And then on a separate page you list what those are. Presumably, 48 is Cesar Chavez Park.

Ms. Kuehn agreed: Exactly, yes. We have a printout for that, but if you look at the version of the Bay Plan Map --

Commissioner Gioia continued: Okay, okay, that answers that. I wondered what those were. A good practice so you do not have to read small print and so many things is to have a key. Have this number, and this number, there is a page next to it that shows what these are.

Ms. Kuehn acknowledged: Correct. And then at the bottom of that new map, we have the symbology explained. So, you see two pound symbols and then it says Priority Use Area number on the bottom right of that new map.

Commissioner Gioia acknowledged and asked: Yes. Like 86 means Yerba Buena Island?

Mr. Buehmann replied: You will see that the Commission Suggestions are a white circle with a white or black around the outside and they are letters.

Commissioner Gioia acknowledged: Got it. Like 86 means Yerba Buena Island.

Mr. Buehmann continued: Yes, that is right.

Commissioner Gioia addressed vista point selections: Who determines what a vista point is? Because one could argue there's other vista points along the shoreline. Who determines what a vista point is, what is the standard? Because there are other,

there are many, I could argue that Point Pinole has vista points, for example, or Point Molate. Who determines what a vista point is?

Mr. Buehmann stated: The Commission does and those were original. Some of them were planned in the original Bay Plan, some of them have been amended over time.

Commissioner Gioia asked: These are Commission designated.

Mr. Buehmann answered: Yes.

Commissioner Gioia continued: So, we could say, hey, we want to designate more vista points. Why is Point Pinole being left out? So, we could do that.

Mr. Buehmann replied: You could do that, yes.

Commissioner Gioia asked: Was that designation as part of some other Bay Plan action?

Mr. Buehmann explained: We would probably want to do that as a separate Bay Plan Amendment because it might have substantive.

Commissioner Gioia continued: And then just looking at the Index. Tidal Marsh in the old map now says Tidal Marsh and Baylands; and then Salt Pond Managed Wetland does not appear. Is it because there are no salt pond or managed wetlands in this part of the map? There are in the South Bay, for sure.

Mr. Hallenbeck answered: Correct.

Commissioner Gioia noted: You have Bay or Certain Waterway, which seems to be a new designation.

Mr. Buehmann explained: It is a way of indicating different jurisdictions might be in a certain place. It is not a jurisdictional determination but rather saying you should check for this here.

Commissioner Gioia acknowledged: Right. But there are no salt ponds or managed wetlands.

Mr. Buehmann stated: That is because there's none on that map.

Commissioner Gioia acknowledged: Got it. There are wetlands.

Mr. Buehmann agreed: Right.

Commissioner Gioia noted: So, they are not managed.

Mr. Buehmann stated: Managed Wetland has a particular definition for the maps.

Commissioner Gioia asked: What does that mean? Remind me.

Mr. Buehmann answered: Let me see if I can do it off the top of my head. It is an area that was diked off from the Bay and used as a duck club or as agriculture for three years preceding 1965.

Commissioner Gioia acknowledged: Got it, okay. Because there are plenty of wetlands that are managed in other ways. I live near one Meeker Slough, in Richmond. So, that is technical, okay. So, there is none of that designation on this map, so you are removing it to not have more information; but you are adding a new category, Bay or Certain Waterway.

Ms. Kuehn chimed in: Yes. So, if you look at Plan Map 1, the one on the other side of the handout we showed you. In this case you do see the Tidal Marsh and Baylands and the Salt Pond or Managed Wetland, and that is because both of those conditions apply in that.

Commissioner Gioia acknowledged: And I see the clarity. Before the royal blue had both water-related industry and port, so you had to look at that little industry or ship. Now you changed the colors in order to designate that, right, to make them more different, okay.

Mr. Hallenbeck added: To further distinguish.

Commissioner Gioia stated: I think I understand. And then there is no Wildlife Refuge. There is Wildlife on the right but not Wildlife Refuge. So, I am just trying to because we are not changing policy, we are just calling it something different.

Mr. Buehmann agreed: That is right.

Commissioner Gioia acknowledged: Okay, thank you.

Vice Chair Eisen chimed in: You may have answered one of my questions. I noticed that, I am looking at Plan Map 1, that these various wildlife areas and wildlife refuges, the names of them are no longer on the map. Are you saying that the name has been replaced by a number?

Ms. Kuehn agreed: Yes, that is correct.

Vice Chair Eisen continued: Okay. And then I do not know if this is an issue, but regularly my husband shows me a map and says, what is this, because he is colorblind and he sees something red or green and he cannot make it out. So, I do not know what the ADA, if it addresses colorblindness. But at least to my eye, having a dark green and a light green and a slightly different green for the tidal marshes, they all kind of run together a little bit. Am I right that Tidal Marshes overlap with Wildlife and Waterfront so that some of the Waterfront has little plants on it, and some of the Wildlife has little plants on it, and that is because those areas are also Tidal Marshes?

Mr. Hallenbeck explained: There are definitely locations where the Wildlife Priority Use Areas overlap Tidal Marsh and Baylands habitats, which might be what you are seeing.

Vice Chair Eisen acknowledged: Okay. I do not know if that color blindness issue is addressed. Maybe one of our Commissioners would admit to being colorblind and tell us if they can make things out. But I know it is a real problem for map reading for people who have that condition.

Mr. Hallenbeck acknowledged: Yes. Those were considerations that we were looking at when identifying some of these color choices. There are things that we can still tweak and test to ensure that they meet as much of those standards as possible.

We also identified a few additional strategies, particularly with the inclusion of the more comprehensive inclusion of the Priority Use Area numbers and their information on the opposing page to be able to help provide other mechanisms for people to identify what those Priority Use Areas are.

Commissioner Eklund spoke: I want to first of all thank you very much for doing the maps. As I get older, I realize, jeez, it is a little bit harder to see. But anyway, I just want to really thank you very much. A couple of questions, though.

Your number 14, is that Hamilton Field? I am on the Map 1 on the right-hand side. Number 14, is that considered, is that Hamilton Field?

Mr. Buehmann sought clarification: Which 14? There is a black 14 and a white 14.

Commissioner Eklund clarified: The white one.

Mr. Buehmann asked: Underneath 6?

Commissioner Eklund continued: That is the other thing is that we should not have the same numbers, in my opinion.

Mr. Buehmann noted: Yes, we can look into that.

Mr. Hallenbeck stated: Yes, that is Hamilton Field.

Commissioner Eklund asked: It is Hamilton Field?

Mr. Buehmann answered: Yes.

Commissioner Eklund opined: Well, I have to tell you, I live near there. I live where the officers used to live. That sure does not look like Hamilton Field.

So, first of all, you have Novato way up there near Black John Slough. Novato also is south of that. We are just right also adjacent to San Pablo Bay. So, someone looking at this would think that anything before Highway 37 was not Novato; that is furthest from the case. Because Hamilton is in the city of Novato and it is still an active Coast Guard base which is not recognized yet, even on this map which we should recognize at least the Coast Guard and some of the military or federal agencies and maybe even state. They should be recognized here. So, that is the wetland restoration project, right?

Mr. Buehmann asked: That boundary for Hamilton, is that what you are asking?

Commissioner Eklund stated: Number 14.

Mr. Buehmann noted: It is not going to be the project boundary it is going to be the boundary of --

Commissioner Eklund added: The water.

Mr. Buehmann continued: Of whatever the designation is, whether it is Priority Use Area or the Wildlife as it was designated by the Commission back in the day.

Commissioner Eklund stated: Well, that was the old runway. But it does not look like it. At least on the old map it had Hamilton Field on there. And so, Hamilton still exists, it is just on the other side of the levee. And so that is very confusing. And I live there and have for three decades or longer. Anyway, maybe we can talk offline about that, but that is very disturbing, in a way.

Mr. Buehmann added: It is also important to understand the context for these maps. They are just a tool to help folks see where different designations, what are different notes and policies that are for different areas of the shoreline. Obviously, when a permit analyst looks at a project they are going to look at a much more

specific, a different scale of map. They are going to be looking at different property information. They are going to be looking at project plans, things like that, and this should not be a substitute for that.

Commissioner Eklund noted: But that was a huge project, though. I was there when we breached the dyke and that is what, 400 acres. It is huge, it is a runway. But anyway. And then why isn't there a star? You know, going back to what John said. At the vista point when you are on that levee. Have you been on that levee at Hamilton? Have you been there at the Hamilton levee.

Mr. Buehmann answered: No. The designations are the designations that the Bay Plan had that were decided by the Commission. I do not know when each one was developed, although we probably have that information, but probably it could even date back to 1969.

Commissioner Eklund stated: I think the discussion that we could add more, but I do not know how we go about doing it so maybe we could get an explanation.

Mr. Buehmann agreed: Yes, we could do that, we could talk about that.

Commissioner Eklund stated: When you walk along that levee that is a huge, incredible view. You can see all the way across the Bay. It is incredible to walk along that levee. And it is really well used; we have it pretty well marked. But that is a little confusing.

I would also suggest we put Novato south of 37 so people realize that that is all of Novato. I do not know how you would do that. At least in the old map you had Ignacio, which is not a town, it is an area, but at least people know that live there that that's part of Novato.

Commissioner Gioia chimed in: It also replaced and you call it 15A now. Is that what you are doing?

Commissioner Eklund stated: No, it is south of Highway 37 not north.

Commissioner Gioia acknowledged: Oh, I see.

Commissioner Eklund continued: Yes. See where it says, Marin County, the right-hand side. Then it has Gallinas Creek. So, the boundary between Novato and San Rafael is closer down to probably number 5. If that is Hamilton. Where A is, that is probably where the boundary is between San Rafael and Novato.

Ms. Kuehn chimed in: Commissioner Eklund, we are happy to take a look at the location and placement of the labels for where we title, and happy to talk with you offline as well.

Commissioner Eklund acknowledged and continued: Okay, I would appreciate that. The colors are great. I also agree with the issue about the differentiation of the blue and the green. Even I had a hard, a more difficult time distinguishing between Wildlife and Waterfront Park, Beach and the Tidal Marsh Baylands. It was a little confusing of what was which.

But I think for me anyway, numbers are harder to use sometimes. Then you have to have the book where the numbers are, and a lot of people do not necessarily have

that. So, maybe we could have a combination of names and numbers, maybe the highlighted areas. People in our jurisdictions would have a good knowledge about what are the key ones that should be in writing. In our opinion, I mean. We are pretty parochial. So, anyway.

