

BRIEFING ON A POSSIBLE AMENDMENT TO BAY PLAN MITIGATION POLICIES (BPA X-20)

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PLANNING PROGRAM PRIORITIES

	Year 1 (2017)	Year 2 (2018)	Year 3 (2019)	Year 4 (2020)	Year 5 (2021)	Year 6 (2022+)
Legislation						Change the McAteer-Petris Act to better address RSL and EJ
Bay Plan Amendments		Environmental justice BPA (7/17 – 10/19) Fill for Habitat BPA (7/17 – 10/19)		Mitigation BPA	Adaptive mgmt for public access / habitats BPA Fill for flood protection BPA Beneficial Reuse BPA*	
				Suisun Marsh Protection Plan / LPP review		
			Seaport Plan update			
			San Francisco Waterfront Special Area Plan (Klamath, Exploratorium, major overhaul)			
					Recreation BPA for liveaboards	
Guidance			EJ guidance and staff training for new policies ART Adaptation planning guidance		Guidance on beneficial reuse of sediment* Minimum design, monitoring, informational guidance for experimental projects	
				Guidance for long-term sustainability of habitat projects		
				Bay Plan CC Policy Guidance		
Planning					Complete econ analysis of beneficial reuse*	Update Tidal Marsh Restoration Design Guidelines(PWA 2004)
				Collaborate with other agencies to develop a compatible approach to mitigation		Investigate incentives transition space for habitat and communities

OBJECTIVES

- Brief the Commission on issues related to mitigation at BCDC
- Gather Commission feedback on:
 - The scope of a potential Mitigation BPA
 - Staff recommendation on process for potential Mitigation BPA

BACKGROUND

Mitigation at BCDC

Mitigation: A series of actions, generally taken in sequence, to offset adverse environmental impacts, specifically first avoiding the impact if possible, then minimizing the impact, and finally, for any unavoidable adverse impacts, providing compensation. (2002 BCDC Mitigation Staff Report).

Compensatory mitigation: “Compensatory mitigation consists of measures to offset unavoidable adverse impacts to the environment and may include: (1) restoring a resource ... (2) creating a new resource...(3) enhancing the functions of an existing resource...(4) preserving a resource....” (SF Bay Plan, Mitigation Findings).

MITIGATION BAY PLAN POLICIES

1. Avoid, minimize, compensate
2. Site and design within Baywide ecological context
3. Community involvement
4. Consideration of multiple benefits in deciding location and design
5. Criteria for amount and type of mitigation
6. Restoration > creation; site selection to increase likelihood of long-term success
7. Provide benefits prior to impacts
8. Required components of mitigation program
9. Interagency coordination
10. Costs and community concerns in choosing among alternative programs
11. Mitigation banking
12. Fee-based mitigation

APPROACHES TO COMPENSATORY MITIGATION

How does it accomplish?

- Fill removal
- Habitat projects
- Contaminant remediation

Where does it happen?

- On-site
- Off-site

Who is responsible?

- Permittee responsible for mitigation
- Mitigation banking
- In-lieu fees



Liberty Island Restoration Bank, Source: RES



Richmond Terminal Four, Source: State Coastal Conservancy



East Span Bay Bridge Touch Down, Source: SF Local CBS

CASE STUDY: MISSION BAY FERRY TERMINAL

How does it accomplish?

- Fill removal
- Habitat projects
- Contaminant remediation

Where does it happen?

- On-site
- Off-site

Who is responsible?

- Permittee responsible for mitigation
- Mitigation banking
- In-lieu fees



Rendering of Mission Bay Ferry Terminal once constructed,
Source: Port of SF



Mission Bay, Source: Bay Crossings

CASE STUDY: SF FERRY TERMINAL EXPANSION

How does it accomplish?

- **Fill removal**
- Habitat projects
- Contaminant remediation

Where does it happen?

- **On-site**
- Off-site

Who is responsible?

- Permittee responsible for mitigation
- Mitigation banking
- **In-lieu fees**



SF Ferry Terminal South Basin, Source: SF Chronicle



Richmond Terminal Four, Source: State Coastal Conservancy

CASE STUDY: LIBERTY ISLAND MITIGATION BANK

How does it accomplish?

- Fill removal
- **Habitat projects**
- Contaminant remediation

Where does it happen?

- On-site
- **Off-site**

Who is responsible?

- Permittee responsible for mitigation
- **Mitigation banking**
- In-lieu fees



Military Ocean Terminal Concord, Source: USACE

May 21, 2020



Liberty Island Restoration Bank, Source: Resource Environmental Solutions (RES)

CASE STUDY: EAST SPAN BAY BRIDGE TOUCH DOWN

How does it accomplish?

