



# Estuary Blueprint Update Implementation Committee Meeting November 16, 2021



San Francisco  
**ESTUARY PARTNERSHIP**

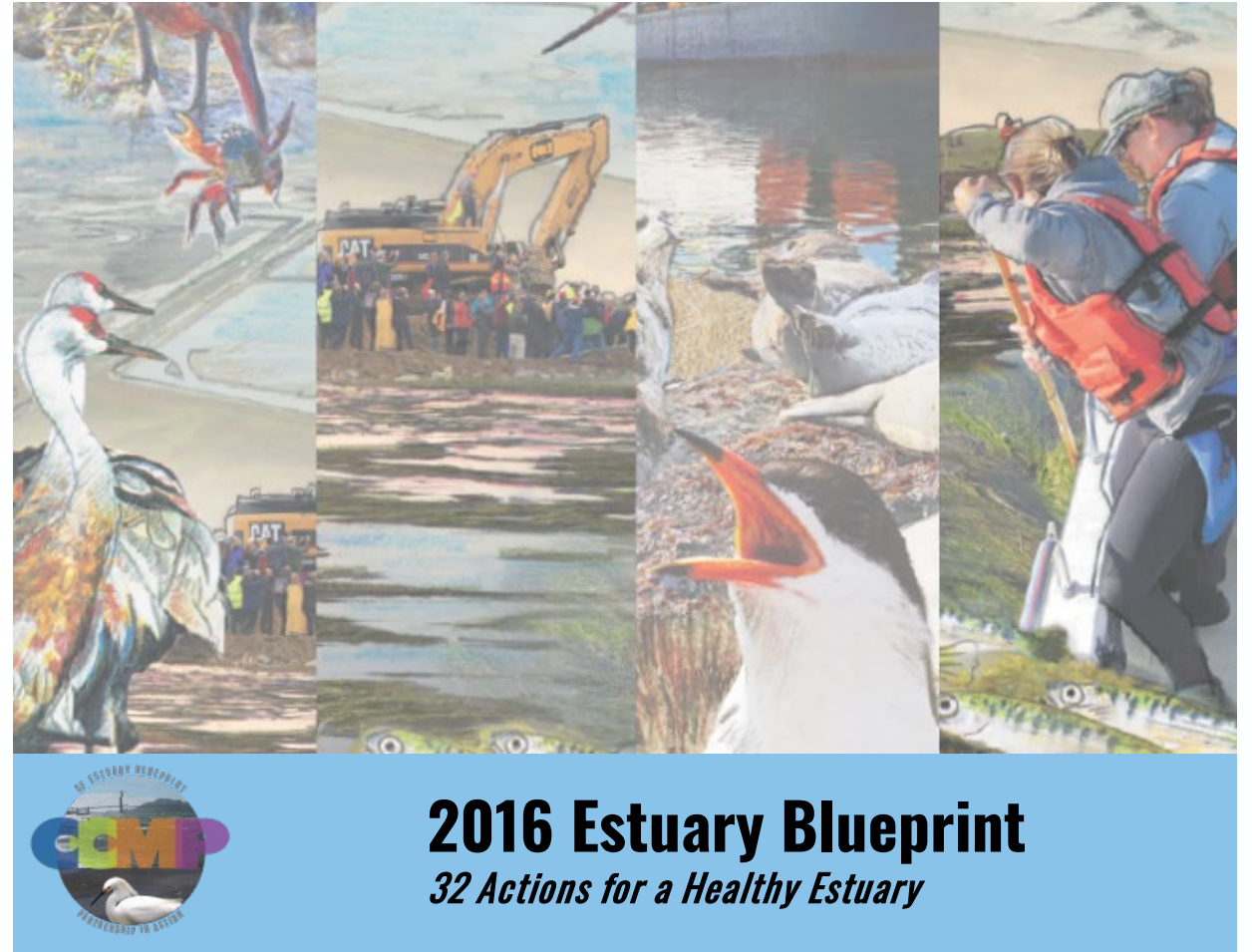
# Today

- Process
- Timeline
- Guiding Principles
- Action Changes
- 2022 Action List
- 2022 Action Summaries
- Questions and Discussion



# Revising the CCMP: Getting to the 2016 Estuary Blueprint

- Major overhaul of CCMP
- From 200+ Actions → 32 Actions
- Aspirational
- Based on a 35-year vision (2050)



