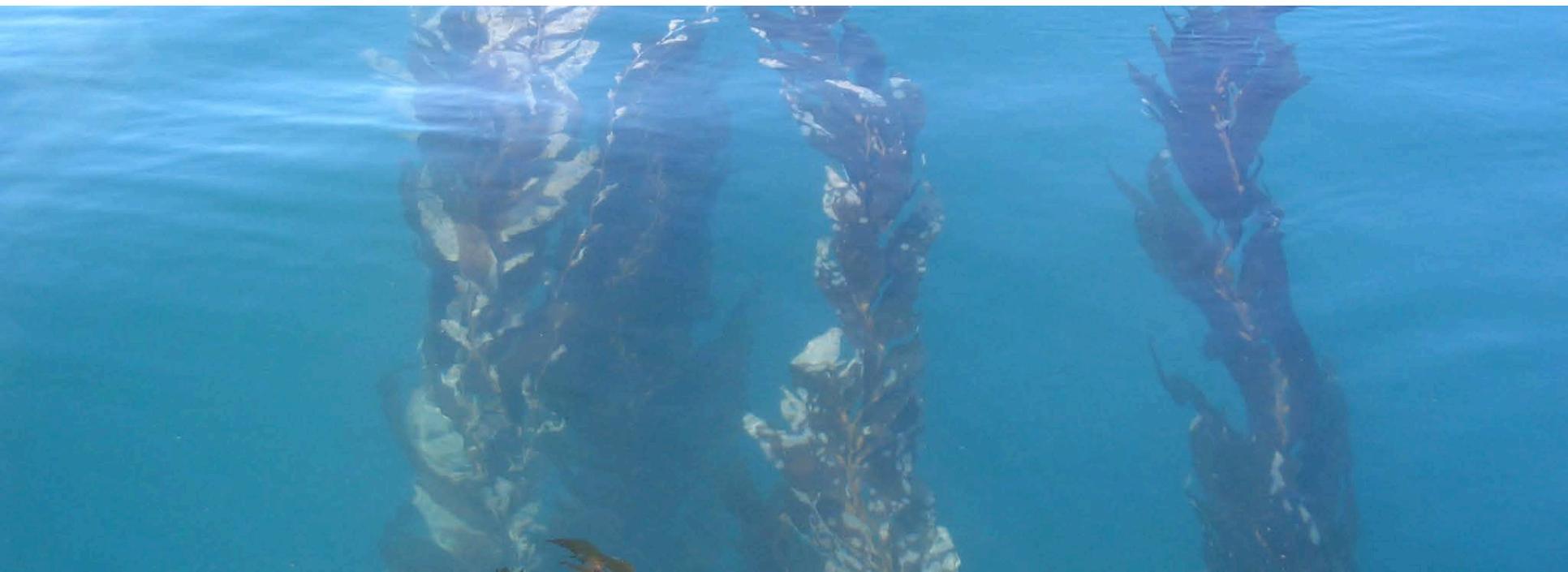


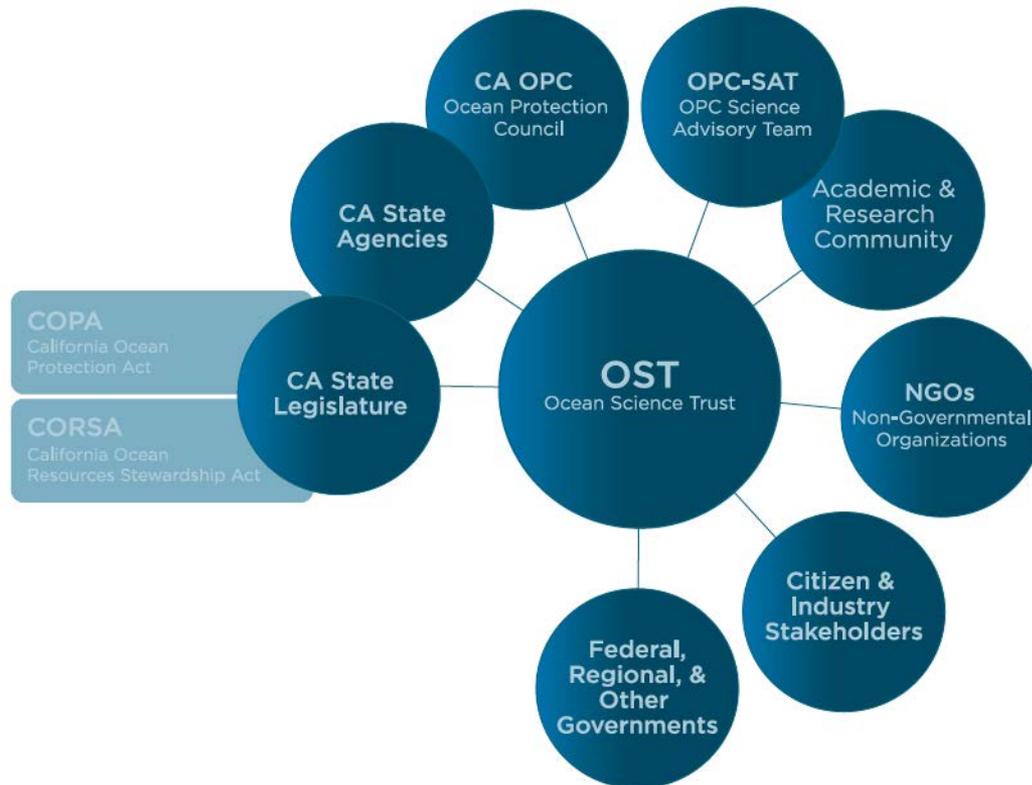
Monitoring Central Coast MPAs: Where are we? What's next?

Liz Whiteman, California Ocean Science Trust



California Ocean Science Trust

Building bridges constructed of our independence, integrity, and knowledge that link science with policy for informed ocean resource management.