- Fill removal
- Habitat projects
- Contaminant remediation

Where does it happen?

- On-site
- Off-site

Who is responsible?

- Permittee responsible for mitigation
- Mitigation banking
- In-lieu fees



East Span Bay Bridge Touch Down, Source: SF Local CBS



Skaggs Island, Source: East Bay Times

INITIAL RESEARCH QUESTION

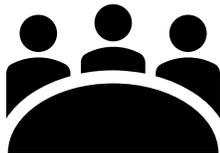
Considering rising sea level, how should we rethink current mitigation practices and paradigms to ensure long-term project success and increase resilience of ecosystems, communities, and the built environment?

PROCESS TO DATE



Background Research

- Preliminary research by RIPTIDES intern, Elena Huynh, in Fall 2019
- BCDC mitigation law and policy
- Commission workshops on Rising Sea Level
- BCDC mitigation staff reports
- Other agency mitigation policies and practices
- Bay Area mitigation planning efforts



Meetings and Interviews

- BCDC Regulatory Staff
- BCDC Senior Staff
- Bay Fill Policies Working Group

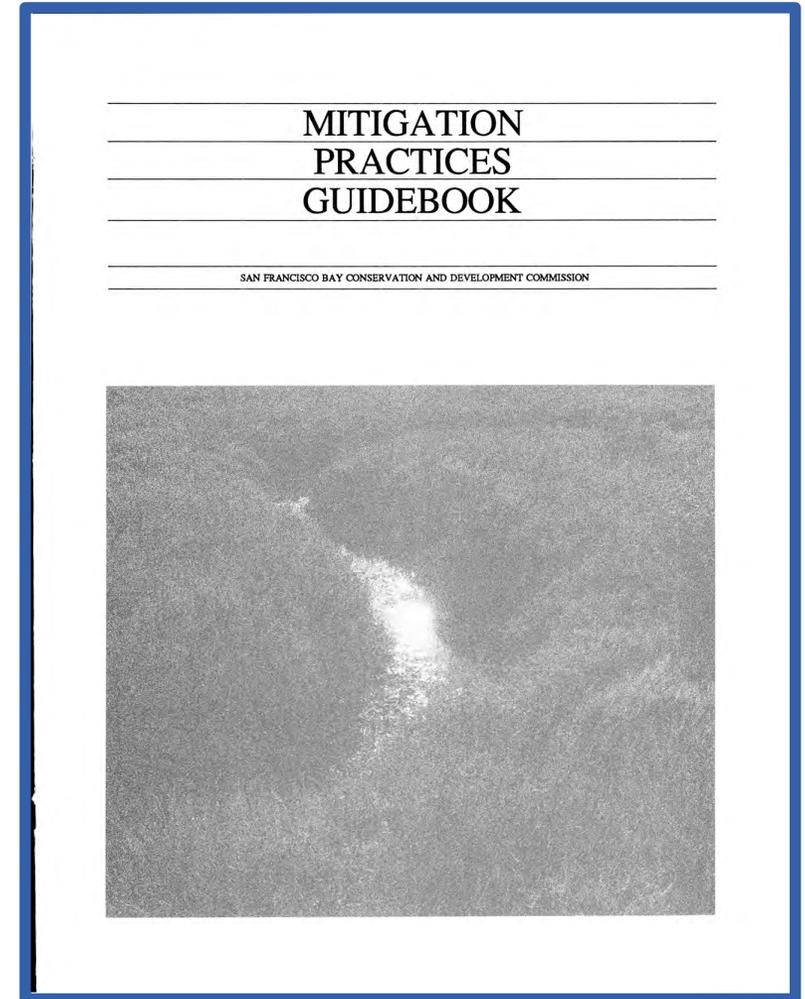
SCOPE AND PRELIMINARY FINDINGS

Seven key issue areas identified:

1. Increasing certainty in mitigation policies
2. Long-term maintenance of mitigation sites
3. Preference for on-site mitigation
4. BCDC's role in mitigation planning
5. Mitigation kind
6. Mitigation amount
7. Environmental justice and social equity

1. INCREASING CERTAINTY IN CURRENT MITIGATION POLICIES

- Issue: Some mitigation policies are vague and are thus difficult to apply with certainty.
- Potential Solutions:
 - Add specificity and clarity to policies
 - Update guidance on applying the current mitigation policies.



