



2016 Comprehensive Conservation
and Management Plan Update

NBWA Meeting - September 9, 2016



28 Estuaries of National Significance - Section 320 CWA

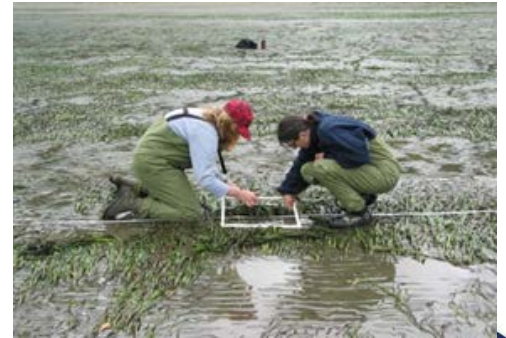


SAN FRANCISCO ESTUARY PARTNERSHIP



San Francisco Estuary Partnership

- Collaborative
- Non-regulatory
- Create and manage the Comprehensive Conservation and Management Plan
 - To restore and enhance the Estuary



Comprehensive Conservation and Management Plan (CCMP)

- 1993 - First master plan for Estuary
- 2007 - Updated
- 2016 Major overhaul



2016 CCMP

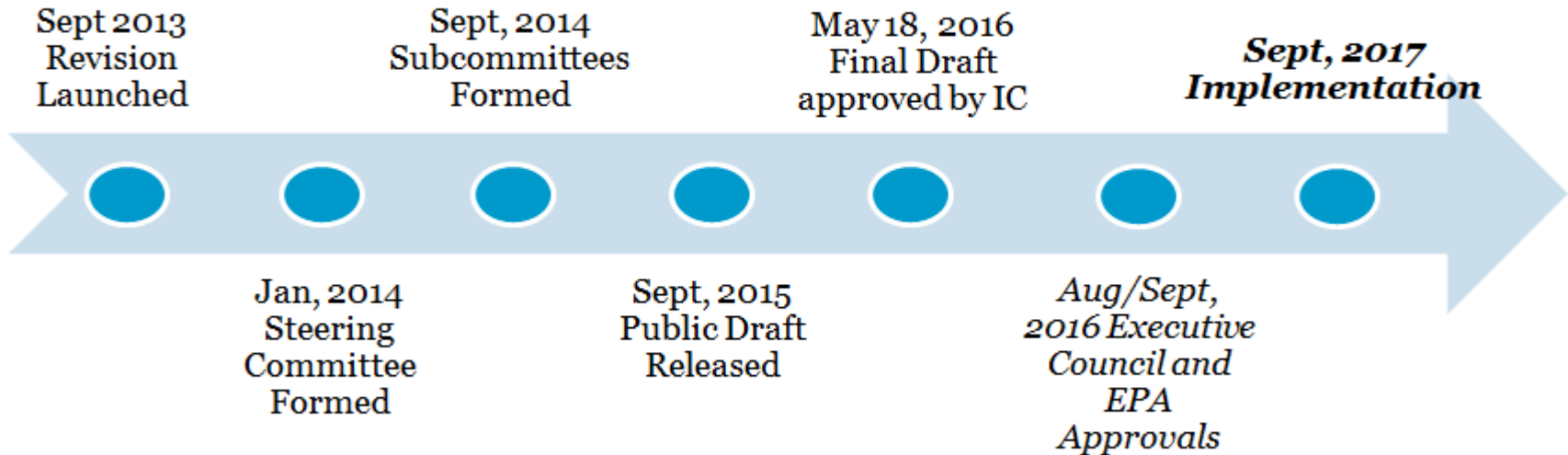


A regional collaborative blueprint for the future of the Estuary

*Where do we want to be in 2050 and what
can we do in the next five years to get there?*



Revision Timeline



CCMP Elements





Introduction and Findings

1

Introduction and Findings

- Estuary Intro, CCMP history, revision process
- Findings based on State of the Estuary Report
 - How healthy is the Estuary?
 - Can we improve the health of the Estuary?
 - What will it take to achieve a healthy Estuary?





Implementation 2

Implementation: Goals and Objectives

Goals:

Aspirational, based on
a 35 year vision (2050)

Goals

- Sustain and improve the Estuary's habitats and living resources.
- Bolster the resilience of Estuary ecosystems, shorelines, and communities to climate change.
- Improve water quality and increase the quantity of fresh water available to the Estuary.
- Champion the Estuary.

