

SAN FRANCISCO BAY REGIONAL DREDGED MATERIAL MANAGEMENT PLAN

Consistency Determination briefing to BCDC
15 JAN 2026

USACE San Francisco District



U.S. ARMY



US Army Corps
of Engineers®



FEDERAL DREDGING PROGRAM

Federal Channels (Red)

- 5,700 acres
- 2.2% of the Bay surface area
- Dredged on various cycles (annual, semi-annual)

Annual Volume Dredged (2000-2022)

- Average: 1.6 million cubic yards (CY)/yr
- Range: 0.5 – 2.6 million CY/yr

Placement Sites (Purple & Brown)

- Disposal
 - Deep ocean
- Transitional Placement
 - In-Bay
- Beneficial Use (BU)
 - Nearshore placement
 - Wetland restoration

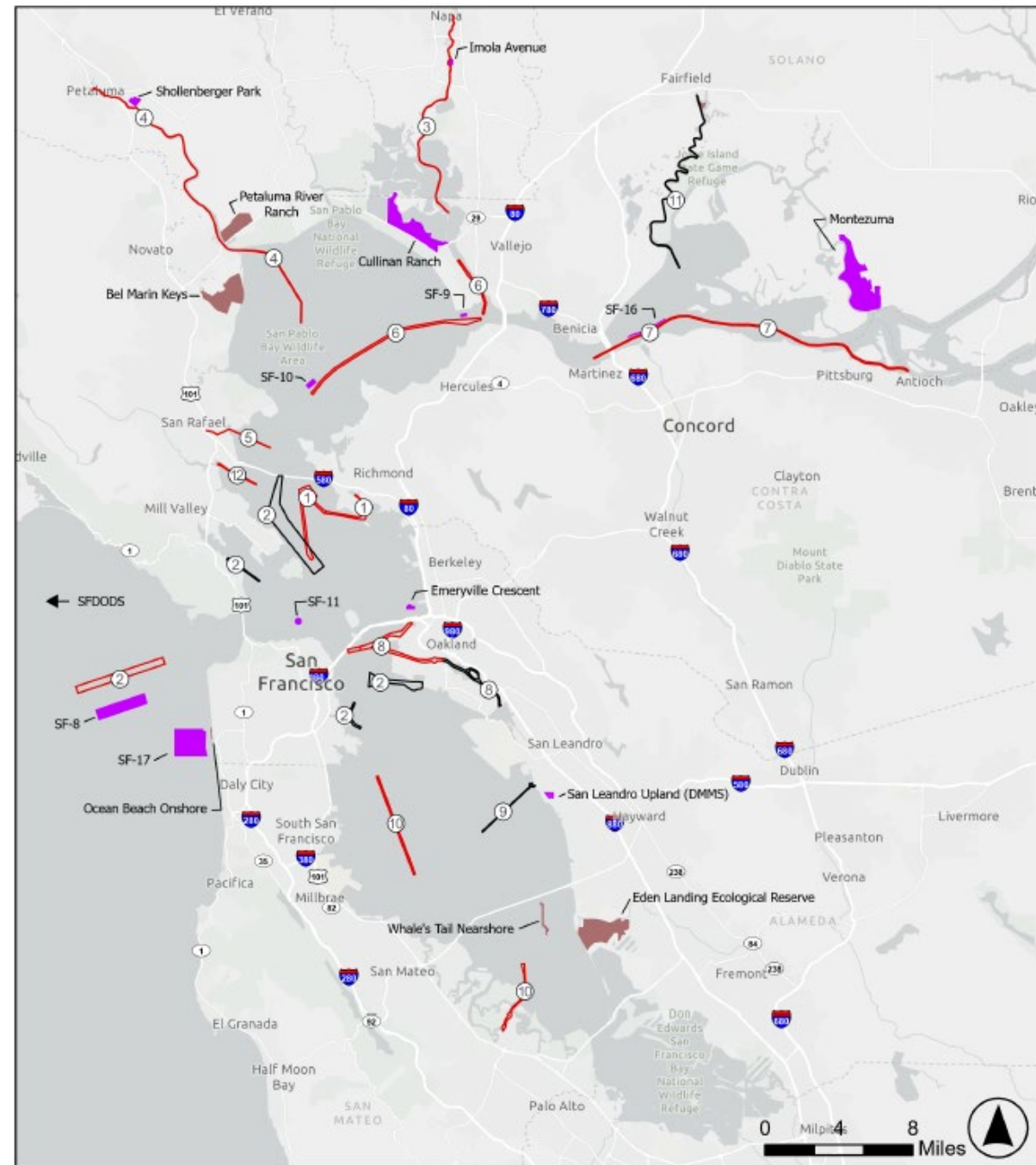
In-Bay

Ocean

Wetland

Lower Cost

Higher Cost

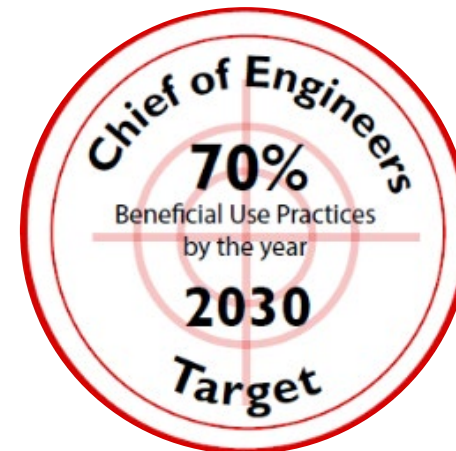


* Not shown: San Francisco Deep Ocean Disposal Site (SF-DODS)



SF RDMMMP OVERVIEW

- **20-year plan** for dredging and sediment placement from SF Bay federal O&M channels
- Identify **least cost navigation program** (consistent with environmental and engineering standards)
- Goal: increase BU consistent with law and policy and avoid ocean disposal
 - 2023 Command Philosophy 70% by 2030
 - National Policy: Maximization of BU in DMMPs
- Broad stakeholder engagement throughout