Mr. Buehmann chimed in: Can I respond to that a little bit?

Commissioner Eklund replied: Yes.

Mr. Buehmann explained: We tried lots of different combinations of labeling. At one point we had almost all of what are now numbers, labeled, and it gets very busy. So, part of the process here is trying to balance readability with providing the information. When these are published that list that goes with them is right next to it if you open this up. This is a bad example because the page next to it is very short. But they are right there. And we are going to be publishing new ones once we have completed this process. But thanks for all your comments.

Commissioner Eklund acknowledged: Yes. I would love to talk with you offline too. It is just Novato is a stepchild to Marin County, so I always like standing up for Novato. Because we were the last city, I think, to incorporate in the county. So, anyway, thank you.

Commissioner Cox commented: Again, thank you. I echo the comments of others regarding the efforts that went into putting all of this together.

I wanted to follow up on Commissioner Gioia's inquiry regarding Wildlife Refuge becoming now Designated Wildlife. Because when I look up the terms, thank you, Google, Wildlife Refuge typically refers to a Formally Designated Protected Area managed by the US Fish and Wildlife Service, whereas Wildlife is just a general wildlife area. How are you preserving the distinction of those areas that are Formally Designated Protected Areas under the auspices of US Fish and Wildlife Service?

Mr. Hallenbeck replied: I believe that as part of the Resolution 16, the terminology for the PUA categories was developed and listed and is what is being used to represent the labels for those areas in these maps. There are, I believe, instances of Wildlife Designated PUAs that are not necessarily all federal or state refuges or that are given the name Refuge as part of their title. And so, I think some of the clarification was related to the fact that that was more specific than what many of these areas actually encompass.

Ms. Kuehn added: In some cases where there was the opportunity to minimize duplicate labels we made the choice to if the PUA name had a similar name to any natural features that were on the map, we made the choice to only retain the PUA name, which is reflected through the number here because of these label challenges. I know everyone wants labels, but in the old map it was under 3-point font size, which is most definitely not ADA accessible. So that was where a lot of the challenges came between trying to minimize labels that were duplicate and also retain font size for legibility for ADA reasons.

Commissioner Showalter was recognized: Just two questions. I think you have

answered the first one I had, which was about where the lists were for map policy numbers, Commission Suggestions and Priority Use numbers. I would just, being a stickler for the fact that people will print, especially if this will be available on PDF. People will just print this page. So, I think it would be really nice if you would add a little line under each of those that said, see page whatever for the.

And then, this is probably a pipe dream, but wouldn't it be nice to show the Bay Trail? Those are my thoughts?

Commissioner Gioia added: And the Bay Water Trail.

Mr. Hallenbeck replied: Those were certainly networks and resources we considered including on these maps. There were considerations that they obscured some of the more Commission-specific resources, vista points, scenic drives, the PUA boundaries themselves in many locations. As part of our ability to focus on the Priority Use Area boundaries and those Commission-specific designations that was a resource that was hard to include in addition to these resources.

Mr. Buehmann chimed in: Can I add to that, though? Maybe I am out of pocket saying this. But we are looking at different mapping solutions for doing a better job of mapping, especially online, our public access. So, it is something that we have been looking into and moving forward with.

Commissioner Showalter stated: Also, I know we have official maps, but I wondered if it was possible to have some sort of addendum maps. I do not know if that is part of the plan. But if we were having addendum maps a Bay Trail addendum map would certainly be something that a lot of people have interest in. Anyway. You cannot always put everything you want on the map. I do know that.

As somebody who started their career at the USGS I really appreciate that this legend is so familiar. It looks exactly what you would see on a topo sheet, which we are all very, very familiar with. So, I really appreciate that you have used those. It means something to so many people just viscerally, we know what that means. We have seen those symbols many, many times, and it is good to use them again. Thank you.

Commissioner Randolph had questions: I had two questions. One going back to where Commissioner Gioia began. So, the designation Vista Point, what defines that? Because when I think of a vista point, I think of you are driving along the highway and there is a sign and a pull off, oh, it says vista point, that is what it is. And you can go there and there is a place to park or whatever, and there is, you know, a very unique kind of view. I could follow that.

But on the map, on Map 4, the one place I can think of that is designated Vista Point is at the immediate north end of the Golden Gate Bridge and there is no star there. Commissioner Cox would know this better than I do, but there is a vista point star kind of where you pull off the highway to go to Sausalito, but there is no particular vista there.

And then the two farther north that are just to the left of 101. I run those trails all the time. And one appears to be at the top of the trail in a grove of eucalyptus trees, and the other a little further along to the north. I know that spot, and you can see the Bay there, but no better than anywhere else.

And also, if you go over to Map 1, there is a vista point at Sears Point. You can see Sears Point, of course, driving by, but I do not know there is any place to get off and actually say, oh, now we are going to stop and look at Sears Point, unless you are driving by.

So, could you explain the rationale? Because it seems like everywhere in the Bay Area is a vista point. There is almost nowhere that is not.

Chair Wasserman interjected: I am actually going to jump in here.

Commissioner Randolph asked: Why these places?

Chair Wasserman continued: Clearly there are a number of Commissioners who are concerned about the vista point thing. That is not the purpose of this presentation. I am not trying to dismiss the importance of it. I would like to defer that question. We are not voting today. So that when these maps come back, we do have a context which may be lost in the annals of history. And we may decide because of that to revisit and spend a lot of time on it, or we may decide that vista points really do not need to be on these maps because that is not the purpose. I am not prejudging this.

Commissioner Randolph acknowledged and continued: Okay. I had one more question which is, am I reading this correctly, Map 4, that the entirety of the Golden Gate National Recreation Area is within the bounds of the Bay Plan? Because I am seeing everything inland north and west and east of the Bay up the Highway 101 being part of the Plan.

Mr. Buehmann explained: So, this is actually connected to the vista point issue. Because when the Bay Plan was created in 1969 the Commission was looking at it as both a regulatory document and a vision for the Bay and how you develop in the Bay, right? So that is where these Vista Points come from. We can do more research and tell you where each one comes from probably, maybe, I do not know.

But the same with Priority Use Areas. You can see that there are Priority Use Areas like the Golden Gate Recreation Area that is far beyond BCDC's jurisdiction, right? And the idea was that the Commission was signaling to the Bay Area that this stuff, this is a Waterfront Beach Park Priority Use Area, this should be for a park.

Now, in our regular permitting work under the McAteer-Petris Act, all that area outside of the jurisdiction does not really affect anything; but it does affect under the Coastal Zone Management Act when we do a Consistency Determination. Because under the Coastal Zone Management Act, BCDC as a certified Coastal Management Program, can review federal activities inside and outside the coastal zone if they affect the coastal zone. And what the Commission is doing here is saying this area is important to the coastal zone. It is important for Waterfront Beach Priority Use Area. So, there is some function there, even though it is usually in limited circumstances.

Does that answer the question?

Commissioner Randolph acknowledged: Yes. Thank you.

Commissioner Kishimoto chimed in: Thank you for fielding all these questions and comments. Well, my question might be a little bit basic. I went back to your Staff Report and it says the Bay Plan includes seven static maps. But could the Bay Plan that we adopt be a higher resolution map that exists digitally that can be the basis of several maps? Most people are going to access the maps digitally, right, on their iPhones or whatever. And it would be nice to expand them out to see the actual map rather than tagging between two different, you know, what is this number? You know, that becomes very hard to read. Is that possible to adopt a basic base map that is used for different purposes or different platforms?

Mr. Buehmann stated: I think we talked about this a little bit when we were going through this process. It is for right now, important for us to have this document that is the Bay Plan that has the policies, they are set in stone, and these maps are static set in stone. But they are a piece too. And Todd and Viktoria can speak to this too. How we do a lot of our online mapping and how we can integrate that stuff so that you could go to an online map and maybe get the same information. But the regulatory, the legal description is here and in other areas, there is Resolution 16 too.

Commissioner Kishimoto asked: So, it is not going to be an impediment to us creating more usable maps, right? Okay.

Commissioner Gonzalez was recognized: I am sorry for not asking this stuff beforehand. I just want to make sure that I understand what is on the map. So, I am looking at Plan 4. All the white numbers we have determined are just labels that have been replaced with a number, and there will be a list someplace else. Perfect. The black circles with white numbers, those are the map policy numbers? Perfect.

Mr. Hallenbeck answered: Correct.

Commissioner Gonzalez continued: The last question. Priority Use numbers. Where on this map is an example of a Priority Use number? Plan 4, Plan number 4.

Mr. Buehmann answered: So, Plan 4. Do you see all the numbers that are covered in white? There are white numbers in a black circle and then there are black numbers that are in white. Do you see those?

Commissioner Gonzalez replied: Yes.

Mr. Buehmann noted: Those are the Priority Use Areas.

Commissioner Gonzalez stated: I thought that that was just the labeling of things that had been removed.

Ms. Kuehn explained: Only the black circles with the white numbers and the white circles with the black letters, all were existing on the page adjacent to the map in the original Bay Plan that you are looking at.

Commissioner Gonzalez offered a hypothetical: So, for example, it is always good to work with examples. For example, the letter A right by Golden Gate Park.

Ms. Kuehn replied: Yes.

Commissioner Gonzalez continued: That is on the prior map and it is on the current map.

Ms. Kuehn agreed: Yes.

Commissioner Gonzalez continued: And that letter A represents?

Ms. Kuehn stated: A Commission Suggestion, as is shown in the legend just below the map.

Commissioner Gonzalez acknowledged: That's perfect. We are in agreement. So, the black circles are the policy numbers, the white circles are the Commission Suggestions, and I am looking for Priority Use Area number.

Ms. Kuehn noted: Yes. So, those are the white haloed black numbers that are in the map, which have been replaced, like you said, from being text, and those are going to be added in the Bay Plan adjacent page the same way that you see all of the other numbers and letters listed there. The only change is that we are adding those numbers with their affiliated labels on that adjacent page as well.

Commissioner Gonzalez continued with the use of a hypothetical: So, for example, again, I just like being really specific, so I am going to be at the bottom. So, I will be at the bottom center of the map of Plan Map 4. So, we have got number 85 at Alcatraz Island. I am assuming that is just a hey, it has been changed. We do not see the word Alcatraz Island.