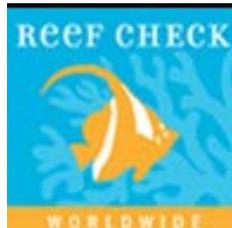


Central Coast monitoring: A quick recap...



Understanding our starting point

Setting a benchmark of ecological and socioeconomic conditions through baseline monitoring



Central Coast MPA Baseline Program

Initial results are encouraging...

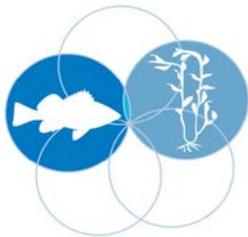
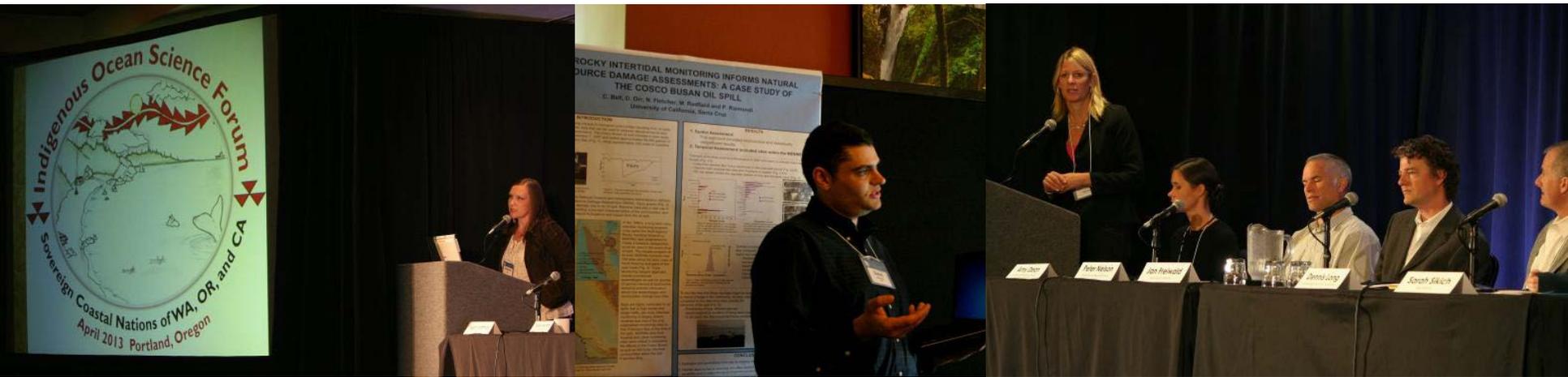
Central Coast MPAs are on track