Implementation: Actions

Strategies (set of tasks)
Achievable within 5
years



ACTION

X

The language of the action itself, describing the type of action (such as protect, improve, develop), the object of the action (such as habitats, monitoring programs, communities) and any key qualifiers or targets (such as watershed-scale, nature-based, multi-benefit).

The action description provides a slightly expanded, but less precise in intent, version of the action, including additional narrative or details.

TASK X-1 Specific tasks to be accomplished over the next five years to support the action. Task language is among the most carefully chosen language in each action. Tasks describe clear concise "to do" items, and often the context in which the task should take place. Tasks also reflect the consensus building and attention to detail of the committees that crafted each task.

BY 2020 Clear milestones with associated dates to track progress in advancing the action. Milestone years reflect the entire planning horizon of the CCMP, from 2016-2021.

TASK X-2 Most actions include multiple tasks. Some tasks occur in a logical progression, from collecting data or information or building consensus to making a management decision or creating a plan based on that information. Other actions have multiple tasks that address the variety of geographic areas or gaps in achieving a comprehensive action.

BY 2016 A single year milestone means the task should be completed by the end of that year.

BACKGROUND

The background section provides supporting information to further explain the action, why it is a priority, and how the tasks advance the action. It includes information such as the planning context or scientific basis of the action, as well as its connection or relevance to other efforts, plans or programs.

OWNERS

Owners of the tasks are entities that have agreed to play a key role in advancing tasks either as implementers, trackers, conveners, or stewards. Each owner is assigned specific tasks, as numbered.

COLLABORATING PARTNERS

Collaborating partners is a list key entities, in addition to the owners, engaged in accomplishing the action. This list describes the most central partners, but may not include all possible partners associated with a collaborative action. Collaborating partners represent organizations that might implement, champion, inform, advise or provide scientific or technical expertise in support of the action, tasks, and milestones.

NEXUS

While the suite of 32 actions together represent an integrated comprehensive approach, the Nexus calls attention to core connections between specific actions, goals and objectives.

32 Actions

Each advancing one or more goals/ objectives



GOAL 1:
Sustain and improve the Estuary's habitats and living resources.

GOAL 2:
Bolster the resilience of Estuary ecosystems, shorelines and communities to climate change.

GOAL 3:
Improve water quality and increase the quantity of fresh water available to the Estuary.

GOAL 4:
Champion the Estuary.

OBJECTIVE		A	B	C	D	E	F	G	H	I	J	K	L
ACTION													
1	Develop and implement a comprehensive, watershed-based approach to aquatic resource protection	●		●	●	●	●			●	●	●	●
2	Establish a regional wetland and stream monitoring program	●		●									●
3	Protect, restore and enhance tidal marsh and tidal flat habitat	●			●	●							
4	Identify, protect, and create transition zones around the Estuary	●	●		●	●							
5	Protect, restore and enhance intertidal and subtidal habitats	●	●		●	●							
6	Maximize habitat benefits of managed wetlands and ponds	●	●	●	●								
7	Conserve and enhance riparian and in-stream habitats throughout the Estuary's watersheds	●	●		●	●							
8	Protect, restore, and enhance seasonal wetlands	●	●										
9	Minimize the impact of invasive species		●	●									
10	Increase the efficacy of predator management		●	●									
11	Increase carbon sequestration through wetland restoration, creation, and management	●		●	●		●						

OBJECTIVES

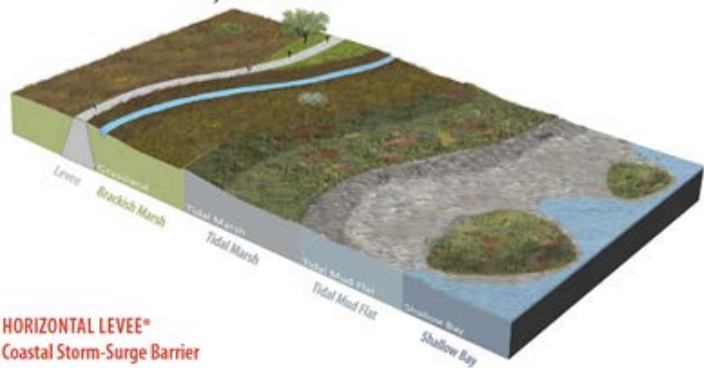
- A. Protect, restore, and enhance ecological conditions and processes that support self-sustaining natural communities
- B. Eliminate or reduce threats to natural communities
- C. Conduct scientific research and monitoring to measure the status of natural communities, develop and refine management actions, and track progress towards management targets
- D. Increase resilience of tidal habitats and tributaries to climate change
- E. Increase resilience of communities at risk from climate change impacts while promoting and protecting natural resources
- F. Promote integrated, coordinated, multi-benefit approaches to increasing
- G. Increase drought resistance and water efficiency and reduce reliance on imported water
- H. Improve freshwater flow patterns, quantity, and timing to better support natural resources
- I. Reduce contaminants entering the system and improve water quality
- J. Build public support for the protection and restoration of the Estuary
- K. Strengthen regional leadership in support of Estuary health
- L. Promote efficient and coordinated regional governance