Mr. Buehmann asked: Are you looking at the printout that we gave you? What we should have done was printed out the map and also all the notes and stuff so you can see how they all work together, because they all kind of connect. They are pages next to each other.

Commissioner Gonzalez observed: I am seeing a difference in color.

Planning Director Fain chimed in: Alcatraz Island is a Waterfront Park, Beach Priority Use Area, and so that is why it is green in both maps. And we added the number 85 to it in the map on the right, so now you know that the name of that Priority Use Area is Alcatraz Island Priority Use Area.

Commissioner Gonzalez acknowledged: Perfect. Thank you.

Commissioner Gunther was recognized: I do not have a question about vista areas, although I contend that living in the East Bay is great because you get to look at Marin County, at the great vistas.

I have a question about our use of this information. I have managed a mapping exercise, and it is an enormous amount of work, and I congratulate you all for doing it. These maps are not just pictures on a page now, they are data sets on ArcGIS or wherever, okay. And you are doing an incredible job of producing these beautiful color ramps and other technical terms that I have forgotten, I know, but it is very impressive. And I think everyone's interest in this just demonstrates what happens when you show people maps, right?

So, our use of these things in public outreach and community meetings and things, I would think it would be incredibly valuable to have a quality visual product that we can use beyond its role in the Bay Plan. I am wondering, first, are we planning to do that?

And secondly, do we offer people like our permittees, our applicants, or the communities creating shoreline plans, do we offer them layers from our work so that when they submit to us geographic products we recognize what they are sending us? Is that something that we also do? And I am asking just in the context of I know how much work has gone in to produce these things and so I want us to make multiple uses of them, if we can.

Mr. Hallenbeck explained: We do have goals by making the Priority Use Area boundaries available through our interactive maps that have been online now for the last year, the goal of that has been for that to be a more accessible, usable way to get information about these areas, in addition to the local shoreline context.

The goal, I think, while those are not able to be downloaded and manipulated or changed, directly brought into a permittee's GIS for example, we are looking at ways in which this information can be made available for that purpose so that permittees will have the information about whether or not a project that they are proposing is in or near one of These Priority Use Areas.

Ms. Kuehn added: Just to add to that, we do have a map on our website that we developed last year under the Jurisdiction tab. We, like you said, use these maps and this effort to build and at least create a single static map that is called *Overview of Select BCDC Jurisdictions*, which is available right now on our website, as a start to creating more online and more user friendly, more interactive maps that speak to different jurisdiction types.

Obviously, this is a process, and we do not want to publish anything where the data quality might cause confusion if we were to do that too quickly. So, this is a good step. It has been a good exercise to, like you said, organize all the underlying data and to try to now ground-truth some of that underlying data as staff go out and do site visits and things like that to ensure that if we were to create more detailed, more granular, more interactive maps online, that those are not going to cause any sort of communication issues or any kind of challenges in terms of how we determine or evaluate what our jurisdiction is.

Commissioner Gunther acknowledged: Yes, thanks. You could get into a situation where this becomes a fulltime job just in and of itself and I do not want us to go there for sure. But in the same way, the power of maps was demonstrated to me in no uncertain terms when my organization built these maps of steelhead distribution in California, and we had a talented cartographer. And the impact of the maps was as great as the impact of the data about where the fish were. People just devoured the maps, and we got a tremendous amount of engagement on the issues because we had these great maps.

Ms. Kuehn noted: I was just going to add, right now we are at that stage where we have the data and we are trying to share this as a communication tool, like you are saying, including this map that is on our Jurisdiction page right now. So, we are starting there and hoping to have that, like you said, increase some more of the understanding and the communication on our jurisdiction.

Mr. Buehmann stated: I really thank you for saying that. These maps have a very particular purpose, and they are one piece of a larger process that you go through if you have a project, or you want to get a permit, or you just want to see what BCDC's jurisdiction is. The thing about Viktoria and Todd as the GIS Team is that they are constantly, this is just a piece of what they have been doing. They also work with local governments, they work with applicants, they work with the staff all the time on different kinds of mapping exercises, different kinds of like where jurisdiction is, things like that. And creating new tools all the time. So, this is just a piece like we said earlier, Todd said earlier, of a long process over the last few years of these guys really refining and improving all the different tools you can use if you are working with BCDC. So, it is part of it.

Vice Chair Eisen commented: I thought I was getting clearer, now I have gotten some muddiness back into my head. When you use the words jurisdiction and Priority Use Areas are you saying that everything on this map that is designated a Priority Use Area by virtue of one of these numbers is within our jurisdiction?

Mr. Buehmann explained: It depends on what the jurisdiction is, right? Because BCDC has multiple different types of jurisdictions. There is McAteer-Petris Act jurisdiction, as I explained earlier there is Coastal Zone Management Act review that we can do under a Consistency Determination. So, all these Priority Use Areas are designated as Priority Use Areas by the Commission. How they affect how a project is permitted will depend on what the project is, where it is, and what is happening there. Does that make sense?

Vice Chair Eisen acknowledged and offered a hypothetical for discussion: I think so. An example might help. On Plan Map 1 number 8 up in the upper left corner, which used to be called the Petaluma Marsh Wildlife Area, that is designated a Priority Use Area because it is a tidal marsh, I gather, so we would have jurisdiction all the way up that river, is what you are saying.

Mr. Buehmann asked for clarification: Wait, say that again. No.

Vice Chair Eisen replied: Number 8. Do you see where I am talking about the Petaluma Marsh Wildlife Area. It is way away from the Bay, but it is designated with this number.

Mr. Buehmann acknowledged: Yes. So, BCDC has jurisdiction on the Petaluma River up to a certain point.

Vice Chair Eisen noted: All the way up that river.

Mr. Buehmann agreed: Yes.

Vice Chair Eisen acknowledged: I see.

Mr. Buehmann continued: And up to, I cannot remember the actual creek.

Ms. Kuehn chimed in: Yes. So, the PUAs and the other base map features that are shown here like tidal marsh, like open water, which is here written as Bay or Certain Waterway. Those are physical features in the Bay that may or may not have jurisdiction implications. And we tried to limit the base map features that you are seeing here to be reasonably what may or may not be inside of BCDC's jurisdiction. Because tidal marsh obviously can go way upstream, there is riparian marsh that oftentimes gets symbolized similarly.

So, these maps are not intended to be jurisdictional or to be used to determine that jurisdictional extent, but we tried to refine some of those layers in this map using actual on the ground data like the Baylands Habitat map that SFEI developed and published in 2024 to just basically create more of a visual limit to where those marsh conditions may exist.

The PUAs are an overlay of that and neither one is intended to determine where our jurisdiction is in this map. That was not the intent of these originally when they were published, where it is even harder to determine what the physical conditions are. So, that was not a goal of these maps.

Vice Chair Eisen acknowledged and asked: Okay. So, when you mention jurisdiction, you are just saying that there is some overlap between these designations on here and our jurisdiction. There may be overlap.

Mr. Buehmann replied: Yes, that is correct. For example, if there was a project at number 8, right. An analyst who maybe is not familiar with that area could say, oh, there might be tidal marsh there, so we might want to look at jurisdiction in a different way based on how that, right?

Vice Chair Eisen acknowledged: I see.

Mr. Buehmann continued: Or there could be a Priority Use Area there and they would be like, okay, it looks like you have a Priority Use Area, it looks like it is this kind, can you double check. Because there is always a jurisdictional determination that happens during the permitting process, so that is an aid.

Vice Chair Eisen acknowledged: Okay, that helps. Thank you.

Chair Wasserman commented: I do not see any other hands for clarifying questions, we have some way yet to go. I know the Executive Director wants to say something. But before we get to him, two comments.

One, when this comes back to us, as it will at some point, I think we need to begin with a Map 101 class talking about what the purpose of these maps are, what are the maps we have, so that we can set it in context, which I think will answer a number of the questions that have come up.

Second, totally unrelated to that but picking up on both the fact that this has garnered so much attention and Commissioner Gunther's comments. Separate from the Map 101 presentation I would actually like to have some thought given and perhaps a presentation on how we can use better our interactive sea level rise maps to generate not so much on this Commission, we have got a lot of attention from this Commission on these, but in the broader public. How we can use those given the comment that maps do engage people.

Executive Director Goldzband observed: I was just going to say there are no hands raised online.

Chair Wasserman acknowledged: Thank you. So, we have no public comment. I am assuming there are no other Commissioner comments but I want to be fair.

Commissioner Showalter chimed in: I was just going to say my comment would be that I would ask staff to consider carefully getting rid of the vista points. I think they are an anachronism and they just confuse things, so give it a little thought.

Chair Wasserman stated: I would support that. But I suspect, given the comments made, it requires Commission action and not purely staff. But just a thought, though. And I would much rather get rid of them than engage in hours of discussion over what should be vista points.

Commissioner Eklund added: Well, actually, there is a formal definition of vista point, and it is a designation made by Caltrans.

Chair Wasserman noted: Not by us.

Commissioner Eklund acknowledged: Yes. So, we may need to change the name then.

Chair Wasserman suggested: Or simply remove it. We will refer that to staff for further thought.

Commissioner Cox chimed in: I do not want to create more work, but I did note during our questioning period that we are updating the carto-genic symbols and such, and indeed it is a whole lot more user friendly as updated. But because the existing Bay Plan Map was created decades ago, I wonder when it would be appropriate to actually update the map to reflect the evolving conditions throughout.

Mr. Buehmann asked for clarification: Sorry, just to clarify. You mean like the Priority Use Areas and things like that?

Commissioner Cox replied: No, the map itself.

Mr. Buehmann asked for specificity: Could you provide some specific examples?

Commissioner Cox obliged: Well, Commissioner Eklund pointed out some inaccuracies in the Novato area. Commissioner Randolph queried whether the vista points designated in Sausalito are accurate. I do believe they are accurate. The area occupied by the Golden Gate National Recreation Area and other areas have evolved over time. And if there were a way to map sea level rise challenges, because indeed some of these areas have eroded and become underwater over time. So, again, I am not trying to create more work and there may not be time to do this, but at some point, that may be something we consider undertaking.

Ms. Kuehn chimed in: Yes, I can speak to that for one second. The base map features, which, again, are not related to the Bay Plan Map or map policies but we did try to visually represent the extent of the Bay and the tidal marsh, the salt ponds, and managed wetlands based on the best available regional data that we have. So, in this case, for example, for the Bay and the tidal marsh that is mapped that is using elevations and habitat classifications from the Baylands Habitat Map that SFEI just produced.

