

Kelp Recovery Working Group: Recommendations for Council Consideration



J. Hilderling



NATIONAL MARINE
SANCTUARIES

GREATER FARALLONES

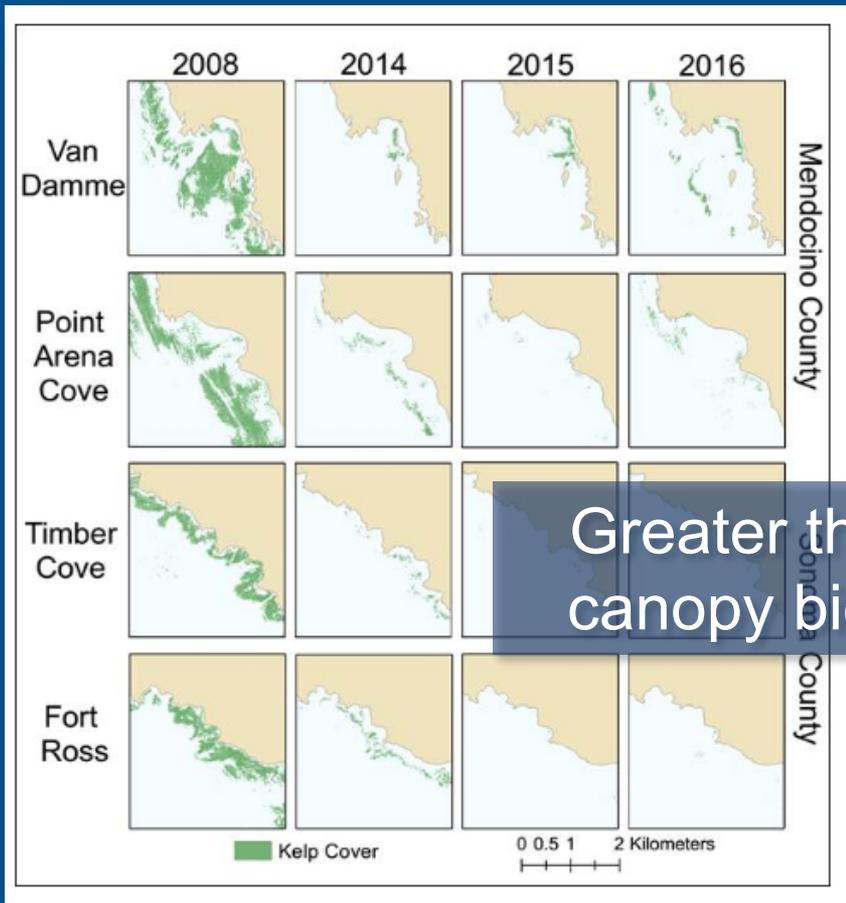


GREATER
FARALLONES
ASSOCIATION



Recap

January 10, 2018: Presentation from staff regarding dramatic kelp decline



Recap

2012



2016



C. Catton

G. Lee

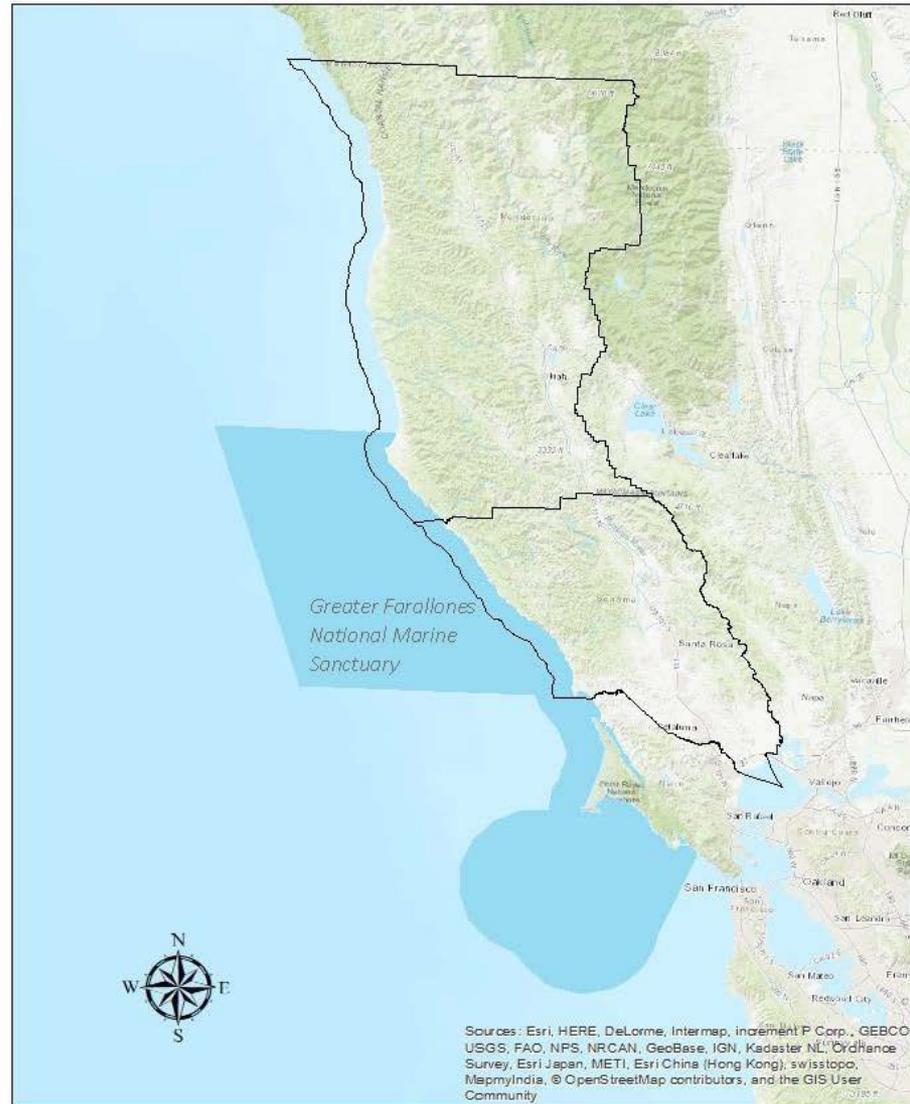
Recap

January 10, 2018: Presentation from staff regarding dramatic kelp decline. Council votes to form Kelp Recovery Working Group.

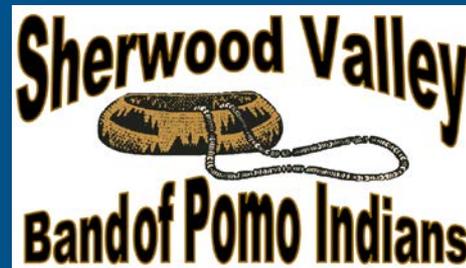
The charge: develop research, community engagement, and management recommendations for the recovery of bull kelp populations along the North-Central California coastline.



Kelp Recovery Focus Region Sonoma & Mendocino County Nearshore Habitat



The Participants



Purpose Statement

Our mission is to promote healthy bull kelp ecosystems along the northern California coast, foster collaborative kelp recovery and conservation efforts, and bring the best information and data to bear on adaptive management of this vitally important resource.