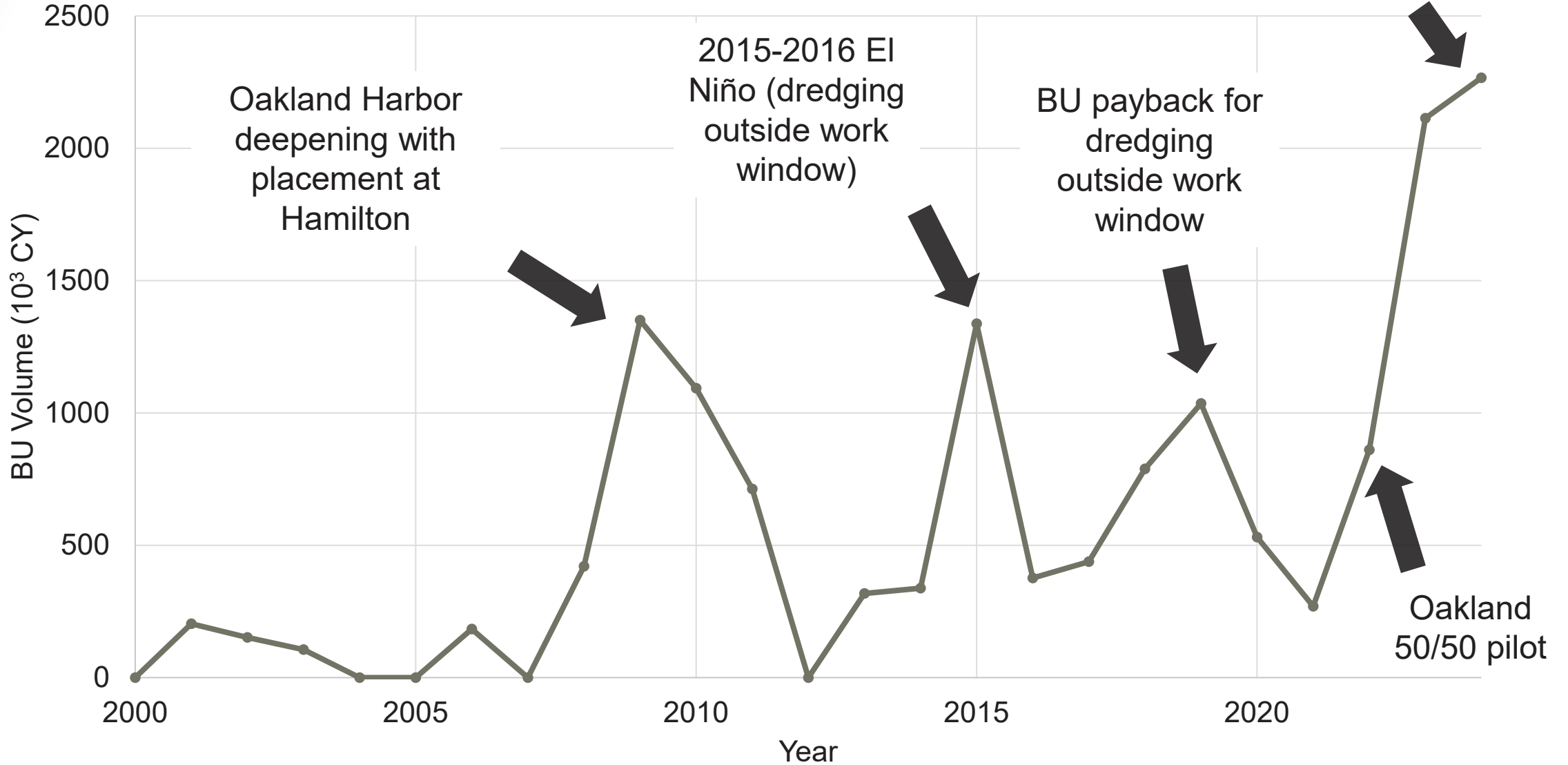
ALIGNMENT WITH SAN FRANCISCO BAY PLAN

The RDMMP provides the long-term blueprint for executing the Bay Plan's vision for sound sediment management.

- **Maximizes Beneficial Use**
 - Implements the Bay Plan's core policy by using dredged material for habitat restoration, levee upgrades, and shoreline protection.
- **Enhances Natural Resources & Resilience**
 - Provides a reliable source of sediment for large-scale wetland restoration, helping marshes keep pace with sea-level rise.
- **Supports Public Access & Recreation**
 - Enables beneficial use projects that may incorporate new public amenities like trails, viewing platforms, and parks.
- **Provides a Predictable Regulatory Framework**
 - Creates a consistent but flexible 20-year plan, ensuring the federal dredging program is streamlined and aligned with long-term Bay Plan goals.