We are in the process of developing what we are calling the Jurisdiction Screening Map, where that is essentially an effort where we are intending to update what is shown here as a base map but as a more usable, interactive map as conditions change.

LIDAR was flown to improve the Baylands Habitat map and the elevations related to that last year, and we are in close communication with SFEI who are going to help us integrate some of those more real-time conditions in what is only functioning as a base map in this map.

So, it is not the intent of this, but we are doing our best to visually represent the potential limits of the tidal marsh and the Bay, based on the best regional data that we have. Right now, this is showing 2020 conditions, which may be why Hamilton and some other areas look different right now. We are undergoing significant effort to try to incorporate and automate the incorporation of newer data into that layer when it becomes available.

Commissioner Cox acknowledged: That is great. Thank you.

Chair Wasserman asked: Other comments, questions, cartographic details?

The public hearing is closed. Thank you. Thank you very much for the work and the discussion. We will obviously come back to this.

9. Briefing on Modernizing BCDC's Technology and Permit Applications. Chair Wasserman announced: That brings us to Item 9, a briefing on modernizing BCDC's technology and permit applications. We will receive a briefing about two upcoming projects. The first project is a major investment in technology to modernize and support our regulatory enforcement and planning programs, and the second is to revise BCDC's permit applications. Harriet Ross, our Regulatory Director, will provide the briefing.

Regulatory Director Ross presented the following: Good afternoon, Chair Wasserman and members of the Commission. I am excited to be presenting to you today.

We will be introducing two important projects that will modernize how BCDC does business. The first is investing in a new online technology to support BCDC's various programs, and the second is revising BCDC's permit application.

I am going to walk through the first part of it on the update to the online platform, and then I will be turning it over to Jessica Finkel who should be there in person to talk about a related project of updating the application form.

On this next slide, as many Commissioners will remember, in September of 2024 we completed a comprehensive assessment of BCDC's regulatory program. We did an assessment at our request from the Department of Finance to basically identify opportunities to modernize and improve how we do our work through a comprehensive assessment that was made of the BCDC's Regulatory Program. You have heard bits and pieces of this over the course of the last year, year and a half, but we have made significant progress. I wanted to put it all on one slide for you.

We launched our website with clear, plain language explanations that help the public better understand our work and mission as an agency.

We redesigned our pre-application process to provide consistent early engagement with project proponents, really helping them solve those problems before they submit applications and start our 90-day clock, and really navigate our process alongside other agency approvals that we are seeking.

We have proposed revisions to the rules that guide BCDC's Permitting Program, starting with the rules to streamline approvals for regionwide permits and removing permit requirements for many of those small-scale projects. This project just finished up its public review phase, and we are coming back to the Commission for your consideration in March.

Our Permit teams were trained and given tools to help them introduce agile project management concepts into their daily work, really to reduce roadblocks, increase collaboration and really speed up decision-making. It is an approach that we received training on.

And lastly, we have invested in staff capacity building with the focus on increasing staff knowledge around nature-based solutions in a training series that were held over the last year. And also, we were trained in other core skills to help the way we manage our projects.

So, the two projects we are presenting on today, again, is the online platform, I think we have mentioned and called it a database in the past, and then the application modernization. These two things are the next critical steps in the work of making things easier for ourselves and our applicants in the Regulatory Program. They do provide a technological foundation that will allow us to continue to implement the recommendations that came out of that program assessment.

Our program assessment identified fundamental challenges with our current permit tracking system. I know I have mentioned this before, but just a quick reminder, BCDC's current systems are outdated, inefficient. They do not work together across the different teams so our staff spends valuable time searching for information that could instead go towards deeper work to analyze projects or to track violations, for example.

Second, our permit applicants and the public have no way to search our database or track status of applications, alleged violations, or local plan development under the RSAP. At the same time, our partner agencies and state and local government have almost all moved to modern technological platforms that allow applicants to submit permits online, the public to search permit databases through their websites, and staff to manage their work more efficiently.

So, while we have come up with a lot of good band-aid solutions over the years to keep things working as best as we can here at BCDC, the assessment really recommended moving to the kinds of technology platforms now widely used by many other agencies.

So, on this next slide what it shows is based on the assessment we identified what we need in a modern platform that supports all of our work across permitting, planning, compliance and enforcement.

Some of the big improvements we expect out of this project really will include, for the applicants, an easy online submission of applications, plans and reports, online fee payment, that is pretty typical of any regulatory agency, and real-time status tracking.

And some of these features we need are not just for permit applicants but also the other customers that BCDC serves. That includes the existing permittees, people that hold permits, reporting on compliance with their permits, and local governments submitting plans under the RSAP.

And for the public, we will now have a searchable database of these products that we are producing, permits, plans, enforcement actions, so people can see in real-time what's happening in their communities and engaging with projects under consideration at the Commission. That has been a long-standing comment made by many others to us as regulatory staff to be able to track what they send to us.

And for staff, the biggest impact, we will have one integrated system where information is centralized and searchable. Where we can manage a project through its full life cycle in the same platform, track deadlines, easily make assignments, and manage the staff's workload. We will be able to produce data and metrics to share with others and this data will really help inform how we do our work.

And then on the next slide here the diagram shows what we are looking for. A platform that allows our various teams to utilize the system to comprehensively manage a project from the time it is conceived through its full life cycle. So, from the early planning stages through pre-application, through the application process itself, to compliance. And in the case of a violation of the terms of the permit, through enforcement and to really help us manage those handoffs among the various staff and teams that will play a role in all of these functions. So, it is truly going to touch every part of BCDC across the whole agency and all of our programs.

The program assessment recommended that like many of our other partner agencies have done in recent years that we purchase access to a software platform to support these functions. Many platforms exist today, and other agencies like BCDC streamlined application processing, improved transparency and customer service. It has the capability of enhancing compliance and reporting features and tools to streamline workflows and really help us manage projects more efficiently.

The program assessment recommended we buy an existing platform rather than build something custom from scratch. I have learned a lot more about software platforms and databases than I ever thought I would. But the recommendation for an agency of BCDC's size, the limited complexity of what we really need it for and limited IT resources. There were a lot of main benefits to purchasing off-the-shelf versus developing a custom platform.

Purchasing an off-the-shelf software platform really will get us to implementation faster.

We will be using technology that guarantees ongoing maintenance. It is generally cheaper to implement and maintain.

It has proven to work in other contexts and for end users at other agencies.

The approach is also recognized as a best practice by the state, and our market research has confirmed that this was the right decision to use an off-the-shelf program. So, we have also talked with many other agencies who are already using these types of platforms, and we have seen demonstrations of different systems, and what we have learned is there's a lot of good options out there. Many of them have the features we need out of the box or with minimal customization.

On the next slide here I just wanted to share several important milestones. I thought this was a good time to brief the Commission on this whole process.

Some of the major milestones that we have accomplished to this point is we have already gone through what is called at the state the PAL process, the Project Approval Lifecycle. This is a state process that is already in place to make technology investments that are well planned and have a clear path to success. We completed that process late last year when the state delegated authority back to BCDC to move forward.

So, what this means is that our plan of what we are trying to do to purchase a platform is relatively low cost, and our project planning approach was solid enough that the California Department of Technology, CDT, determined that we do not need ongoing close state oversight; and that we can proceed on our own with supervision from our parent agency CNRA.

And then with the legislature also authorizing the use of the Bay Fill Cleanup and Abatement Fund last summer, we have talked extensively about these revenues are going to support this project. So, that gave us the funding to spend this year on this digital platform.

So, now we have the authority and the funding to move forward. We formed a BCDC team with representation from other different program areas and technical staff across the agency to guide this work.

And then we also did bring in part-time consultants from the California Department of Technology that have experience in these types of projects to really help us follow the best practices for making an investment like this.

And they have been on board since November and they are helping us really drill down on what our requirements are for a platform, help us conduct this thorough market research and make sure we are making a sound choice.

And then on the next slide here, showing the next steps. Through the market research we have conducted with CDT we have evaluated and seen a number of platform demonstrations. There's a lot of options out there. We are on track to select our top choice within the next one to two months depending on how long the contracting takes.

And to help reduce unforeseen contracting issues and really reduce the complexity for purchasing we will be selecting a system that is already available for us to purchase under the existing state Leveraged Procurement Agreement. There's a lot of terms and acronyms and processes that have different names. But what this agreement means is that the state already has a contract with a number of these companies and we are using an existing state contract to enter into to purchase this platform. The benefit really to us is that these are under negotiated terms; terms have been established. All of this results in better pricing for us.

And then we are also pushing for a pretty ambitious implementation schedule. Behind the scenes we have been working on this already for a year and a half. So, we are really pushing hard to get to implementation by the end of this year or early next year.

So, that completes my presentation on the digital platform. I was going to now turn it over to Jessica Finkel to talk about the permit application and then we can take questions.

Climate Adaptation Policy Specialist Finkel addressed the Commission: Thanks, Harriet. Good afternoon, Commissioners. My name is Jessica Finkel, and I am on our Regulatory Improvements Team at BCDC. Building on what Harriet has shared I would like to introduce you to another project that is closely related to the new platform and that is work to update BCDC's permit application.

First, a little background on the problem that we are trying to solve. In addition to challenges with our permit tracking system, our program assessment identified several challenges with our current application form that have contributed to a situation where many if not most of our permit applications are initially incomplete. As a result, staff spends a significant amount of time following up with applicants to gather more information to help us understand the project, evaluate it against BCDC's policies, and to draft the permit itself. So, I want to talk through a couple of those challenges in particular.

First, our current form does not work well for the wide variety of projects that we permit. We use the same form right now for almost everything, for major development projects, all the way down to small projects like a homeowner replacing their dock. It is also very oriented toward development activities and so it ends up being an awkward fit for other types of projects like habitat restoration projects that we really want to encourage.

Second, the last time we thoroughly updated the form was in 2008, so it does not explicitly reflect more recent policy updates like our environmental justice and social equity policies, our climate change policies and our Bay Plan Bay Fill for Habitat policies. We still collect information related to these policies through the application process, but the form does not specifically ask for information about them up front.

Third, the form includes several tables and technical sections that were meant to collect important information, but we have learned that they are overly rigid, and we found that they are rarely filled out correctly.