# Updating the 2016 Estuary Blueprint for 2022

GOALS → OBJECTIVES → **32 ACTIONS** → TASKS



# Update Process

- 1) Establish Steering Committee
- 2) Review existing 2016 Actions
- 3) Develop Guiding Principles
- 4) Identification of Resolved Topics, Gaps, Emerging Topics
- 5) Develop Action Update and Working Group Strategy
- 6) Working Group meetings to update Actions
- 7) Concurrent outreach and engagement via social media, targeted outreach, presentations, and listening sessions

# Update Process: March 2020-November 2021

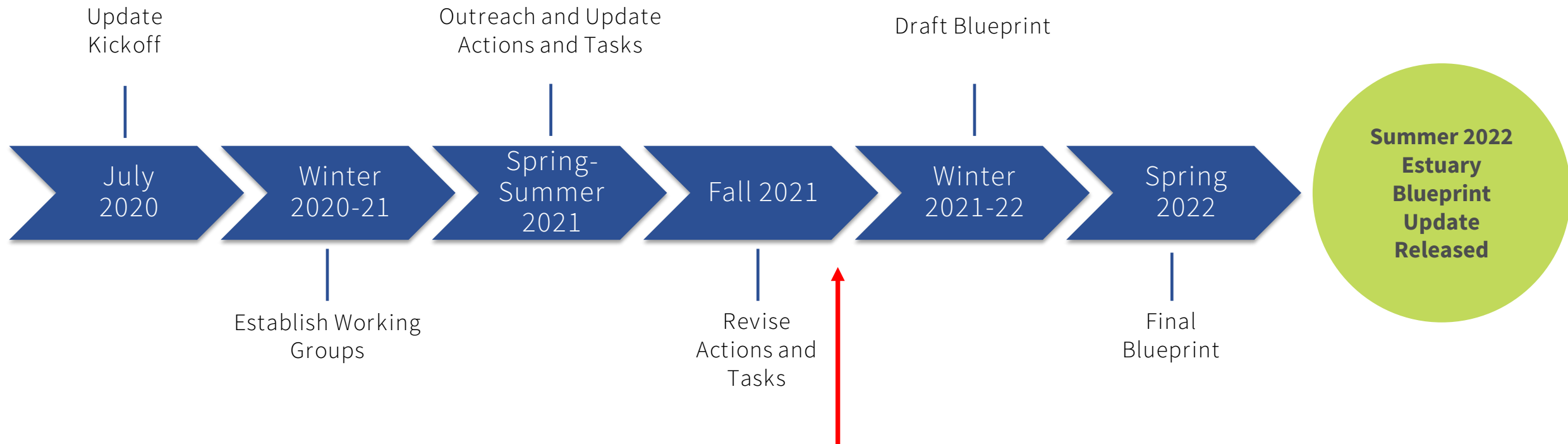
Over **80** participating organizations and agencies

Over **100** meetings:

- Monthly Steering Committee meetings
- Monthly Working Group lead meetings
- Staff-led Working Groups
- 1:1 meetings and consultations

Over **20** presentations

# 2022 Estuary Blueprint Update Timeline



# Blueprint Update Guiding Principles



Remain aspirational yet feasible



Expand and deepen multi-sectoral engagement



Integrate further across geographies and plans



Focus on equity



Improve clarity and responsibility



# CHANGES TO 2016 ACTIONS

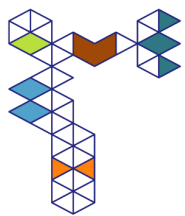
2016 ACTION	CHANGES
1: Watershed-based approach	Discontinued and integrated into Action 12
2: Wetland regional monitoring program	Updated
3: Tidal marsh and tidal flats	Updated and narrowed to tidal marsh only
4: Transition zones	Updated
5: Intertidal and subtidal habitats	Updated and expanded to include tidal flats
6: Managed ponds	Updated
7: Creeks	Updated
8: Seasonal wetlands	Updated
9: Invasive species	Updated
10: Terrestrial predators	Discontinued and integrated into Action 6
11: Carbon sequestration	Updated

# CHANGES TO 2016 ACTIONS (cont.)

2016 ACTION	CHANGES
12: Watershed connections	Updated and expanded to include Action 1
13: Sediment	Updated
14: Nature-based shorelines	Actions 14, 15, 16, and 17 re-oriented and consolidated into 3 Actions focused on climate resilience and nature-based solutions
15: Natural resources and resilience	
16: Natural resources and hazard response	
17: Regulatory permitting	
18: Freshwater flows	Updated
19: Long-term drought planning	Discontinued/shifted to Spotlight focus
20: Agricultural water use efficiency	Updated and combined with Action 21
21: Landscaping water use efficiency	Updated and combined with Action 20
22: Recycled water	Updated