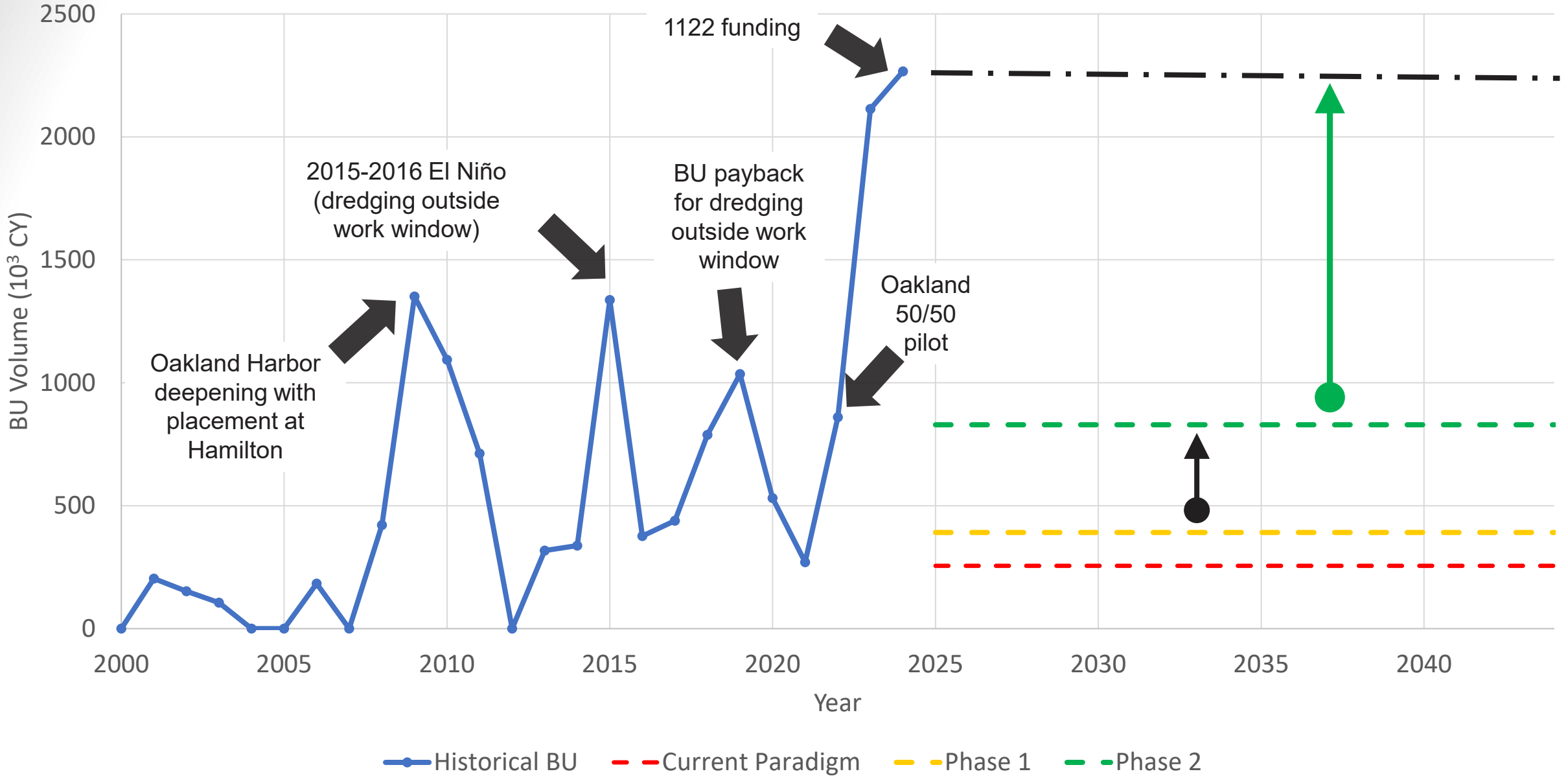


USACE HISTORICAL BENEFICIAL USE





USACE PROJECTED BENEFICIAL USE





HOW ARE WE ACCOMPLISHING MORE BU?



