Bay Fill Policies Working Group Meeting – Timeline and Workshop Feedback

April 26, 2019

San Francisco Bay Conservation and Development Commission

Timeline/Next Steps

Until ~May 20: Develop policy language and finalize reports

By May 20: Background and Staff Report Mailings

- May 16: Bay Fill Working Group Meeting?

May 20 – June 20: Opportunity to comment on reports

June 20: Initial Public Hearing

- June 20: Bay Fill Working Group Meeting

July 18: Bay Fill Working Group Meeting?

Additional Public Hearings?

Policy Options and Feedback

What can we change?	Pros	Cons

Generally supported (sometimes with a few caveats)

Range of Opinions

Generally not supported

1. Limited Amount of Fill Allowed for Restoration Projects

What can we change?	Pros	Cons
1) Remove "minor amount of fill" language, and rely on the language in the McAteer Petris Act	By requiring the "minimum amount of fill necessary" for a project, the McAteer-Petris Act already requires that applicants carefully consider fill volume for any project. Currently, fill for habitat projects must satisfy an additional standard of "minor fill". Removing this additional subjective standard would hold all projects to the same fill volume standard..	Removal could result in much larger volumes of fill in the Bay. The "minimum amount of fill" language in the McAteer-Petris Act still requires applicants for habitat projects to justify the amount of fill.
2) Replace the language "if no other method of enhancement or restoration except filling is feasible" to reflect the potential need for fill to maximize the benefits of the project	Language specifically addressing the volume of Bay fill allowed for habitat projects could provide better guidance to regulators and applicants	This language may still create additional restrictions or be redundant with the McAteer-Petris Act
3) Add language to guide determinations for the minimum amount of fill necessary (e.g. settling rate, how compact material will become, habitat and landscape scale considerations).	It is important to consider physical sediment dynamics and habitat functions in determining the "minimum amount" of fill necessary. Would be helpful in providing guidance to regulators and applicants	In some cases this information may be difficult or more expensive/time consuming for applicants to provide; also, can be considered without adding language

2. Using Dredged Sediment for Habitat Projects in Tidal Waters

What can we change?	Pros	Cons
1) Amend Dredging Policy 11b so that only deep water projects comparable to the Middle Harbor Enhancement Project will have fill restrictions contingent on the successful completion of Middle Harbor.	Modifying subsection 3 of Dredging policy 11b would ensure that the beneficial reuse of much needed sediment for tidally active habitat projects is not restricted by a single project	Only altering subsection 3 means that other elements of the policy still impose restrictions on the beneficial reuse of sediment for tidally active habitat projects
2) Remove Dredging Policy 11b	Removal of this policy would lift a significant restriction on the tidally active habitat projects that would use dredged sediment, while still leaving in place the substantive requirements that beneficial reuse projects must adhere to in Dredging Policy 11a	Deletion would remove direction to develop clear understanding of potential impacts of fill in tidal waters and some important protections for projects proposing to use large volumes of dredged sediment
3) Amend Dredging Policy 11b to be consistent with the McAteer Petris Act's requirement for the minimum amount of fill necessary for the project, and encourage the strategic use of dredged sediment in tidally active projects while continuing to work toward accomplishing conditions 1-3	A modified version of Dredging Policy 11b could further support and encourage the use of dredged sediment for habitat projects that are tidally active wherever possible, but still include restrictions to ensure that this reuse is done with thorough consideration of potential impacts to the Bay and its wildlife	Deletion would remove some important protections from potential impacts of projects proposing to use large volumes of dredged sediment
4) Address this issue through the planned for Beneficial Reuse Bay Plan Amendment	All dredging policies, including those for beneficial reuse of dredged sediment could be addressed comprehensively at one time	This would delay the implementation of updated policies on habitat projects, and a continued restriction on the amount of dredged sediment that could be used in tidally active habitat projects

3. Regional Goals | Restoring Complete Ecosystems

What can we change?	Pros	Cons
1) Add information referencing the principles of *Subtidal Habitat Goals*, *Baylands Ecosystem Habitat Goals Update*, and SFEI's *Adaptation Atlas*	This will strengthen BCDC's support of the best available science in the Bay Plan	Specific reference to a current paradigm may limit future work unintentionally. Reference to the "best available science" may be better.
2) Require information from permit applicants on how the project will fit within regional habitat restoration frameworks and adhere to the principles of these frameworks in their goals, siting, and design	This will ensure that projects consider regional habitat objectives	This information may be expensive or time-consuming for applicants to provide
3) Add policies to encourage projects that increase habitat connectivity, both at the project level and the regional level	Habitat connectivity is essential to ensuring wildlife populations can access the suite of habitats and ecosystem functions they need to thrive	Not every project may have the capacity or need to enhance habitat connectivity (i.e. may still be providing essential habitat without connecting habitats). Also, a comprehensive regional ecosystem adaptation vision has not yet developed.
4) The extent of a project's adherence to regional frameworks, including site suitability, should scale with the size, lifetime, and/or purpose of the project	Some smaller or temporary projects may not need to be sustainable in the long term if their goal is to provide valuable habitat for a finite period of time	It may be difficult to assess what the project's actual life will be and may allow projects to avoid considering adaptation strategies that would promote sustainability.