Partnership in Action

- ◎ Understand watersheds and make connection between streams, rivers, and Estuary habitats downstream
- Optimize the region's significant past investment in wetland habitats by protecting and growing a healthy mosaic of different kinds of habitats



Partnership in Action



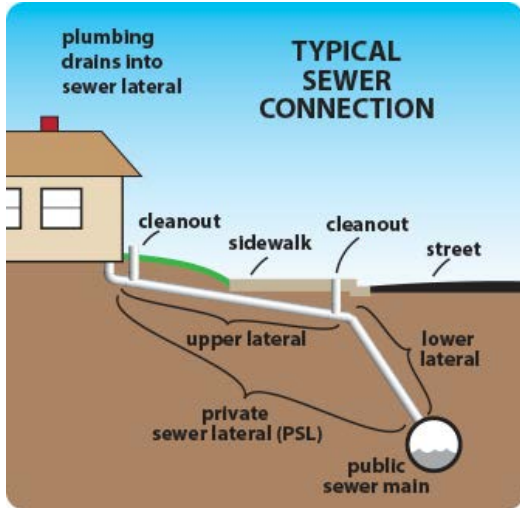
- ⦿ Control stresses on native species and natural habitats
- Bolster the “system” in “ecosystems” - food webs, connections between habitats, movement of sediments
- Support natural solutions to protecting our shores - build natural infrastructure and resilience into our shorelines

Partnership in Action

- Plan for long term droughts, push for water conservation, recycling and regional planning
 - Increase regional ag water use efficiency
 - Expand use of recycled water



Partnership in Action



- Reduce mercury, PCBs, pesticides, trash, direct sewage discharges
- Assist development of sewer lateral repair ordinances
- Explore funding mechanisms for residents to repair laterals

Partnership in Action

- ◎ Keep pushing to solve the thornier challenges
 - how to trap carbon in wetlands to reduce greenhouse effect
 - how to reuse bay bottom sediments to raise shoreline elevations
 - Make resilient land use planning practices more pervasive - retreating from floodplains, greening gray pavements



Partnership in Action

- ◎ Keep the public in the loop about why they should care, what their tax dollars are doing, how they can help champion a healthy, resilient Estuary





Tracking Progress

3

State Of The Estuary 2015 Indicator	CCMP Goals	CCMP Objectives	CCMP Actions
WATER			
Safe For Swimming	Goal 1, 3	Objective a, b, i	Action 26
Safe For Aquatic Life	Goal 1, 3	Objective a, b, i	Action 24, 25, 27, 30
Fish Safe to Eat	Goal 1, 3	Objective a, b, i	Action 25, 27, 28
Freshwater Inflow	Goal 3	Objective a, b, h	Action 18
HABITAT			
Open Water Habitat	Goal 3	Objective h	Action 26
Eelgrass	Goal 1, 2	Objective a, d, e	Action 1, 2, 4, 5, 9, 12, 15, 17
Tidal Marsh Extent	Goal 1, 2	Objective a, d, e	Action 1, 2, 3, 11, 15, 16
WILDLIFE			
Benthic Invertebrates	Goal 2	Objective a, e	Action 9
Fish	Goal 2, 3	Objective a, e, h	Action 1, 5, 6, 7, 9
Harbor Seals	Goal 2, 3	Objective a, e, i	Action 27, 28, 31
Winter Waterfowl	Goal 1, 2	Objective a, b, e	Action 3, 6, 8
Breeding Waterfowl	Goal 1, 2	Objective a, b, e	Action 3, 6, 8, 10
Shorebirds	Goal 1, 2	Objective a, b, e	Action 3, 6, 10
Hérons & Egrets	Goal 1, 2	Objective a, b, e	Action 3, 6, 10
Tidal Marsh Birds	Goal 1, 2	Objective a, b, e	Action 3, 6, 9, 10, 12
Ridgway's Rail	Goal 1, 2	Objective a, b, e	Action 3, 6, 9, 10, 12
PROCESSES			
Migration Space	Goal 1, 2, 4	Objective a, b, d, f, k	Action 2, 3, 4, 13, 15, 16, 17
Beneficial Floods	Goal 2	Objective d, e	Action 12, 26
Zooplankton as Food	Goal 1, 3	Objective a, b, c, h	Action 9, 18
Feeding Chicks	Goal 1	Objective b, e	Action 3, 6, 10
PEOPLE			
Urban Water Use	Goal 3	Objective g	Action 18, 19, 20, 21, 22, 23, 24
Recycled Water Use	Goal 3	Objective g	Action 19, 22, 23
Public Access/Trail Access	Goal 4	Objective j, k, l	Action 31