More hopper dredging

- More efficient dredging
- Limited range for species

More in-bay placement

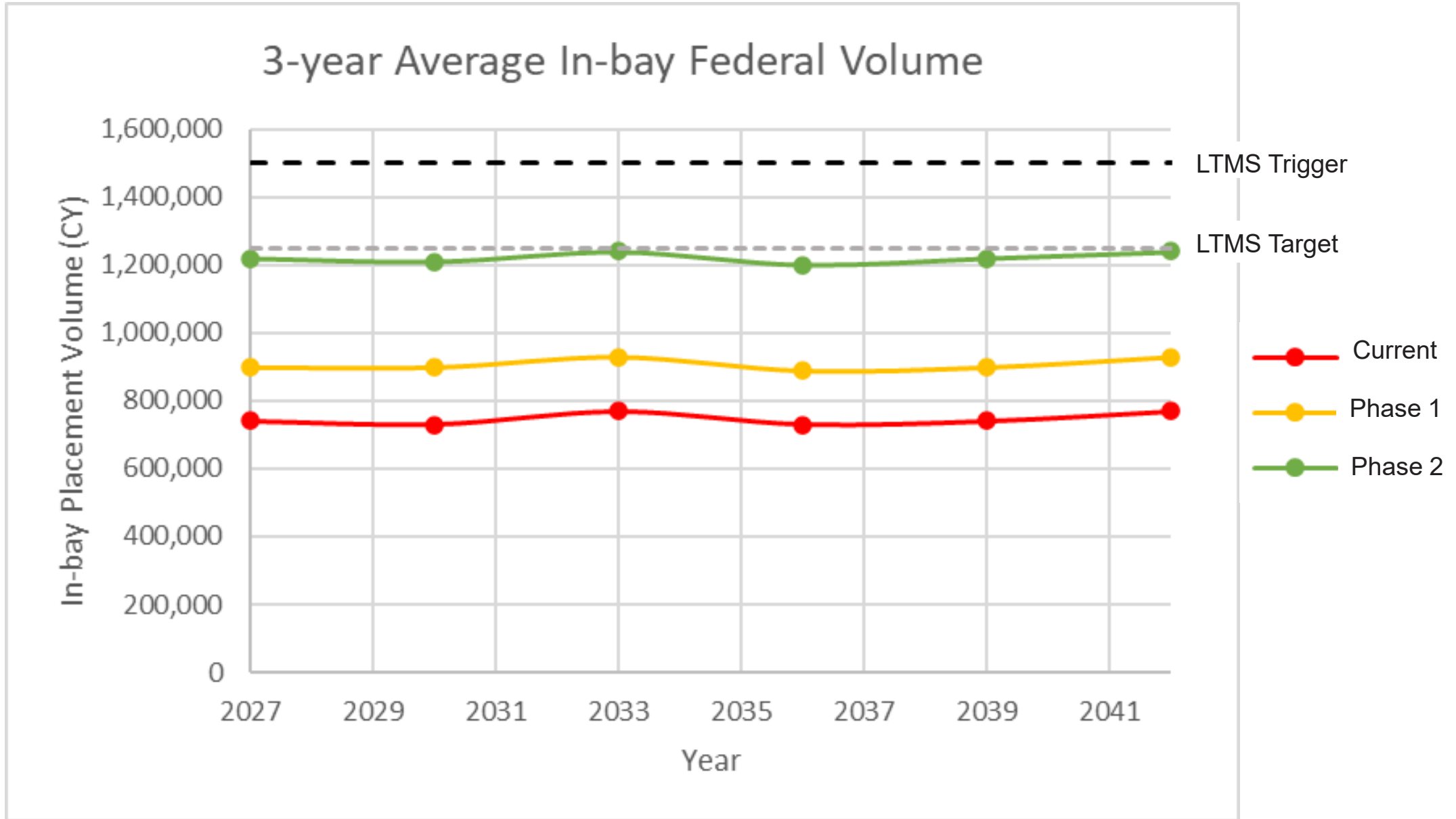
- Keeps sediment in the Bay system
- Avoids ocean disposal

Cost
savings
achieve:



**Beneficial Use at
100% federal cost**

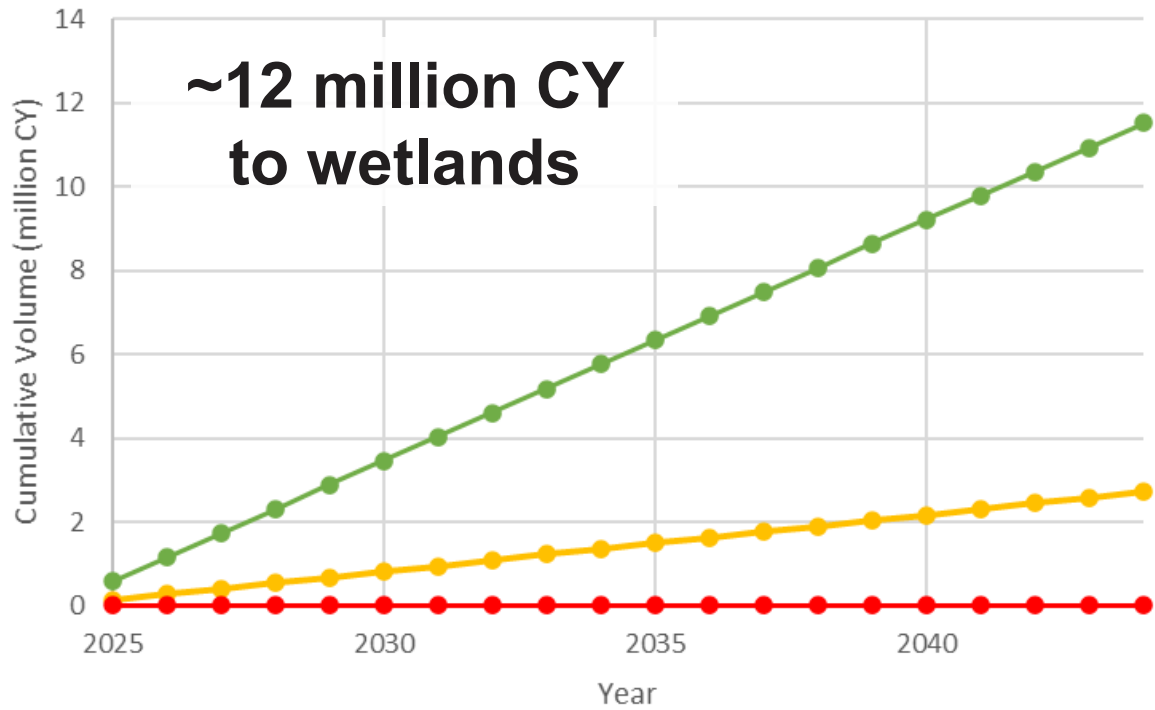
IN-BAY PLACEMENT PHASED APPROACH



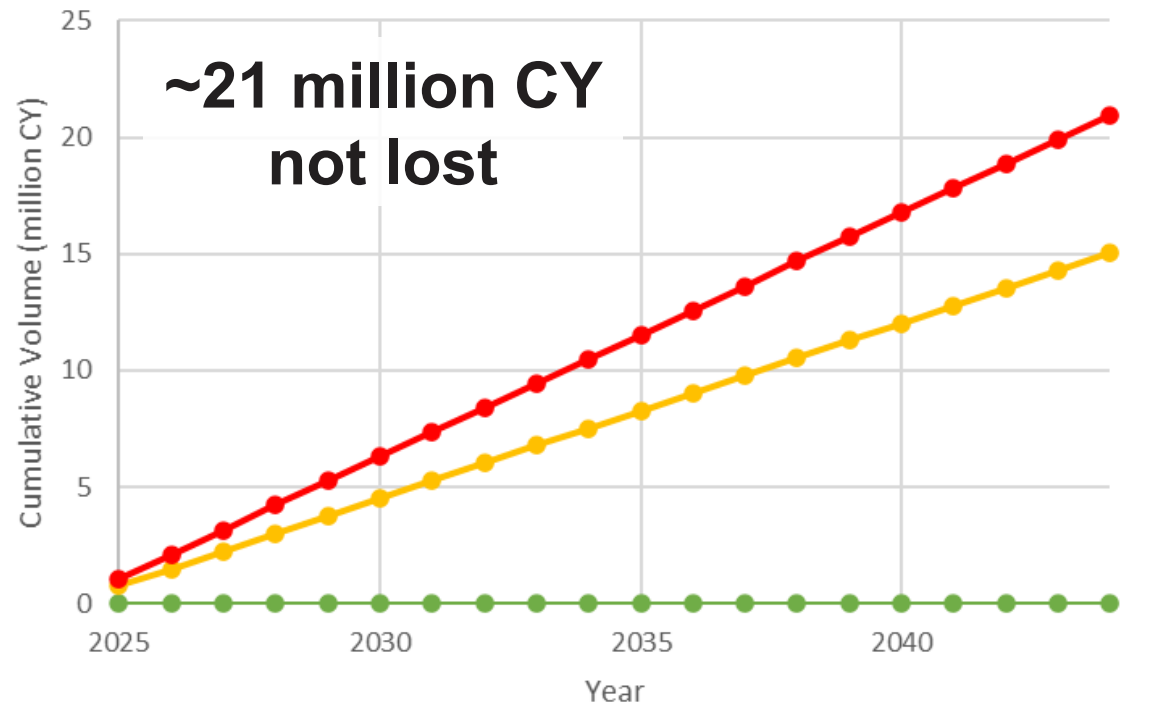


PARADIGM SHIFT TOWARD BENEFICIAL USE

Wetland BU Volume



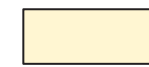
Sediment Lost to Ocean



—●— Current paradigm
 —●— Phase 1
 —●— Phase 2



PROPOSED ACTION (BY CHANNEL)