# CHANGES TO 2016 ACTIONS (cont.)

2016 ACTION	CHANGES
23: Plan Bay Area – water integration	Discontinued/integrated into climate resilience Actions
24: Stormwater management	Updated
25: Emerging contaminants	Updated
26: Raw sewage discharges	Discontinued and integrated into Action 28
27: TMDLs	Re-oriented to contaminants related to fish
28: Nutrients	Updated
29: Ocean acidification	Discontinued
30: Trash	Updated
31: Public access and resource protection	Updated
32: Champion the Estuary Blueprint	Updated and re-oriented to Champion the Estuary
N/A	New Action on improving equity



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# Estuary Blueprint

## 2022-2027 Estuary Blueprint Actions



San Francisco  
**ESTUARY PARTNERSHIP**

Estuary Blueprint Update

November 16, 2021 | 12

# 2022 ESTUARY BLUEPRINT ACTIONS

Wetland monitoring

Watershed connections

Stormwater management

Tidal marsh

Sediment

Emerging contaminants

Transition zones

Climate resilience

Fish contaminants

Intertidal/subtidal habitats

Adaptation planning

Nutrients

Managed ponds

Adaptation implementation

Trash

Creeks

Freshwater flows

Public access

Seasonal wetlands

Water conservation

Champion the Estuary

Invasive species

Recycled water

Greater equity



# WETLAND MONITORING (2)

## Implement a Regional Wetland Monitoring Program

**SUMMARY:** Update reflects shift from establishing to implementing the Wetland Regional Monitoring Program (WRMP)

**ENGAGED:** SF Bay National Estuarine Research Reserve (NERR), SF Bay Regional Water Board, EPA, SFEI, USGS, SF Bay JV, Save the Bay, South Bay Salt Pond Restoration Project, Alameda County Mosquito Abatement District



# TIDAL MARSH (3)

## Protect, restore and enhance tidal marsh habitat

**SUMMARY:** Update moves tidal flat habitat to Action 5 and expands to include all Baylands to allow for migration with sea level rise.; adds an enhancement task

**ENGAGED:** Association of Ramaytush Ohlone, SF Baykeeper, BCDC, Citizens Committee to Complete the Refuge, DWR, ESA, Golden Gate Audubon, Marin Audubon, NERR, SCC, SBSPRP, SFBBO, SFBJV, SF Bay Regional Water Board, SFEI, SFSU, US EPA, and Valley Water



# TRANSITION ZONES (4)

**Protect, restore, and enhance estuarine-upland transition zones and adjacent upland ecosystems**

**SUMMARY:** Update captures the importance of protecting, restoring, and enhancing transition zones, including the addition of adjacent upland areas and diked historic baylands, for wetland migration space and high water refugia.

**ENGAGED:** EPA, SF Bay Regional Water Board, Coastal Conservancy, Citizens Committee to Complete the Refuge, Marin Audubon, BCDC, DWR, SFBBO, GG Audubon, SF Baykeeper, SFEI, ESA, SFBJV, Point Blue, others



# INTERTIDAL/SUBTIDAL HABITATS (5)

## Protect, restore, and enhance intertidal and subtidal habitats

**SUMMARY:** Update adds tidal flats and other non-wetland intertidal and subtidal habitats. Tasks added on removing and enhancing habitat value of artificial structures

**ENGAGED:** Association of Ramaytush Ohlone, SF Baykeeper, BCDP, Citizens Committee to Complete the Refuge, DWR, ESA, Golden Gate Audubon, Marin Audubon, NERR, Coastal Conservancy, SBSPRP, SFBBO, SFBJV, SF Bay Regional Water Board, SFEI, SFSU, EPA, Valley Water



# MANAGED PONDS (6)

## Maximize habitat benefits of managed ponds and other non-tidal wetlands and waters

**SUMMARY:** Update expands the definition of managed ponds to include other non-tidal wetlands and waters; adds predation control