And fourth, many of the questions are quite dense and applicants just do not really understand what we are looking for. So, as a result we often get inaccurate or incomplete information and frequently find that applicants will just skip sections or questions altogether.

Beyond these issues another underlying challenge is the design of the form itself. If you have ever seen our form, it might remind you of a 1040 tax form. It is really intimidating. There are lots of tiny boxes. You always wonder if you are putting the right information in the right place and maybe you need to hire a professional to help you make sure you do it right.

Our vision is to move toward an application that is more in the mold of Turbo Tax where we ask only for information that is relevant to a particular project, we avoid as much as possible the regulatory terms that we know have a lot of meaning behind them but can feel really opaque to our applicants, and guide applicants step by step through a more modern interface.

Similar to how Turbo Tax takes information from your federal return and uses it to mostly fill out your state return we also want to at least make sure that as part of this review we are looking for opportunities to collect information about projects in ways that are similar to how our partner agencies are asking for it. So that way applicants will not have to write a completely bespoke application for BCDC, but can instead build on documentation that they are already providing to their local government or other resource agencies.

And so overall our goal here is to produce applications that are complete and accurate the first time somebody submits it.

The platform that Harriet discussed is an opportunity for us to modernize our application and move from a more paper-driven process to one that is more integrated with our workflows and processes. So, that is why we are thinking about these two projects in tandem.

We are still in the early stages of the project. We have done a thorough audit of our current application form to understand how it relates to our policies and to identify the sections that are outdated or missing.

Regulatory staff also participated in a workshop led by trainers from the Office of Data and Innovation; it is sort of a government-to-government service or department. They act as a consultant to state departments to help them build different tools and processes that will serve Californians. So, we had folks from the Office of Data and Innovation come in and do a workshop with us. It was focused on human-centered design processes. We had a lot of fun. You can see in the picture. We had some party hats. We got to use modeling clay and popsicle sticks, lots of colorful sticky notes. But importantly, it really helped our team get on the same page in thinking about how we can design an application in a way that puts our users first.

We are currently focused on interviews with permitting staff and applicants from a variety of perspectives to dig into the details of the form and better understand the specific pain points with the form to understand where people are getting held up.

We are wrapping up our user research, and we are starting to move into the next phase, which is figuring out what changes we want to make, thinking through how we can design an application that will elicit the right level of information from applicants. We will be continuing to work with stakeholders as we move through this process.

We also plan to thoroughly test and iterate along the way to make sure wherever we end up works both for applicants and for staff.

Our current application is in the regulations. So, once we have a good idea of what we want the new application to look like we will need to revise our regulations to reflect the changes. We plan to coordinate closely with the Office of Administrative Law to figure out how we can preserve as much flexibility as possible so that we can make future changes, whether that is to incorporate new technology that can make our application even simpler, iterate on questions to make them even clearer and help people understand what we are asking, and to incorporate any policy changes down the road.

Our ambitious timeline has us implementing the new application towards the end of this year or early next year.

Once it is available we will be focused on outreach and making sure that applicants and staff have the resources that they need to manage the transition to the new application.

That is all I have for you today. You can go to the next slide. That has our contact information if you have any follow-up questions for me or for Harriet, and we are also happy to take questions now. Thank you.

Chair Wasserman asked: Do we have any public questions or comments?

(No members of the public addressed the Commission.)

Chair Wasserman continued: Questions from Commissioners?

Commissioner Eklund asked: Question on the testing part. Are you planning to have an applicant that is familiar with your form to actually try to complete it for a new application?

Ms. Finkel stated: One thing we are considering is having a working group help us work through the intricacies of the design and the testing, and that would include people who have a lot of experience with our form. As part of our user research, we have also been speaking similarly with folks who have a lot of experience. We have spoken with consultants who work with a lot of homeowners. We have spoken to consultants who work with a lot of different state agencies, along with direct interviews with applicants themselves. So, from other agencies, restoration projects, developers. We are trying to hit different constituencies, people who have a lot of experience, and also people who have maybe only applied once and so are not experts in BCDC's processes to make sure it works along the spectrum.

Commissioner Eklund continued: So, you do plan to include some applicants in the testing? That is what we did when we modified the NPDS permit for EPA and that was very useful. So, thank you, very good presentation.

Commissioner Pemberton chimed in: Thank you. Wonderful presentation. Really appreciate the update and briefing and that BCDC is making efforts to modernize its permit application process. I just had a question on something you said early in your presentation about nature-based solution training. I was wondering if you could elaborate on that training.

Ms. Ross replied: Yes. Maybe I will start and then Jess you can fill in the details since she helped plan all of those trainings. We had a series of trainings where we brought in other folks. Obviously, we have a lot of regional partners that have developed a lot of materials and a lot of regional guidance and a lot of regional information and data.

We had someone from the state Coastal Conservancy come and talk to us about what nature-based solutions are, what they can consist of, where it has been successful within the Bay. We also had internal training from our own staff that was also familiar with that, sharing a lot of work from, say, the Army Corps' *Design with Nature*, I cannot remember the exact document title. But yes, there were a number of trainings related to that from outside experts primarily. Jess, do you have anything to add to that?

Ms. Finkel added: Yes, I can add a little bit to that. This first year of training that we had over the course of most of 2025 was organized by someone who has since left BCDC. But Dr. Britne Clifton organized a series for us that was an introduction to nature-based solutions and different nature-based solutions options for shoreline protection. We had folks from SFEI and SFEP, the San Francisco Estuary Partnership, came in and did a training on the WRMP, the Wetlands Regional Monitoring Plan. But we also learned about the Baylands Resilience Framework and some other. Some foundational planning documents for protecting subtidal and Baylands areas. So, that was the first year of training.

And then one of the things on your Consent Calendar today was an additional contract with SFEI to come in and do some additional training for staff. I think we have a baseline understanding at this point and so now we are ready to go a little bit deeper into some of those topics. So, we will be learning more about nature-based solutions. How really regulatory staff can assess what nature-based solutions make sense in what places, what questions we can be asking as regulators, helping us understand the restoration design process from beginning to end so we know what questions to ask, and starting to think about some of the lessons that we are learning so that we can incorporate that and continue to be able to move forward and promote those through our Regulatory Program.

Commissioner Pemberton acknowledged: Thank you so much, I think that is wonderful. Appreciate that.

Commissioner Gilmore was recognized: Thanks again for the presentation. I thought it was very interesting and I am glad to see BCDC moving forward.

My questions have to deal with implementation and data migration. Now I know you have not picked the platform yet; and I am assuming that whatever platform you pick comes with specialists to help you integrate it into BCDC's processes moving forward. So, that is one question, probably a yes or no answer.

But then the other question I have is in picking a platform are you looking at it also in terms of ease of data migration? Because clearly you are going to want to load all the things that BCDC has done, permits, compliance, enforcement, into whatever this platform is, not only going forward but looking back. So, could you give me some insight into that in terms of what you have thought about? And this may be a question that could be more fully answered once you have picked the platform, I do not know.

Ms. Ross replied: Yes, and that is true, we will have more detailed answers for how it specifically works for the platform that we choose. But right now, in all of our demonstrations and the many, many hours of meetings we have had with different platform sales reps basically, yes, these are two very good questions. One, of course, yes, it has to incorporate within the process that we have. We have all of the process, but it is not digitally and it is across different places, it will bring it all together. Although we like to think what we are doing here at BCDC is very unique, these off-the-shelf products already have, they consider and they use and they have similar processes, so it is already all kind of built in. But yes, it will integrate within also the other processes that we have.

And then in terms of data migration, yes, it is big. It is very big. It is not just moving over the digital data, but it is also continuing to scan. I do not know if any of you have ever had the privilege of going upstairs to our offices in the file room where there are stacks and stacks of paper files that have not been digitized. It is an ongoing effort that we have. But all of that is going to be a part of that data migration.

That is the key. That is a big component of what we need is to manage the data that we have. So, I cannot give you much more details other than it is a huge consideration, and we will be migrating all of the data.

Vice Chair Eisen commented: Thank you for that presentation. It was really very clear and helped me get a handle on what you are dealing with.

From the Enforcement Committee standpoint, one of the things that we run into a lot is not the person or entity that did not abide by the terms of their permit, it is the person who never got a permit for something they should have gotten a permit for. And that happens all the time. And I wonder how often somebody wants to build a fence or whatever and they look online and they see our application form and think well, that does not have anything to do with me. That cannot possibly be something I am supposed to fill out.

So, I think the application renovation that you are going to do is going to be really important for a lot of people. But as you are doing it, I do not know if there are some processes that can be built in that will help people know. I am thinking of at the very beginning of the form it says, "Do I need a permit?" Answer this question, yes or no. Answer this. Maybe that is already there. But to really help those folks who do not even understand that they need to start into the permitting process, because that is a lot of our enforcement problems. Thanks.

Ms. Finkel replied: Yes, I think that is a great suggestion. Having a screener, a couple of questions to get you on the right path.

Executive Director Goldzband chimed in: Just to further what Jessica said, you will remember that the package that you are seeing in two weeks with the regulatory changes includes something like 20 different project types that will no longer need an application.

And one of the things that we are ensuring as we pick the vendor is that the portal that anybody will be able to see will contain enough information about how to move forward and how to drop off. It is really important to try to get that as clear as possible from the beginning. And so the whole thing rests, indeed, on the ability of a portal to be developed as part of the front end of this database so that when Rebecca Eisen's grandkids in 35 years decide to build something, they will still be relevant enough so that they will say, okay, A yes, B yes, C no, we get to drop out.

That leads me to say three things to this Commission.

The first is that we have had an awful lot of really hard stuff come to this Commission in my tenure. I would argue this is harder than anything I have dealt with. That is because when you select a vendor and you put a database in, you are stuck with it. And number one, nobody likes their database. I will give 100 bucks to somebody who says they would love their database, because it does not happen. Everybody has trouble with their databases. No matter how good they are, it is difficult. We will learn the hard way because that is what you do with databases. But what we are trying to make sure that we get is that we get it right the first time because it ain't going away.

Second, this maintenance and customer service has to happen over the long term, because this is going to be at BCDC for at least ten years. You just figure that you are not going to replace a database in three or five years. It is too expensive; it is too difficult to do.