Phase 1



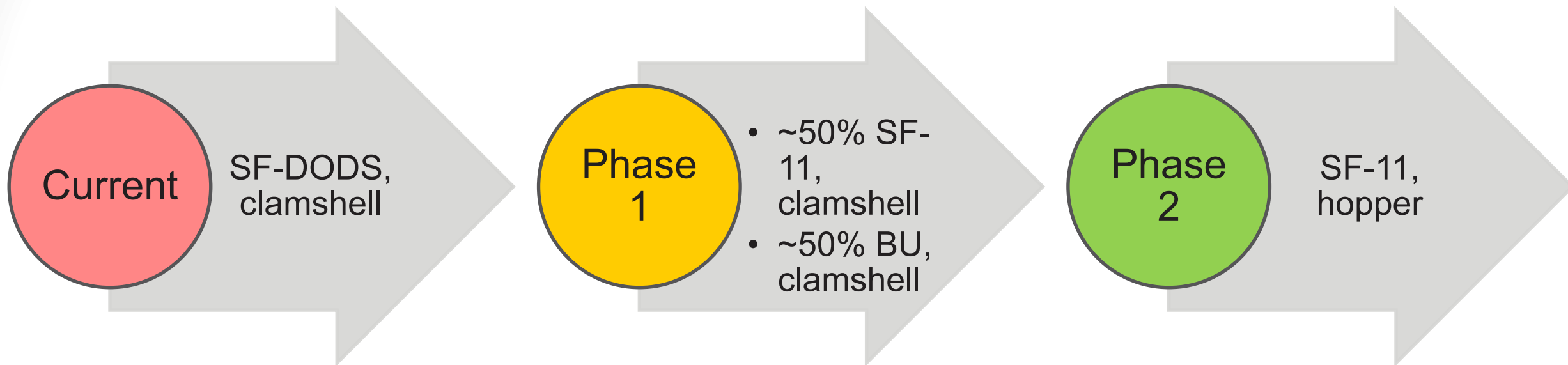
Phase 2

Channel	Current Program	Phase 1	Phase 2	Average Volume per Episode (1K CY)	Typical Volume Range per Episode (1K CY)
Oakland	Ocean	Ocean	BU, in-bay	750	120– 1,225
Redwood City	In-bay	In-bay	In-bay	180	10 – 650
Richmond Inner Harbor	Ocean	In-bay, BU	In-bay	300	10 – 630
Richmond Outer Harbor	In-bay	In-bay	In-bay	210	85 – 730
San Pablo Bay	In-bay	In-bay	In-bay	150	60 – 560
Suisun Bay Channel	In-bay	In-bay	In-bay, BU	165	50 – 425
Napa River	Upland	Upland	Upland	110	65 – 165
Petaluma River	Upland	Upland	Upland	150	75 – 210
Petaluma Across the Flats	In-bay	In-bay	In-bay	70	70
San Rafael Creek	In-bay	In-bay	In-bay	110	35 – 280
San Bruno	In-bay	In-bay	In-bay	30	30