**ENGAGED:** Association of Ramaytush Ohlone, SF Baykeeper, BCDC, Citizens Committee to Complete the Refuge, Delta Conservancy, DWR, Golden Gate Audubon, Marin Audubon, SF Bay NERR, Point Blue, Coastal Conservancy, SBSRP, SFBBO, SFBJV, SFBRWQCB, SFEI, EPA



# CREEKS (7)

Conserve and enhance riparian and in-stream habitats throughout the Estuary's watersheds

**SUMMARY:** Update shifts focus from fisheries to riparian restoration

**ENGAGED:** EPA, SF Bay Joint Venture, SFEI, SFF Bay Regional Water Board, Coastal Conservancy, Valley Water, The Watershed Project, Marin/San Mateo RCDs, Conservation Lands Network, Urban Tilth, Association of Ramaytush Ohlone, Potter Valley Tribe



# SEASONAL WETLANDS (8)

## Protection, restore and enhance non-tidal seasonal wetlands

**SUMMARY:** Update broadens tasks beyond previous focus on vernal pools to cover all types of non-tidal seasonal wetlands and includes updated targets for Bay and Delta.

**ENGAGED:** SF Bay Joint Venture, Ducks Unlimited, Conservation Lands Network, DWR, Delta Stewardship Council, NRCS, RCDs



# INVASIVE SPECIES (9)

## Minimize the impact of invasive species

**SUMMARY:** Update expands scope on Early Detection, Monitoring, and Rapid Response; Best Management Practices, permitting, fouling communities, and marine mobile infrastructure

**ENGAGED:** Association of Ramaytush Ohlone, BCDC, Dept. Fish & Wildlife, Delta Conservancy, Delta Stewardship Council, Golden Gate Audubon, Coastal Conservancy, SF Bay Regional Water Board, EPA, Valley Water, Cal-IPC



# CARBON MANAGEMENT (11)

Decrease carbon emissions and increase carbon sequestration on natural and agricultural lands

**SUMMARY:** Update shifts from research to implementation of carbon management; advances project implementation in the Delta and research needed on carbon cycles

**ENGAGED:** EPA, Delta Conservancy, Delta Stewardship Council, SF Bay NERR, BCDC, USGS, DWR, Citizens Committee to Complete the Refuge, Cal State East Bay



# WATERSHED CONNECTIONS (12)

**Restore watershed connections to the Estuary to improve habitat, flood protection, and water quality**

**SUMMARY:** Update broadens focus from multi-benefit projects at the shoreline to emphasize watershed-based and OLU (Operational Landscape Units) planning approaches, and research opportunities related to sediment and flood control channels.

**ENGAGED:** DWR, EPA, Delta Stewardship Council, BCDC, SCC, SFEI, SCC, Citizens Committee to Complete the Refuge, SF Regional Water Board, Marin County



# SEDIMENT (13)

**Manage sediment and soil on a regional scale and advance beneficial use**

**SUMMARY:** Update reflects recent findings and captures next steps to manage regional sediment supply needs and sources to meet restoration and climate change resilience goals

**ENGAGED:** EPA, BCDC, Coastal Conservancy, SF Bay NERR, SFEI, Ducks Unlimited, SF Baykeeper, Citizens Committee to Complete the Refuge, SF Bay Regional Water Board, SF Bay JV, US Army Corps of Engineers, LTMS Project Managers



# CLIMATE RESILIENCE (14-17)

## Incorporate natural resource protection while planning for increased climate resiliency

**SUMMARY:** This action focuses on regional planning for climate change with an emphasis on natural resource protection.

**ENGAGED:** BCDC, SCC, Sierra Club, US EPA, SF Regional Board, Valley Water, SF Baykeeper, Delta Stewardship Council, Point Blue, ABAG/MTC, BARC, SFEI, SFBJV, UC Berkeley



# ADAPTATION PLANNING (14-17)

Overcome challenges to accelerate implementation of climate adaptation projects that prioritize natural and nature-based strategies

**SUMMARY:** Update addresses removal of barriers (information, regulatory processes, funding) to accelerate project planning and implementation

**ENGAGED:** BCDC, SCC, Sierra Club, US EPA, SF Regional Board, Valley Water, Baykeeper, Delta Stewardship Council, Point Blue, ABAG/MTC, BARC, SFEI, SFBJV



# ADAPTATION IMPLEMENTATION (14-17)

Implement climate adaptation projects that prioritize natural and nature-based strategies