Mitigation Practices Guidebook, 1987, Source: BCDC

2. LONG TERM MAINTENANCE OF MITIGATION SITES

- Issue: How long must mitigation sites be maintained considering sea level rise, and who is responsible?
- Potential solutions:
 - Policy change: ensuring long-term project success
 - Policy addition: maintenance of mitigation with sea level rise
 - Guidance:
 - Monitoring and management criteria to ensure long-term success .
 - Assessing risk and vulnerability of proposed mitigation to determine necessity of long-term maintenance



Peyton Slough Restoration, Source: <http://www.dutragroup.com/project-details-marineconstruction-aggregates-dredging-marine-construction.html?id=18>

3. PREFERENCE FOR ON-SITE MITIGATION

- Issue: BCDC policies state an order of preference for mitigation that differs from other regulatory agencies and may not reflect the potential advantages of mitigation banking and in-lieu fee programs.
- Potential Solutions:
 - Policy change: order of preference for banking and in-lieu fees
 - Guidance: use of mitigation banking and in-lieu fee programs to improve sea level rise resilience
 - Improve interagency coordination of mitigation requirements.



Liberty Island Restoration Bank, Source: <https://res.us/projects/liberty-island-conservation-bank/>

4. BCDC'S ROLE IN MITIGATION PLANNING

- Issue: Stronger BCDC involvement in regional mitigation planning may be important to ensure the benefits we want to see where we want to see them, and to facilitate multi-agency permitting of mitigation projects.
- Potential Solutions
 - Policy change: mitigation siting; interagency coordination
 - Policy/finding addition: sea level rise benefits of mitigation planning
 - Mitigation bank or fund for fill removal
 - Increase BCDC involvement in regional advance mitigation planning efforts.
 - Improve interagency coordination of mitigation requirements.



Encinal Terminals, Alameda Island, Source:
<http://starharboralameda.com/tag/encinal-terminals/>

5. MITIGATION KIND

- Issue: Can we and should we require more out-of-kind mitigation when appropriate to work toward greater sea level rise resilience of the estuary?
- Potential Solutions
 - Policy change: add specificity on determination of kind and nexus
 - Guidance: determine acceptable/appropriate nexus and kind



6. MITIGATION AMOUNT

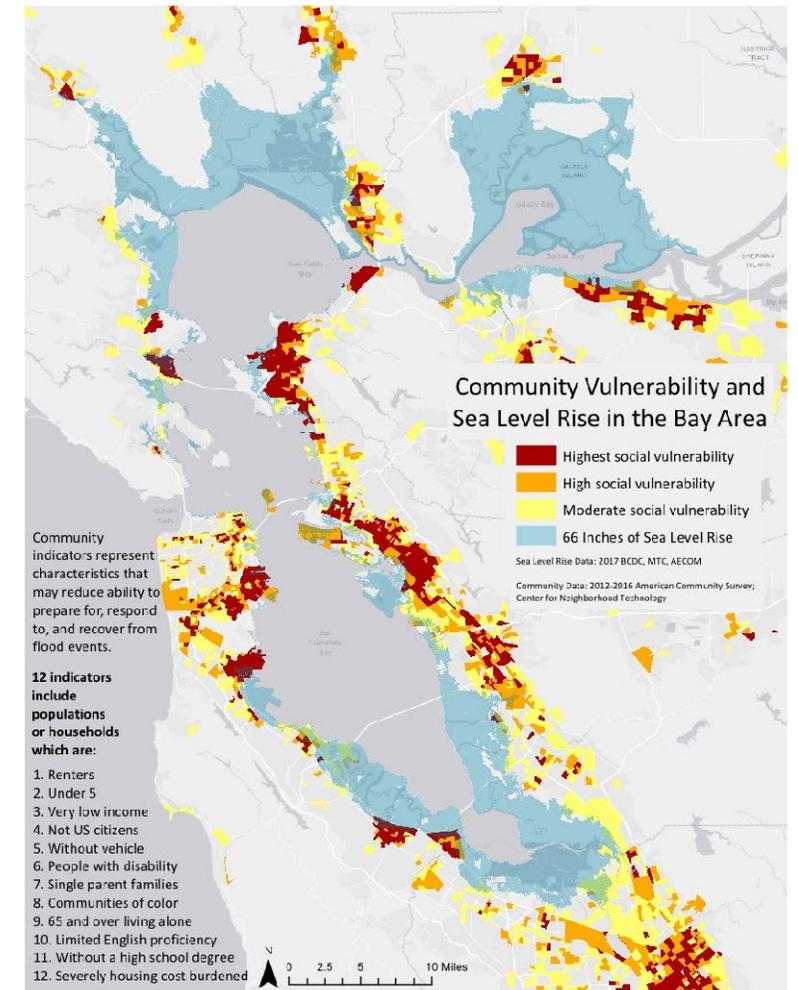
- Issues: How should mitigation amount be determined for projects that advance sea level rise resilience?
- Potential Solutions
 - Policy change: add specificity on determination of amount
 - Guidance:
 - Measuring “benefits” vs “detriment” considering sea level rise
 - How to determine appropriate mitigation ratio