*This table does not include the San Francisco Main Ship Channel

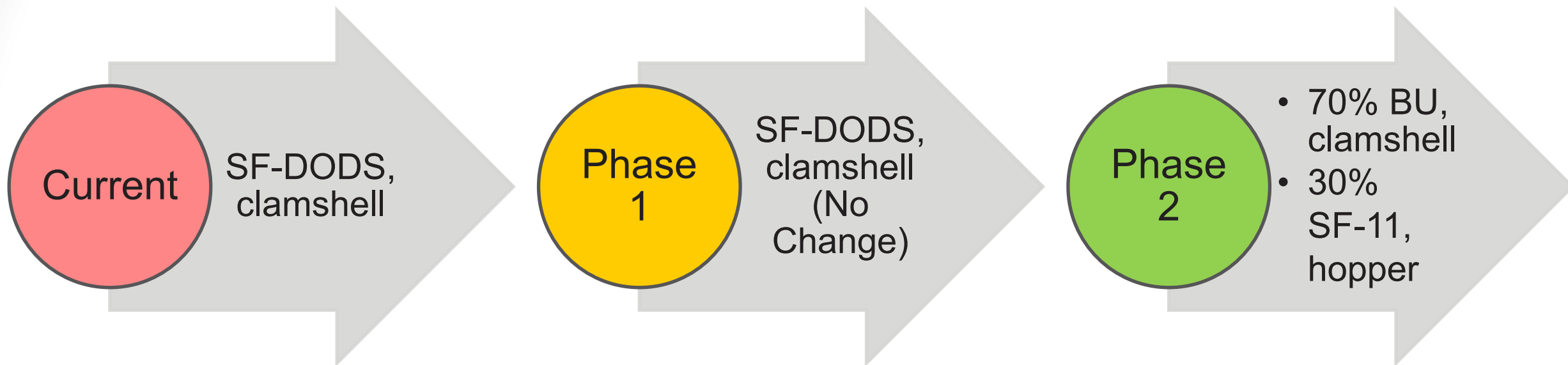


EXAMPLE: RICHMOND INNER HARBOR





EXAMPLE: OAKLAND HARBOR





MULTI-YEAR ENGAGEMENTS ON RDMMP

Timeframe	Milestone
Summer 2019	<u>Public Meeting</u> . Regional Dredge Material Management Plan (RDMMP) scoped.
2020	Technical <u>Charettes</u> with the Interagency Working Group (IWG) , composed of resource and regulatory agencies, ports, dredging companies, etc.
2020 to 2021	Project team formed scopes for studies to address programmatic data gaps identified by IWG.
Winter 2022	Project management tasks finalized, and project work begins
Spring 2023	<u>Public Meeting</u> : update, feedback, and input
Spring 2023 – Spring 2024	Plan Formulation (Alternatives Analysis, Cost Estimates, Risk Analysis). <u>Outreach with community groups and tribes</u> .
Spring 2024 – Summer 2025	RDMMP and EA <u>reviewed by public</u> and by USACE vertical chain
August 2025	Final RDMMP/EA package approved
Fall 2025 – Winter 2025/2026	Permits received and consultation completed (e.g., Clean Water Act Section 401 Water Quality Certification, * Coastal Zone Management Act Letter of Agreement (BCDC))
Fall 2025 – Spring 2026	Dredging plans and specifications development followed by contracting process (BCOES, bid solicitation, bid opening, bid award, etc.)
Spring – Summer 2026	FY26 dredging begins



ENVIRONMENTAL PERMITS

Activity	Status
Coastal Zone Management Act	OUTSTANDING - Consistency Determination submitted to BCDC on 8 July 2025
NEPA CEQA EA/EIR	Complete – 28 AUGUST 2025
Clean Water Act Section 404(b)(1)	Complete – Included as part of EA/EIR NEPA CEQA document
National Historic Preservation Act (Section 106)	Complete – 28 AUGUST 2025
Clean Air Act	Complete – 28 AUGUST 2025
Clean Water Act Section 401	Complete – 10 December 2025 WDR/WQC (R2-2025-0025)
Endangered Species Act and Magnuson-Stevens Act	Compliance with the ESA is covered by the LTMS Biological Opinions issued by NMFS and USFWS (NMFS, 2015 and USFWS, 2025).



AVOIDANCE, MINIMIZATION, AND BEST MANAGEMENT PRACTICES

Category	Measure / Practice	Purpose / Regulatory Driver
<i>Work Windows</i>	Adhere to NMFS and USFWS Biological Opinions	Protect sensitive species during migration & spawning, and place at Beneficial Use sites to offset effects
<i>Habitat Protection</i>	Maintain eelgrass & herring spawn buffers	Avoid direct physical impacts on critical habitat areas
<i>Species Protection</i>	Avoidance measures & pilot studies for fish deterrents (lights, sound)	Reduce mortality of fish and other organisms from entrainment
<i>Water Quality</i>	Control water loss from hopper; pumps off in water column	Minimize turbidity and the incidental take of water column species
<i>Proactive Beneficial Use</i>	Place material at Beneficial Use sites	Turn dredged sediment into a resource for habitat restoration and sea-level rise resilience

THANK YOU + QUESTIONS

We look forward to discussing our progress with the Commission as we progress.

Thank you to all the LTMS agencies and other partner regulatory agencies, Tribes, and the public.



Photo: SFEI