State Of The Estuary 2015 Emerging Indicator	CCMP Goals	CCMP Objectives	CCMP Actions
Pervasive Pesticides	Goal 1, 3	Objective b, i	Action 7, 27
Oyster Beds	Goal 1, 2	Objective a, d, e	Action 5, 14, 29
Woody Riparian	Goal 1, 2	Objective a, e	Action 7
Watersheds	Goal 1	Objective a	Action 1, 2, 24
Managed Ponds	Goal 1	Objective a	Action 6
Sediment	Goal 1, 2	Objective a, d, e	Action 13, 24
Invasions	Goal 1, 3	Objective a, b, i	Action 9, 19

Tracking Progress

Programmatic Outputs

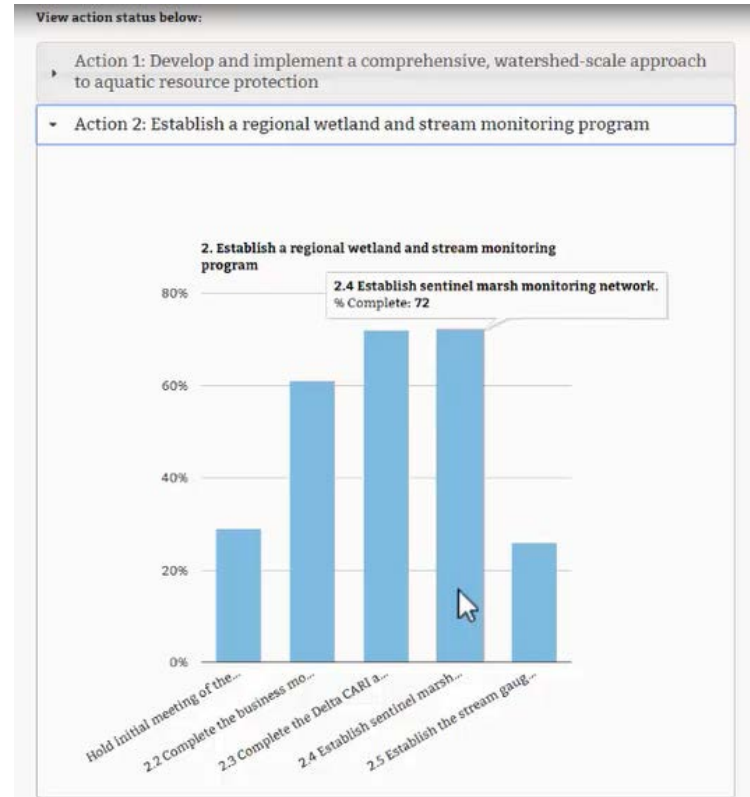
- Tasks and Milestones

Environmental Outcomes

- State of the Estuary Report Indicators

sfestuary.org/ccmp/

- Funding Analysis
- Progress Tracker
- Success Stories



“The CCMP catalyzes the work of others -- setting goals, defining actions, and aiding in efforts to collaborate among multiple agencies and organizations”
Amy Hutzel - Coastal Conservancy



“The CCMP is the framework for conservation of the San Francisco Estuary into the future”
Mike Vasey - SF Bay NERR



Any questions?

You can find me at
caitlin.sweeney@sfeuary.org
sfeuary.org/ccmp