The Process

3 in-person meetings, 1 webinar, multiple conference calls



Kelp Recovery Working Group Timeline



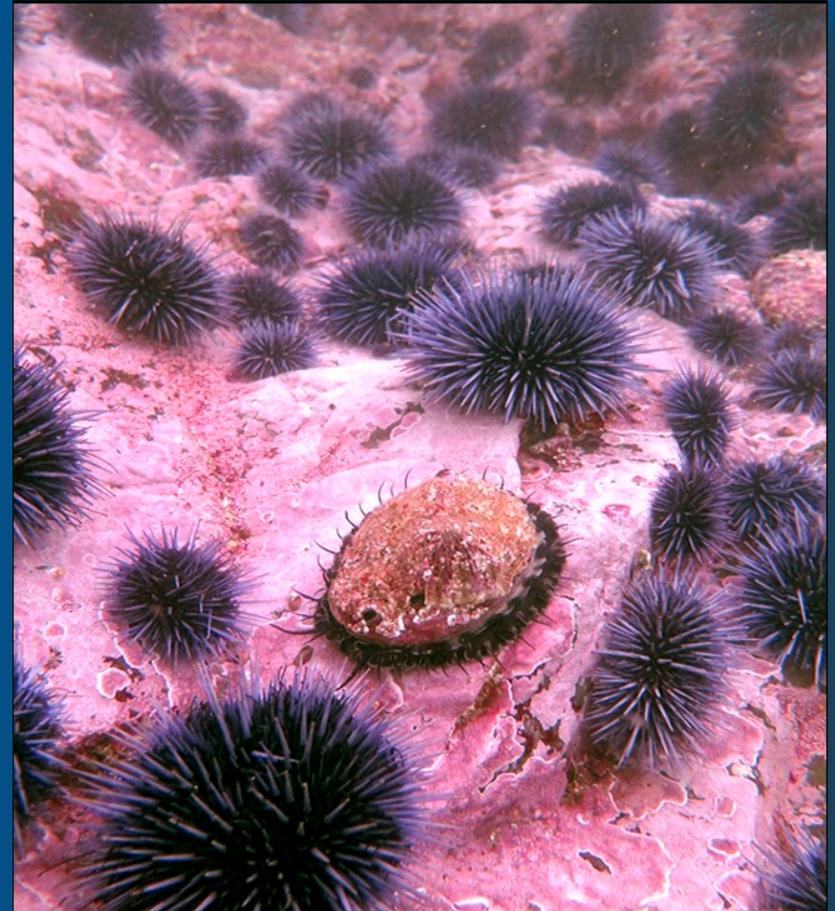
Timeline

April 25 - Meeting #1: Orientation and Science/Recovery Learning

Working group members:

- Reviewed the state of the science regarding kelp loss in the region from Cynthia Catton, CDFW;
- Identified data and knowledge gaps
- Learned from invited speakers restoration and recovery methods used elsewhere.

Guest Speakers: Tom Ford of The Bay Foundation and Braeden Schiltroth of Simon Fraser University.



A. Maguire

Timeline

June 6 - Webinar: Canopy Kelp Monitoring Methods and Technologies

Learned from guest speakers:

- Various efforts to survey kelp canopy using different methods and technologies;
- The challenges of remote sensing and aerial mapping & ways to address challenges;
- Group discussed implications for the North coast region and began crafting monitoring recommendations based on what was learned.

Guest speakers:

Rebecca Flores-Miller (CDFW),

Tom Bell (UCSB),

Meredith McPherson (UCSC),

Maycira Costa (UVic),

Helen Berry (UW)



Timeline

June 26 - Conference Call: *Selection Criteria for Restoration Sites*

Working group members met via phone to develop an initial list of criteria that should be used when selecting sites along the coast for management actions to retain spore production for the overall bull kelp population.

A survey of the criteria was created and distributed to the working group members following this call.

Site Selection Criteria Results

	Site Selection Criteria, in order of importance (n = 16)	Average Rating (1 = Very important; 5 = Not important)
1	Current persistence of kelp	1.13
2	Historical persistence of kelp	1.25
3	Subtidal survey sites	1.63
3	Areas of cultural sensitivity to be avoided	1.63
4	Areas of cultural significance to be recovered	2
5	Historically isolated kelp beds	2.19
6	Sediment Impacts	2.25
7	Presence of anthropogenic stressors	2.31
8	Sites of value to red abalone fishery	2.34
9	Proximity to public access points	2.44
10	MPAs where urchin harvest is allowed	2.56
11	Protection from wave exposure	2.63
11	Sites of value to red urchin fishery	2.63
12	MPAs where urchin harvest is prohibited	2.88
13	Freshwater output sites	3.25

Timeline

August 2 - Working Group Meeting #2: Create the Recommendations

Working group members:

- Reviewed the results of the restoration site selection criteria survey and the information/data gaps;
- Identified immediate and near-term bull kelp recovery options in the context of variable future conditions (scenarios);
- In topic teams, developed draft recommendations for facilitating the recovery of bull kelp populations along the Sonoma/Mendocino coast.

Topic teams met via phone and over e-mail correspondence to further refine topic area recommendations in advance of their final September meeting.



Timeline

September 13 Working Group Meeting #3: *Finalize the Recommendations*

Working group members:

- Crafted a purpose statement for the group;
- Reviewed draft recommendations;
- Finalized general components of all recommendations and identified intersections across topics;
- Assessed the “big picture” and identified recovery actions through time and across scenarios;
- Identified agency/individual leads for each recommended action;
- Identified most critical next steps and funding opportunities.



Kelp Recovery Working Group Timeline



Next Steps

TODAY: Sanctuary Advisory Council review of recommendations

Sanctuary Review of Recommendations and Development of Kelp
Recovery Plan

November – February

Sanctuary staff will develop a summary report including background information, data synthesis, recommendations, case studies, recovery characteristics, etc. to guide bull kelp management into the future

Sanctuary Advisory Council Meeting to Discuss Kelp Recovery Plan

February 2019