Highway 37, Source: <https://sanfrancisco.cbslocal.com/tag/highway-37/>

7. ENVIRONMENTAL JUSTICE (EJ) AND SOCIAL EQUITY

- Issue: How could mitigation project planning, siting and design better address environmental justice and social equity needs, especially in the context of sea level rise?
- Potential Solutions
 - Policy change: add EJ in consideration of project sustainability, and location, amount, and kind of mitigation.
 - Policy addition: further EJ benefits of mitigation projects
 - Guidance: Incorporate EJ analysis addressing issues identified above



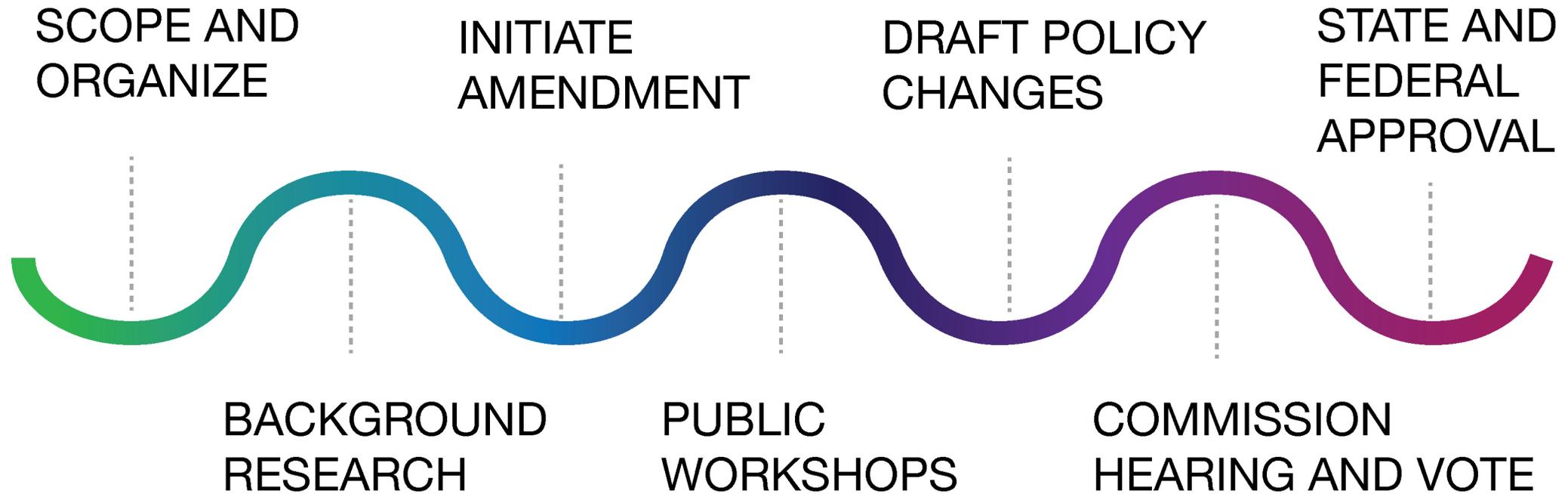
Source: BCDC

GENERAL CONCLUSIONS FROM REGULATORY STAFF AND BAY FILL WORKING GROUP MEETINGS

- The current mitigation policies are likely flexible enough to address most of the issues related to sea level rise, but more clarity around the intent of some policies would benefit permit analysts and applicants when handling current and future issues.
- The policies leave many questions regarding how mitigation should be handled in the context of rising sea level.
- For some issues, more research is necessary to determine the extent of the problem and the options to address the problem.

NEXT STEPS

(Refine project goal)



(Release Background Report)

POTENTIAL NON-POLICY SOLUTIONS

- Develop guidance on the following topics, as appropriate:
 - **Monitoring and management criteria to ensure long-term success** of mitigation projects.
 - **Assessing risk and vulnerability of proposed mitigation to determine necessity of long-term maintenance.**
 - The use of mitigation banking and in-lieu fee programs to improve sea level rise resilience
 - How to determine acceptable/appropriate nexus and thus mitigation
 - **Measuring “benefits” vs “detriment” considering climate change/SLR**, and how to determine appropriate mitigation ratio
 - Interpreting and applying the current mitigation policies.
- Improve interagency coordination of mitigation requirements.
- Collaborate to develop a mitigation bank or fund for fill removal
- Increase BCDC involvement in regional advance mitigation planning efforts or mitigation bank development.

DISCUSSION

Gather Commission feedback on:

- The scope of a potential Mitigation BPA
- Staff recommendation on process for potential Mitigation BPA