**SUMMARY:** Update advances and tracks design and implementation of natural and nature-based shoreline projects

**ENGAGED:** BCDC, SCC, Sierra Club, US EPA, SF Regional Board, Valley Water, Baykeeper, Delta Stewardship Council, Point Blue, ABAG/MTC, BARC, SFEI, SFBJV



# FRESHWATER FLOWS (18)

Improve the timing, amount, and duration of freshwater flows critical to Estuary health

**SUMMARY:** Update maintains focus on synthesizing and disseminating science, with development of new tasks to reflect potential Tribal and NEP collaboration

**ENGAGED:** The Bay Institute, SF Baykeeper, Sierra Club, Delta Stewardship Council, State Water Board, California Indian Environmental Alliance, Suscol Intertribal Council, West Coast NEPs



# WATER CONSERVATION (20 and 21)

## Reduce water use around the Estuary

- **SUMMARY:** Update broadens focus of two previous actions to target greatest opportunities for indoor and outdoor water efficiency
- **ENGAGED:** Pacific Institute, SPUR, UC Berkeley's Water RENUWiT/Bay Area One Water Network, Zone 7 Water Agency, Valley Water, BAYREN, MTC/ABAG Planning, ReScape CA



# RECYCLED WATER (22)

## Expand the use of recycled water

**SUMMARY:** Update maintains similar focus of previous version, with the addition of a task focused on the topic of reverse osmosis concentrate (ROC)

**ENGAGED:** Bay Area One Water Network, BACWA, Valley Water, Central Contra Costa Sanitary District, Contra Costa Water District, City of Hayward, SF Bay Regional Water Board



# STORMWATER MANAGEMENT (24)

## Manage stormwater with low impact development and green infrastructure

**SUMMARY:** Update shifts focus to implementation and regional tracking of projects, as well as innovative funding strategies

**ENGAGED:** EPA, SFEI, SF Bay Regional Water Board, BAMSC (formerly BASMAA), MTC, Cities of Oakland, San Jose, San Francisco, and San Pablo



# EMERGING CONTAMINANTS (25)

## Address emerging contaminants

**SUMMARY:** Update maintains similar focus and reflects priority emerging contaminants such as microplastics, pesticides related to pet products, and PFAs.

**ENGAGED:** EPA, SFEI, SF Bay Regional Water Board, BACWA, California Product Stewardship Council



# FISH CONTAMINANTS/CONSUMPTION (27)

## Address contaminants related to fish consumption

**SUMMARY:** Update substantially shifts focus from implementation projects for select TMDLs to a suite of tasks addressing contaminants in fish and health risks related to fish consumption.

**ENGAGED:** SF Bay Regional Water Board, Suisun RCD, California Indian Environmental Alliance, Suscol Intertribal Council, All Positives Possible, First Generation



# NUTRIENTS (28)

## Advance nutrient management in the Estuary

**SUMMARY:** Update maintains focus on funding and studies, and adds the next stage of implementation in the Delta and dissemination of findings, including public outreach

**ENGAGED:** SF Bay Regional Water Board, Central Valley Regional Water Board, SF Baykeeper, BACWA, Bay Area One Water Network, UC Berkeley



# TRASH (30)

## Reduce trash input into the Estuary

**SUMMARY:** Update maintains focus on policy change and developing an indicator for State of the Estuary Report and explores new tasks on outreach and behavior change.

**ENGAGED:** SFEI, SF Bay Regional Water Board, City of Oakland, Delta Conservancy, and California Product Stewardship Council, EPA



# PUBLIC ACCESS (31)

Foster support for resource protection and restoration by providing Estuary-oriented public access and recreational opportunities compatible with wildlife

**SUMMARY:** Update expands focus to address multiple benefits of open space, including habitat, recreation, health, cultural/religious use, in addition to tracking progress

**ENGAGED:** ABAG/MTC, SFEI, Conservation Lands Network



# CHAMPION (32)

## Champion the Estuary

**SUMMARY:** Update shift focus away from implementing the Estuary Blueprint and toward communications, outreach, and education on Estuary Blueprint priorities and progress.