Which means, number three, it has to be totally adaptable. And this is what really concerns me. Because if I had asked you two and a half years ago to define artificial intelligence and how it is going to be changing the way we think about life in 2026 you would never get it right. I would never get it right. I do not know what is going to happen in three years. I do not know what's going to happen technologically in five years. But the vendor we pick has to have the ability to adapt its off-the-shelf products that we use and that we can adapt with them to whatever is going to happen in three to five years. And that is a real gamble. We have to try to get that as right as we possibly can.

And so that is why this process is keeping me up a little bit at night. I know it is keeping Harriet up at night as well as an awful lot of our staff who are working behind the scenes to try to make sure that as we go through this contracting process that we get that right. It is also why this new third IT person who we are going to put on in a limited term basis is going to have to have database experience.

Commissioner Gunther spoke: I just wanted to add that this is sort of a damned-if-you-do, damned-if-you-don't, kind of situation.

But the other issue is that my experience with these projects is that it always takes longer to implement than you think you should and so you end up in this limbo situation where you are putting all this energy into your new system. But for us, our applicants will still have to be operating with the old system as well. And I do not know if that can be minimized, but I think that always happens. So, Harriet, that might be something once you pick your vendor and you think about it, it is like, these things always seem to malfunction in some way or whatever and it takes a while to get all of the things rolled out. Meanwhile, you still have a 90-day clock ticking and even if you cannot use your new system you have to be working on it. So, you end up doing both for a while.

Ms. Ross agreed: Yes, that is what keeps us up at night. First of all, we will be having what they call a Train the Trainer. So, whatever platform we pick they will be training our staff extensively on how to use it. But before we even get to that point, we will be testing it. And so, in my mind I am thinking we will use it on a couple of test cases first, before we roll it out to the entire division to input, for example, all the applications that we receive, immediately. We will take it a little slow to make sure it works, work out the bugs, get the training, and then transition. It will not be one day we will be using the old system and then the next we will be using the new system.

Executive Director Goldzband stated: And we can assure you it will not be seamless.

Commissioner Gonzalez chimed in: So just a couple of comments. First, thank you on your perspective on approaching it from the user's point of view. I think that is paramount in making sure that we adapt ourselves to their needs. Because ultimately, they are trying to build a project or do whatever they are doing and we want them to comply, and the way that that best happens is when we are easy to deal with through the interface.

I agree with a lot of what has been said here today in terms of things to worry about and to consider.

One thing that I will highlight is the importance of your vendor selection. That it be a vendor that is going to have longevity. I think that there can be a tendency to pick the least expensive vendor only to find that that vendor ends up failing and then we have a database that is a proprietary database that we can no longer pull things out of. So, that is a risk that I want to make sure that we are going to pick a vendor with longevity, as best as we can predict.

We are going through this process in the city that I work in, and we made a very conscious decision that we would pay a little bit more, but to go with something that we think is not going to disappear in the next five years.

When we talk about, I think you used the expression the Turbo Tax-type approach on the front end, I think that is glorious. That is fantastic. The key is having flexibility in the rules, and as you learn, to be able to adapt those rules trivially. I think that certain vendors are going to make that easy and other vendors will say, well, if you pay us, we can change the rules for you. And so, understanding which systems have the ease of adaptation where the team can quickly update a rule, can quickly upgrade the workflow through a drag and drop, as opposed to having to hire a consultant for every tweak. Because there will be updates. I think you are spot on. There will be lots of updates. We are not we are not going to have the time to analyze every possibility. And in fact, we will get it 80 percent right, 70 percent right, 50 percent right.

Chair Wasserman interjected: Hopefully better than 50.

Commissioner Gonzalez continued: And we are going to tweak, we are going to adjust, we are going to pivot, and that is part of the way that these things work.

But the cost question and the speed to change is all in the ease of making those rule changes and making changes to the data structures and the like. That is a very big consideration, from my perspective at least, in how easy that is and the consequence on you guys. Because if you have to hire a consultant for every single change that you make that just bogs things down. And there's a lot of modern systems that allow ease of adaptation. So, those are the two primary things that I would focus on in addition to what has already been said. Thank you, Chair.

Chair Wasserman added: I would add just a couple of comments. Thank you for all of the hard work. Compliments in particular, for all of the outreach you have done to peer groups and constituent groups. I think that is a piece that is often left out in the choosing how to approach this and what vendors to use. Echoing Andy's comments that it always takes longer. This was identified as one of the really major issues that needed to be addressed when I became Chair 14 years ago. So, I appreciate that it takes time. I hope this next phase will take a little less time than that because I would like to see the end of it and I probably will not be here in 14 years.

I think it would be useful as you go along to give us, it might simply be through an Executive Director's report, but to keep us apprised of how the projects are proceeding. Both of these are very important for us to be able to continue to be effective.

And then my last comment is a little disagreement with the Executive Director. He planted the seeds for it. We will be lucky if it lasts five years, given the impact that AI is going to have on all of our lives and our systems, but we need to do it anyway.

Executive Director Goldzband interjected: Can I respond to that for just two seconds? Two things.

Chair Wasserman replied: Sure.

Executive Director Goldzband stated: Number one, I want to give props to Ethan Lavine who is not here today because he is on vacation, who has been leading this. You have seen Ethan, who is Jessica's boss, work through the outreach process, work through the regulatory change process, all with Jessica right at his side. The reason that Harriet did the presentation today is because Ethan is out of the country. So, we need to give props to Ethan as well as Jessica.

And then the second thing is, I also want to give thanks to the Department of Finance. It is not often that any state agency thanks the Department of Finance. But when I asked the Department of Finance to do its mission-based review of our permitting I did so betting that one of the things it was going to say, if not the first thing it was going to say was, you all need a database. And they came back after about a year and a half of work and gave us a list of things to do, and lo and behold a database was number one.

That is how we got the funding to actually do this after trying for 12 years to get funding. It is because the Department of Finance policy people said you all need it. And so then Ethan and Rylan and Harriet and a couple others and I worked to get the legislature to figure that out, with our help and with the help of the Department of Finance and CNRA, and that is how we are able to use the funds in the Bay Fill account to actually pay for this. So, I want to give credit where credit is due.

Chair Wasserman acknowledged: All right. Thank you very much.

10. Briefing on State of Our Estuary. Chair Wasserman stated:

We will move on to Item 10, which is a briefing on the state of the Estuary. We will receive a briefing from the staff of the San Francisco Estuary Partnership and the San Francisco Estuary Institute on the *State of Our Estuary*, which uses the best available scientific information to assess and summarize the status and trends of the health of our Bay and Delta. BCDC Planning Director Jessica Fain will introduce the briefing.

Planning Director Fain presented the following: Good afternoon, Commissioners. I am excited to introduce the next item. *State of Our Estuary* is a really remarkable snapshot of the trends of how we are doing environmentally in the Bay and Delta. I had a chance to see it debuted at the State of the Estuary Conference this past fall, they gave a really fantastic overview, and we really wanted to bring it to you to make sure you were aware of this incredible resource that is available to us.

We are joined here with by Caitlin Sweeney and Alex Thomsen from the San Francisco Estuary Partnership, and online with Laura Feinstein from the San Francisco Estuary Institute, who will be presenting today, and Caitlin is going to kick us off.

Ms. Sweeney addressed attendees: Thank you, Jessica. Good afternoon, Commissioners. It is great to be here this afternoon, and we sat through some very exciting agenda items. I learned a lot, was refreshed with a lot, but great to be here. I am Caitlin Sweeney. I am the Director of the San Francisco Estuary Partnership.

We got a shout out a little while ago, but for those of you may be less familiar with who we are, we are part of the National Estuary Program, a place-based, nonregulatory program of the US EPA, created essentially to sustain and restore estuaries of national significance, which of course, our beloved San Francisco Estuary is. We are housed regionally within the Association of Bay Area Governments and the Metropolitan Transportation Commission, which of course many of you also serve on.

Essentially, we work with myriad partners, including very closely with BCDC over many years, to advance projects and programs to increase the health and the resilience of the San Francisco Estuary.

We are joined today by our partner on this project, the San Francisco Estuary Institute. People often get us confused, partnership/institute. But as you know, I believe, the Estuary Institute is a nonprofit science institute focused on advancing science to increase the health and resilience of the San Francisco Estuary. So, the Partnership and the Institute work very closely together on integrated solutions to our Estuary's most pressing problems, so we are really excited to have them as a collaborator on this project.

You are going to hear today from Alex Thomsen from the Estuary Partnership and Laura Feinstein from the Estuary Institute about the newly released State of Our Estuary platform. As Jessica said, an integrative hub that will help us track the health of the Estuary.

I do not want to steal any more from their talking points, but I will just emphasize that I think more than ever it is so important for us to be able to understand whether or not the work that we do is really improving the Estuary. And we need to understand this on a comprehensive, holistic basis. So, not only project by project, whether individual projects are meeting their performance metrics, but whether all of those projects cumulatively, and all of the management decisions and all of the policy changes that we make, whether all of those cumulatively are really changing the health and the resilience of the Estuary. So, this is a place where we can look at that. Where we can look at the past, evaluate how we have been doing, and reorient ourselves for a more successful future.

And I will just add also for all of us who work in this space, when you are at those inevitable cocktail parties, I do not know if people still have cocktail parties anymore, I am not sure, but if you are, someone will invariably ask you, oh, you are a BCDC Commissioner, how is the Bay doing? So, this will give you a chance to either remember something that you heard today or to be able to point them in the right direction for how the Bay is doing, which is probably the most important question that any of us can be asked.

Again, really pleased to be here today and I will turn it over to Alex Thomsen who will start us off. Thanks.

Ms. Thomsen presented the following: Thank you, Caitlin, and thank you all for having us here to give this presentation.

Today we are going to walk you through some history of this reporting, its regional significance. Laura will share some really interesting takeaways about how the Estuary is doing. And we will wrap up with sharing how this tool informs priority setting for future regional action.

This State of Our Estuary website is a new online version of the *State of the Estuary* report, which you may be familiar with. I know some people in this room helped advance this report, including Commissioner Gunther. Previous versions of the report, which also built on past work by the Bay Institute.

The Estuary Partnership released this report in 2011 and updated versions in 2015 and 2019 in collaboration with the San Francisco Estuary Institute. These reports are really important, and we are really excited to have this new go-to online platform where people can access a continuously updated source of the health of the Estuary and understand in measurable environmental outcomes how our work is improving the health of the Estuary. And where the health of the Estuary is not improving, brainstorm together what we can do to address those stagnant issues.