4. Pilot Projects | Monitoring | Adaptive Management

What can we change?	Pros	Cons
1) Include language encouraging projects to have an adaptive management plan, and stating what adaptive management plans should entail	Adaptive management plans increase the project's likelihood of success, and allow for more uncertainty at the time of permit approval	Not all projects may have the budget or need to complete or adhere to an adaptive management plan
2) Add language stating that the level of design, amount of monitoring, and level of detail in an adaptive management plan required for a habitat restoration project should scale with the project goals, size, impact, level of uncertainty, and expected duration.	This would ensure that projects do not need to do more design, monitoring, or management than is necessary or appropriate for the project.	The proper level of design, monitoring, or management for a given project may be subjective and/or difficult to determine
3) Add data sharing and data synthesis requirements for BCDC's monitoring data to require that this data is informing projects, and feeding into regional monitoring and data collection efforts	This would ensure that BCDC's monitoring data is utilized, both to improve internal efforts and to enhance knowledge in the region	This will likely require more resources both at BCDC and for the applicant; also, a designated repository for regional monitoring data does not exist yet
4) Add policy language to ensure that applicants are able to financially and logistically support monitoring and adaptive management needs	Projects with adequate funding will be more likely to adhere to goals and be "successful" if applicants have the funding in place for ongoing monitoring and adaptive management	Some valuable and well-designed projects may not have funds to ensure these activities at the time of permit approval
5) Add policy language to further define, encourage and guide the use of pilot and demonstration projects as proof of concept and information-gathering mechanisms	If their performance is monitored and the data is shared, pilot/demonstration projects could reduce the uncertainty about future projects' design, and potential impacts	There may not be sufficient time before the threat of sea level rise intensifies to learn from pilot projects before implementing larger-scale fill projects; may be hard to determine what exactly constitutes a pilot project; if pilots fail, they may cause more harm than good

5. Impacts and Habitat Conversion Caused by Fill

What can we change?	Pros	Cons
1) Add language noting the potential impacts that may be associated with restoring complete ecosystems and creating valuable habitat (e.g. creating new marshes, subtidal habitat, islands, etc.)	Serves to remind applicants and analysts to use caution and think about a suite of potential outcomes when considering projects that allow large volumes of fill in the Bay	This kind of language might not be that essential or useful to analysts
2) Add requirements to analyze the relative impacts and benefits of fill to make habitats better adapted to sea level rise	Helps applicants and analysts to assess whether it is appropriate to fill a given site for sea level rise adaptation	Impacts and benefits may be difficult to determine for fill methods that have not been used in the Bay
3) Require that applicants and analysts examine the impacts of habitat loss or type conversion on habitat availability and needs. Consider cumulative impacts of all projects, as opposed to individual project impacts. Approve type conversions within an adaptive decision framework, and only allow new projects incrementally as we monitor and learn	Allows careful and experimental implementation of type conversion. Reduces the risk of cumulative impacts, and encourages consideration of the regionwide habitat requirements for all Bay organisms	This could still cause some impediments to the need to act quickly to restore habitats prior to predicted rapid increases in sea level rise mid-century. Also, there is no current knowledge of how much habitat is needed to support Bay fish and wildlife
4) Defer action on amending Mitigation policies to the Mitigation Bay Plan Amendment (tentatively scheduled to be initiated in Fall 2019)	Issues related to the impacts of fill for habitat projects and mitigation for fill for habitat project impacts could be addressed comprehensively	The appropriate policies may not be in place to ensure that large fill for habitat projects in the Bay do not have unforeseen consequences

6. Fill for Natural Shoreline Protection

What can we change?	Pros	Cons
1) Add language requiring the use of the best available science to assess the most appropriate and sustainable nature-based shoreline protection strategies for different parts of the Bay.	This will ensure that the most recent science on the sustainability of multi-benefit shoreline protection projects is used to make decisions about shoreline protection	
2) Amend the language to state that nature-based or nonstructural solutions to shoreline protection should be used and that applicants must demonstrate why nonstructural solutions are not feasible. Also include language noting that shoreline protection options exist along a spectrum from green to grey and that natural solutions can be incorporated into structural solutions.	This would ensure that applicants try to use natural shoreline protection primarily, and consider creative solutions to incorporate natural shoreline protection into all shoreline protection projects	It may be difficult to prove that natural infrastructure solutions are not possible
3) Lessen mitigation requirements for living/natural shoreline protection projects in comparison to hardened shoreline protection projects	This further incentivizes the consideration and use of natural shoreline protection	In some areas hardened infrastructure is necessary to protect human life and property, so it may be unfavorable to require more mitigation for this work.
4) Amend the language to include other habitat types	Tidal marshes are only one of many habitats that provide shoreline protection benefits. Other includes oyster reefs, mudflats, and upland transition areas.	
5) Defer action on amending Shoreline Protection policies to the Fill for Flood Protection Bay Plan Amendment (tentatively scheduled to be initiated in 2021)	This amendment will focus on potentially allowing Bay Fill for the primary purpose of shoreline protection.	There will be a delay in any amendments to the Bay Plan Shoreline Protection policy language.