**ENGAGED:** SFEI, BCDC, SF Bay Joint Venture, DSC



# EQUITY (N/A)

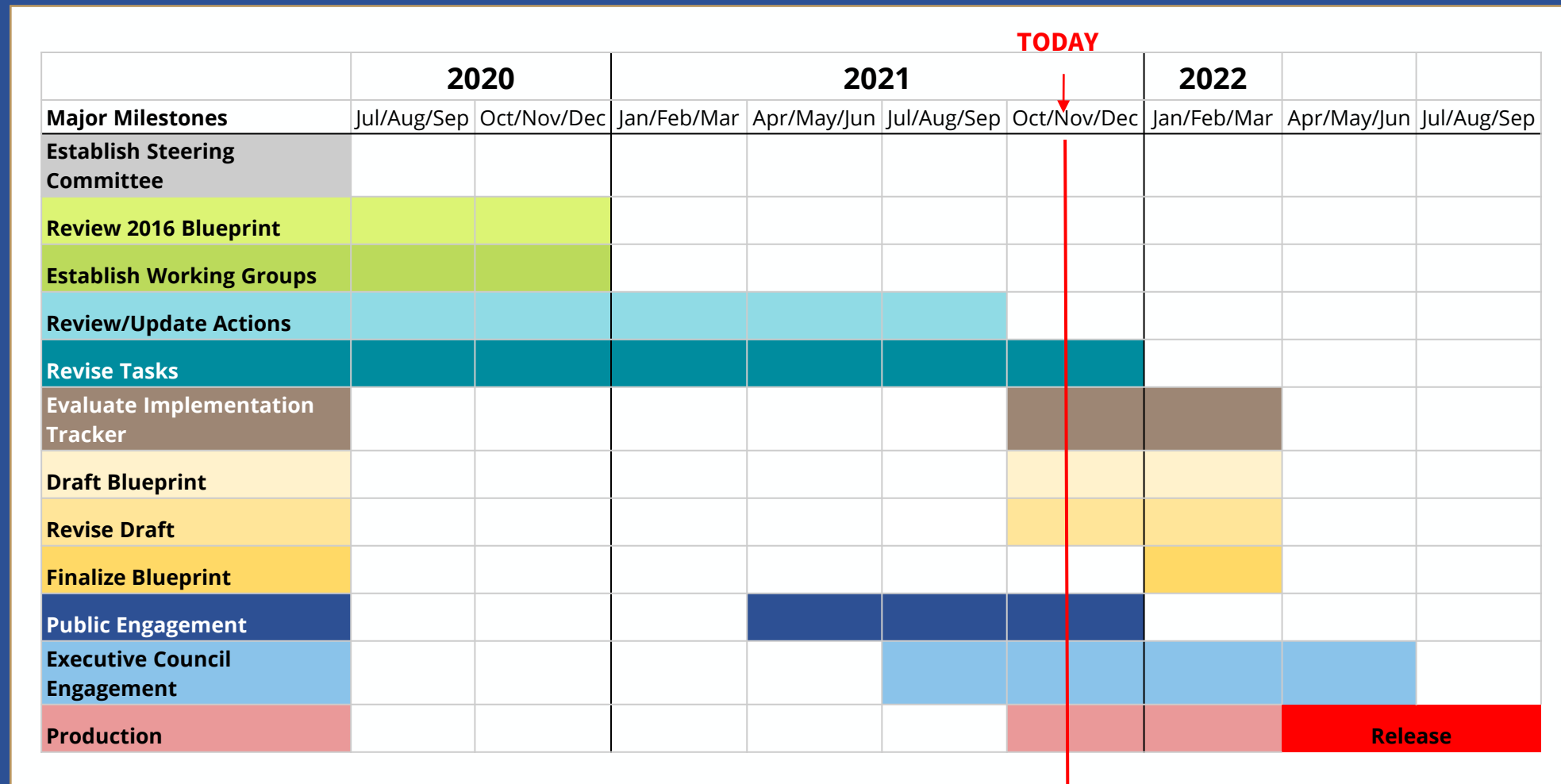
**Elevate frontline, underserved, and Tribal communities in planning for and benefiting from a healthy, resilient Estuary**

**SUMMARY:** New action focused on developing regional forums and platforms that build capacity to shift greater decision-making power into the hands of frontline and underserved communities and Tribes and Tribal organizations.

**ENGAGED:** BCDC, CIEA, CA Audubon, SCC, others



# Roadmap



# Revised Timeline

January 25	Special IC meeting: Full Draft Blueprint Review
March 16	IC meeting: Final Blueprint Approval
April-July 2022*	Approval Process and Release of 2022 Estuary Blueprint

# QUESTIONS?



## Next Steps

- Review for consistency
- Draft available for public comment
- Edits to overall document
- IC Meeting January 25





# Thank You

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