The *State of Our Estuary* reports on the health of 24 indicators across different categories of indicators. We have updated data on 12 of these indicators as of the 2025 release of the platform, and we are currently in the process of updating additional indicators over the next one to two years. Over the long term we are planning periodic updates to all of the indicators so that this can remain a hub for people to go back to and get an updated status of the health of the Estuary.

Our indicators are spread across these five categories of Estuary health. We have Clean Water indicators including freshwater flow and safer aquatic life. We have indicators for Quality Habitat, such as tidal marsh and open water habitat. Resilient Processes indicators including soft shores and subsided lands. Flourishing Wildlife indicators such as native fish and shorebirds. And Thriving Communities indicators including fish safe for eating and wetland decision-making.

One of our goals with this website was to provide information at various levels for a number of different audiences. We developed the Executive Summary that you see in these screenshots here, which is available on the homepage of the website. I also have printed copies for anyone who is interested in having one after this. This was meant to be something that is easily digestible. There is a key takeaway about each of the indicators along with a summary of what it means, what it is measuring. And then the colorful box indicates the status, if it is good, fair or poor condition, and the trend with a symbol in the box. And Laura will walk you through a subset of these indicators. We have the scorecard, and then we also have a narrative summary of what all of these indicators are telling us overall about the health of the Estuary.

Each indicator also has its own page with status and trend information, the date it was last updated, more information about what the indicator means, and then a technical appendix for those who want more detail on the scientific methods or additional results that went into the summarized status and trend of the indicator.

And there is a lot more that I would love to show you on the website, but hopefully you will check it out after this meeting. For now, I will turn it over to Laura Feinstein to share some key takeaways.

Ms. Feinstein addressed the Commission: My job today is to walk you through some of the highlights from the scorecard and to give you a few succinct takeaways that you can use at the next cocktail party where somebody asks you how the Estuary is doing. My name is Laura Feinstein. I am the relatively new Director of the Resilient Landscapes Program at San Francisco Estuary Institute. Some of you might be familiar with Letitia Grenier. I have stepped into her role, so I have big shoes to fill here.

Just to give you the geographic context of *State of the Estuary*. The *State of the Estuary* evaluates both the Bay and the Delta, and we look at most of the indicators separately for the Bay and the Delta, although a few of them we do combine into an Estuary-wide indicator.

And of course, part of the reason why this is so vitally important is because we sit at the mouth of California's largest watershed, it is two-thirds of the land mass of California and almost half of every drop of water that falls in this state falls within this watershed.

To make sure this is fresh in your mind as we go through the scorecard, this greenish blue color means Good, Fair is yellow, Poor is red. Improving is an up arrow, No Change is flat, Declining is a down arrow. This diamond is Mixed results. And for some of the trends we do not have a trend available yet because perhaps this is the first year that we measured the indicator, so we are waiting until a second time-point before we indicate what the trend is.

We have four key takeaways from the Executive Summary. The first one is that where approaches to restore ecosystem health are well understood and managers have taken action on the ground, the results are visible.

No place is this more evident than in the positive trends we are seeing in tidal marsh acreage and the marsh birds that live in them. As you well know, and in part to the credit of BCDC, the Estuary has really been promoting the restoration of tidal marsh habitat over the past few decades. We set a goal of 100,000 acres of tidal marsh in the Bay itself, not including the Delta, about two decades ago, and we are now at about 50 percent of that goal. We really have seen a sharp increase in the acreage of tidal wetlands in just these past two decades.

But doing the restoration, of course, in itself, is not enough. If you do not do the restorations well, they can fail. It also takes decades, really, for these marshes to recover the full functionality of a healthy marsh. But we are seeing that those restoration projects are reaching that kind of full functionality, as indicated by the fact that the wildlife that depend on them are also flourishing. So, both the tidal marsh acreage and the marsh birds are still in the Fair category, but they are showing some pretty sharp upward trends, which is really positive.

Our second key takeaway is that in other areas, problems persist because usually either they are physically difficult to address or the solutions come with some big social and economic tradeoffs that make it politically difficult to take on the solutions.

So, again, nowhere is this more evident than in all the indicators that are connected to the amount and the timing and the duration of those large freshwater flows that the Estuary has evolved with that would normally happen late winter and spring as we have our big rain events like we have had recently, and then again as the snow begins to melt in the spring. Because so much of that water is now diverted for use by farms and by cities, we see that freshwater flow is both in Poor condition and not only that, but it continues to decline. Things are only getting worse in recent years in terms of the amount of water coming through.

These other indicators are closely connected to that overall measure of how much freshwater comes through. Beneficial Floods looks at the connectivity between the water of the Estuary and the wetlands and floodplains surrounding it. We know we need sufficient water so that the water can jump the banks of the Estuary and flood its natural historic floodplains. That is essential for fish to reproduce, as well as for the Estuary and its wetlands to swap these necessary nutrients for the Bay to be healthy.

And then Open Water Habitat is also connected, and it is an indicator that is really looking at the amount and duration of large amounts of freshwater in Suisun Marsh, which we know is an area that many of the endangered fish in the Delta rely on to reproduce.

These are indicators, of course, where we know the water is so valuable to both cities and economic health and agriculture of the state that we have really struggled with making any significant difference or any positive difference in improving these indicators.

Some of the Water Quality Indicators also show how it is that certain of these problems are harder to solve than others.

For example, Safe for Swimming, this is a metric that is looking at whether or not people can safely get in the water, splash around, and not get sick from the types of bacteria that come out of wastewater treatment plants from untreated sewage.

In the 1970s people really could not get in the Bay and safely swim or play. But with many years of regulation and collaboration between our wastewater dischargers and the Regional Water Board we have seen vast improvements in water quality, particularly in this area of bacteria that make it unsafe to swim. Now people can generally get in the water, splash around, and not get sick later.

On the other hand, there's other contaminants that are far more difficult to regulate and control and to treat as well. So, Safe for Aquatic Life and Fish Safe for Eating, one of the big reasons why those are still hovering in the Fair category despite decades of regulations on the pollutants is because mercury is a big driver of what causes both aquatic life to have too much exposure to pollutants as well as the fish that we can catch and eat from the Bay to be unsafe for eating. Mercury, a lot of it originated during the Gold Rush, flowing down from the mines in the Sierra down to the Bay. And because of its chemical nature it tends to bind to sediments and then move up through the food chain. And then when animals die that mercury goes back into the sediments and continues to circulate. So, just the physical nature of mercury makes it extraordinarily hard to remove from the Bay. That is why we see these indicators hovering in this Fair category, because we really do not expect to see improvements in the short term. It will take really decades to see these conditions improve.

A third key takeaway is that most of the Bay indicators that we measure are in Fair condition and stable, while most of the indicators we measure in the Delta are in Poor condition and declining. So, we are seeing that the Bay overall looks healthier than the Delta. And much of this comes back to reflect the fact, as we were saying, that we have not made great progress on increasing the amount of freshwater available to the Estuary. And the Delta, of course, is highly sensitive to the amount of freshwater that flows in each year. All of its species and habitats have coevolved with those big pulses of freshwater that it rarely receives now.

There is also, of course, just the tremendous amount of land-use change that has happened both in the Bay and the Delta. But overall, the Delta is having a slower recovery of some of its historic wetlands. So much of that has essentially been levied off and turned into farmland, duck clubs, and is now subsiding and potentially unavailable for restoration.

One of the interesting things is that, as I was saying, we are seeing a lot of indicators in the Fair category, a lot of them in the Poor category. But oftentimes when you do a deeper dive into the data, you find these trends happening at a finer scale that show us some of the ways that we can be improving the condition of the Estuary, as long as we can take those lessons and implement them at a larger scale.

For example, waterfowl is a good example of this. Waterfowl, ducks, are in Fair condition right now with a mixed trend in how they are doing in the Bay. But when you take a closer look at the trends in the populations, we see actually that the populations of certain types of ducks are doing quite well in the North Bay and in the South Bay, in the vicinity of places where there has been active restoration of ponds that the ducks prefer to live in. So, we are able to see that there are positive trends happening where we are doing the type of restoration that is necessary for the ducks to thrive. So, the next step is to start to take those actions more broadly throughout the Bay.

Now I will pass it back to Alex.

Ms. Thomsen continued: One thing that makes this resource so powerful is that our region has so many agencies and organizations doing work to improve the health of the Estuary. We are really excited that this tool can provide information to those agencies and organizations to inform their work. It can inform our funding, our policy making, our planning, and other efforts to target that work in areas that need it most.

One place where we do this shared priority setting for our future work is in the *Estuary Blueprint*, which you might be familiar with. This is a document that the Estuary Partnership produces every five years with over 100 partners, establishing a shared vision of where we want the Estuary's health to be and concrete actions that we can all take over the next five years to get us closer to that vision. BCDC has been a key partner in developing Estuary Blueprints and implementing their actions.

And to give you one example of how information from this reporting feeds into those Blueprints. In the 2015 version of the *State of the Estuary* report, many of the indicators had takeaways about potential climate impacts to the health of those indicators, particularly some of the habitat-related indicators.

And so that led us, in the 2022 version of the Estuary Blueprint, to developing some very high priority actions and tasks to addressing climate resilience and reducing barriers to implementation of climate related and adaptation projects.

Some of these actions were championed by BCDC, including implementation of the Bay Adapt Joint Platform and also the Regional Shoreline Adaptation Plan, representing major efforts to establish a shared vision about a more climate resilient Bay and providing clear guidelines for local governments to helping achieve progress on this topic.

We also hope that the *State of Our Estuary*, now this online version, can inform BCDC's future work to protect Bay resources, strengthen climate resilience, and improve public access. We have also listed some other planning and regional documents on this slide because we see lots of opportunities for the information from the *State of Our Estuary* to feed into other priorities.

So, with that I would like to close by thanking the amazing team that worked on this website, including the overall vision, the design and technical features of it, and also the science content and science review.

I would also like to thank our funders, the State Water Board, US EPA and Delta Stewardship Council. Thanks again for having us present. I have some copies of our Executive Summary and scorecard that I can pass out or stick around here after the meeting and hand to you then. Thank you.

Chair Wasserman asked: Do we have any public comment?

(No members of the public addressed the Commission.)

Chair Wasserman continued: Questions, comments from Commissioners?

Vice Chair Eisen spoke: Thank you so much for the presentation. It is really fascinating to have this high-level view of our Bay. The 24 factors that you analyze. My guess is that you have a huge database or source of data to evaluate each one, which is totally different than the data that you would have to evaluate a different one of those. So, how eelgrass is doing, you are going to look at an entirely different data set than how the Ridgeway rail is doing.

If you go to your website, the ourestuary.org, does it allow you to drill down into that data? I ask because there are some data sources about birds who you probably are well aware, the eBird and the Cornell Labs data set, which is probably one of the biggest sets of data around wildlife that exists on the planet, will tell you exactly what is going on with the Ridgeway rail in the Bay Area. Do you use those other sources? And if you do, can you find out more about it at ourestuary.org?

Ms. Thomsen replied: That is a great question, thank you. I will start off by answering but I will also invite Laura if she wants to add anything. Yes, on each indicator page you can drill in to see what data sources were used. That is summarized on the page itself for easy reference. But then you can also go to the technical appendix, which is a PDF, and you can look in there for even more detail about the data sources and how they were analyzed. And you are absolutely right. There is a huge variety of data sets that go into this product, and different ones for each indicator. We do not have the raw data available through the website, but it lists the leads, the science leads who analyzed the data and what the data sets are, so that if someone were interested they could follow up to find that data.

Vice Chair Eisen acknowledged: Wonderful. Thank you.

Ms. Feinstein chimed in: Yes, and I will chime in. That is a great point about the fact that there is abundant data on clapper rail and yet we have not updated that indicator. The reason is not lack of data. Well, it is a combination of things. One is

that we wanted to handle a manageable number of indicators for this round, given that we were building the whole website at the same time, it was just a lot to take on. So, we will be working on updating all those other indicators that we were not able to tackle this time. That will happen on a rolling basis, and we will be alerting people when we add or update indicators.

Specifically, yes, there is a ton of data on clapper rail. I think the challenge, though, of developing a good indicator often is not getting the data, it is often pulling together a lot of good scientists to really think through how we are evaluating that data and what it means specifically to be considered Poor, Fair or Good.

Those kind of judgment calls take a lot of time. We do not we do not like to rush them. So, figuring that out is a lot of what takes a lot of time before we even go in and analyze the data.

Commissioner Eklund commented: Great presentation. I am just enamored with the whole process and the collaboration between the Institute and Caitlin's group, it is really quite an honor to be a part of it.

A couple of questions. Where do you get your data from? Do you get it from EPA, State Water Board? Because they get a lot of data. We did when I was there. I do not know what they are doing now. But where do you get your data?

Ms. Feinstein answered: All of the above. Yes, if you wanted to dig in to the technical appendices. Actually, you do not even have to get that deep. On each indicator page there is a section where you do a little drop-down arrow and it tells you all the main data sources. But yes, we work closely with all the government agencies to pull together the most up-to-date and relevant data.

For example, with clean water, any of our Clean Water indicators, because San Francisco Estuary Institute runs the regional monitoring program, which in turn actually is much of the data that the Water Board uses, we have easy, direct access to that.

Other than that, we do a lot of data requests. USGS provided a lot of data for us on wildlife, for example. That is sort of our job actually at SFEI is to have our fingers on the pulse of where the data is and know how to get it.

Commissioner Eklund asked: What about the Army Corps of Engineers? Because there are some areas of the Bay or the Delta that may not be doing so well and some are doing fine. Are you able to get some of the technical data about the quality of the dredged material that they are dredging up in the Bay or in the Delta?

Ms. Feinstein replied: That is a great question, and I do not have an answer for you off the top of my head. But I do know that our Sediment Team would have a good answer for you. Yes, I can certainly ask them to follow up with you on do we have the data on the quality of sediment that is dredged. And we are going to add a sediment indicator. That indicator will be added at the end of this year. So, we will have a little more insight into that particular topic soon.

Commissioner Eklund opined: I think that is really important because dredging, and I know that there have been some tests and some studies done on what impacts dredging actually does in the Bay. Because it is not a clean process, at least from the dredging that I saw on the hopper dredge as well as on the other dredges that the Army Corps did.

So, I was interested whether or not you have done any more testing or examination of what impact dredging actually has on the Bay, or whether that information is available for the Corps. I would be interested to hear a little bit more about that.

And then, do you get data from BCDC and the other state agencies that deal with San Francisco Bay?

Ms. Feinstein replied: Absolutely. We are really fortunate to have such a great working relationship with BCDC, and we do a lot of data sharing.

Commissioner Eklund asked: How about the Coastal Conservancy and some of the other organizations?

Ms. Feinstein answered: Yes.

Commissioner Eklund acknowledged: You get that too. Okay, great. Thank you. Wonderful job. Keep it up. Because I think that the more people that know what the quality of the Bay and the Delta is, the more that they are going to advocate for organizations to keep going so we can improve the Bay and the Delta. So, thank you.

Commissioner Showalter commented: I was just going to make a few comments. Caitlin, it is lovely to see you. Caitlin is one of my heroes. She has been leading the charge on the state of the Estuary and putting on the State of the Estuary conference for many, many years. I think it has been going on at least 30 years if not longer than that. And that is a time every other year it is held and it gets together scientists and agency people from the whole region to talk about the state of the Estuary.

Of course, over time, the subject of that has morphed. Nobody was talking about climate change when we met in the late 1980s, but the last one it was top of mind. So, I just want to thank you for continuing that effort.

And the other thing I want to do is I just want to call it out as adaptive management. One of the most important scientific best practices for moving science forward is adaptive management. That is basically saying, especially in engineering and when you are implementing something, it is basically saying, okay, we did this project. We learned these things from it. What can we use that we learned from this project on the next one that is kind of similar. That is really what you are doing kind of writ large with the *State of the Estuary* and this report. Before it was a beautiful brochure, but times have gone on, so now it is much more appropriate to have a website. I just want to thank you for all your contributions.

Commissioner Gunther chimed in: As the project leader for the first one of these things it just warms my heart to see it, and not as a personal thing. But every year that we can keep this going it becomes more valuable because we have that historic perspective.

But we only have that if we maintain a consistent approach to what we are doing, right? We are trying to measure the health of the Estuary but there is no such thing as a healthometer that you stick into the water, and it reads red, yellow or green, right? This is not an exercise in measurement, it is an exercise in judgment. And so, it is the measurements we have, but if we do not use expert judgment to deliver the kind of information that we heard today, then we are not going to get the value out of it, and that is what we are getting.

And maintaining that is going to be a challenge going forward. We talked about this at the Water Board when you guys presented too. But for some of these indicators we have individuals who have been doing this since my beard was not gray. We have to be able to pass that on. We have to institutionalize this. That is what I see happening, both with SFEP and SFEI.

But that really needs to be a real focus going forward, I think, so that we do not lose this capacity. Some of these data sets are available for analysis because the people doing the work are trusted by the people who are generating the data.

Some scientists will not give you their data to make judgments with if they do not think that you understand the strengths and weaknesses, you understand how to make valid inferences from what you have. I think that the last slide that had all those people on it just gives an inkling of the integration that is occurring here between people taking measurements in the field year after year, and people putting this together, and then other people assembling that, and then other people coming and giving us this kind of overview that allows us to make these judgments.

Fred Nichols, who was one of really the founders of our ecological work in the Bay said the hardest thing for his job is when his neighbor leaned over the fence and said, so Fred, how is the Bay doing, right? He did not have an answer back in the mid-1980s and we now have an answer because of this effort. I want to make sure that we recognize the vulnerability of our system. Because if we can keep this going 10 years from now, 15 years from now, it will be even more valuable, and we will really be able to see these long-term trends in these judgments and that is really essential.

I am so pleased to see people much younger than I now doing this work. That shows one piece of the puzzle has been solved. But if we cannot keep that standardization, you know particularly Tina Swanson, who does the freshwater flow work - I could not get the data. The people from DWR who have been doing this with Tina for years are willing to give her the information because they know she will treat it with respect.

How we do that going forward for the next one is, I think, as important as all the work we have done to modernize the presentation with the website. But thanks so much for this, it is really a really a great job.

Ms. Thomsen acknowledged: Thank you so much for the comments and for being able to share all of that rich experience that you have in what goes into producing this type of report. I just wanted to follow up on a couple things that you mentioned, one of them being the data itself and related to the earlier questions about data.

The continuity of this reporting does really rely on continuity of the data collection in the first place. We really rely on regional monitoring programs like the one that Laura mentioned for water quality in the Bay and also the Wetlands Regional Monitoring Program for data that they contribute that we then analyze and share on the website, and other data sets that have been going on for a long time, like the ones you mentioned from DWR. So, the continuity of the data is really important.

And then also, this is really relevant to conversations we have been having among our team about being able to continue to do the analysis in the same way over time, even when people move on and retire.

What we have done with some of our indicators is the people who have analyzed the data have actually written it up into a script that someone can run in a software that will pull in all of the data and analyze it in the same way, produce the same type of graphs, but with updated data. That is the type of thing that we are moving towards and thank you for highlighting the importance.

Ms. Feinstein added: Yes, Andy makes great points. And yes, SFEP has been working really hard on thinking about the process of *State of the Estuary* and making sure that it has longevity, and part of that, of course, is stewardship of the data.

I will say, one of the challenges that I see with all of this with consistency and longevity is that so much of the data we collect, we get the funding to collect it on a grant-by-grant basis. That means that sometimes you do not have a grant, you cannot collect the data that year, and that can be a serious compromise to what you are doing.

In particular I think we deal with this at SFEI with EcoAtlas. EcoAtlas is part of what provides all that mapping that we were talking about two items ago. It kind of provides this vital baseline set of geographic data that we really could not do much of our science without, and yet again, it gets funded in drips and drabs and that makes it really hard. So, anytime anyone wants to have a conversation about making sure that these long-term data sets really have the kind of financial security they need, would love to have a conversation about it.

Chair Wasserman offered concluding remarks: Thank you and thank you for the work behind this, the longstanding work, the current work, and the very good presentation. I would urge all of us on the Commission to certainly read the Summary but actually delve in and read the report.

Caitlin's comment at the beginning that we frequently do get asked when we talk about our service on this Commission what the state of the Bay is. You know, the hard truth is that our mission, as important as it is, is not truly aimed at the state of the Bay and the Estuary as this report is, but it does underlie all of what we do and has huge importance. And the fact that the trends are a little bit meh should be of concern to all of us.

So, thank you very much for the work and the commitment.

11. Adjournment. There being no further business, the Commission meeting was adjourned at 4:17 p.m.