- Some species (e.g., abalone, lingcod) have demonstrated early increases in size and abundance
- Fishing opportunities continue in a diversified economy

...and extend beyond the science

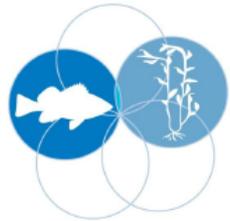
New partnerships and collaborations to steward
the network



State of the
CALIFORNIA
Central Coast



... informed MPA management



State of the **CALIFORNIA** Central Coast

Reflecting on the First 5 Years
of Marine Protected Area
Monitoring, Management, and
Partnership

Symposium Proceedings



Recommendations from DFW to the Fish and Game Commission:

- Ongoing monitoring
- Enforcement
- Outreach and education

What's next...



Step 1. Updating the monitoring plan

2013
FALL

Update the Central Coast Monitoring Plan

The updated plan will apply the **monitoring framework**, be informed by baseline monitoring results and the best available science, reflect stakeholder priorities and meet management needs for the region. Opportunities to inform the plan are being planned for early 2014.

The final plan will be presented to the Fish and Game Commission in Spring 2014.



Deploy existing

The success of research and collection of interdependent monitoring needs

The success of the Ocean Springs

- Draw on knowledge from baseline monitoring
- Apply monitoring framework
- Reflect management priorities

Applying the monitoring framework

10 Ecosystem Features



CONSUMPTIVE
USES



NON-CONSUMPTIVE
USES



MID-DEPTH
ROCKY
ECOSYSTEMS



ROCKY
INTERTIDAL
ECOSYSTEMS



KELP &
SHALLOW ROCK
ECOSYSTEMS



ESTUARINE &
WETLAND
ECOSYSTEMS



SOFT BOTTOM
INTERTIDAL & BEACH
ECOSYSTEMS



SOFT BOTTOM
SUBTIDAL
ECOSYSTEMS



DEEP
ECOSYSTEMS &
CANYONS



NEARSHORE
PELAGIC
ECOSYSTEMS

DATA COLLECTION & ANALYSIS

ASSESSING ECOSYSTEM CONDITION & TRENDS

How is the ecosystem doing?

Ecosystem Feature Checkup

Checkups are conducted by measuring a set of **vital signs** that provide a window into the health or condition of an ecosystem feature.

Examples may include:

Monitoring of the abundance and sizes of sea stars, red urchins, or lingcod.

Ecosystem Feature Assessment

More detailed and technical, **assessments** measure sets of **indicators** that together tell us about the condition of a particular part or **attribute** of an ecosystem feature.

Examples may include:

By monitoring shorebirds, we can draw conclusions about the condition of the plants and forage fish that they depend upon.

EVALUATING MPA DESIGN & MANAGEMENT DECISIONS

How are MPAs affecting the ecosystem?

Short-Term Questions

Short-term questions can be answered within the five year review periods recommended by the MLPA Master Plan.

Examples may include:

Are key habitats (e.g., kelp forests) represented and replicated across the regional MPA network?

How does placing an MPA boundary across a rocky reef affect the fishery in areas outside the MPA?

Long-Term Questions

Long-term questions can take several years to decades to answer and can help inform future adaptive management decisions.

Examples may include:

Are rocky reefs inside MPAs connected by adult movement or larval dispersal of fish species?

Is 'spillover' of fishery species affected by MPA size? How can MPAs be sized to balance fisheries benefits with ecosystem protection?

Reflecting priorities

Central Coast Community Gatherings to Guide Continued Marine Protected Area Monitoring

January 13, 15 & 16, 2014

Summary of Key Themes Now Available

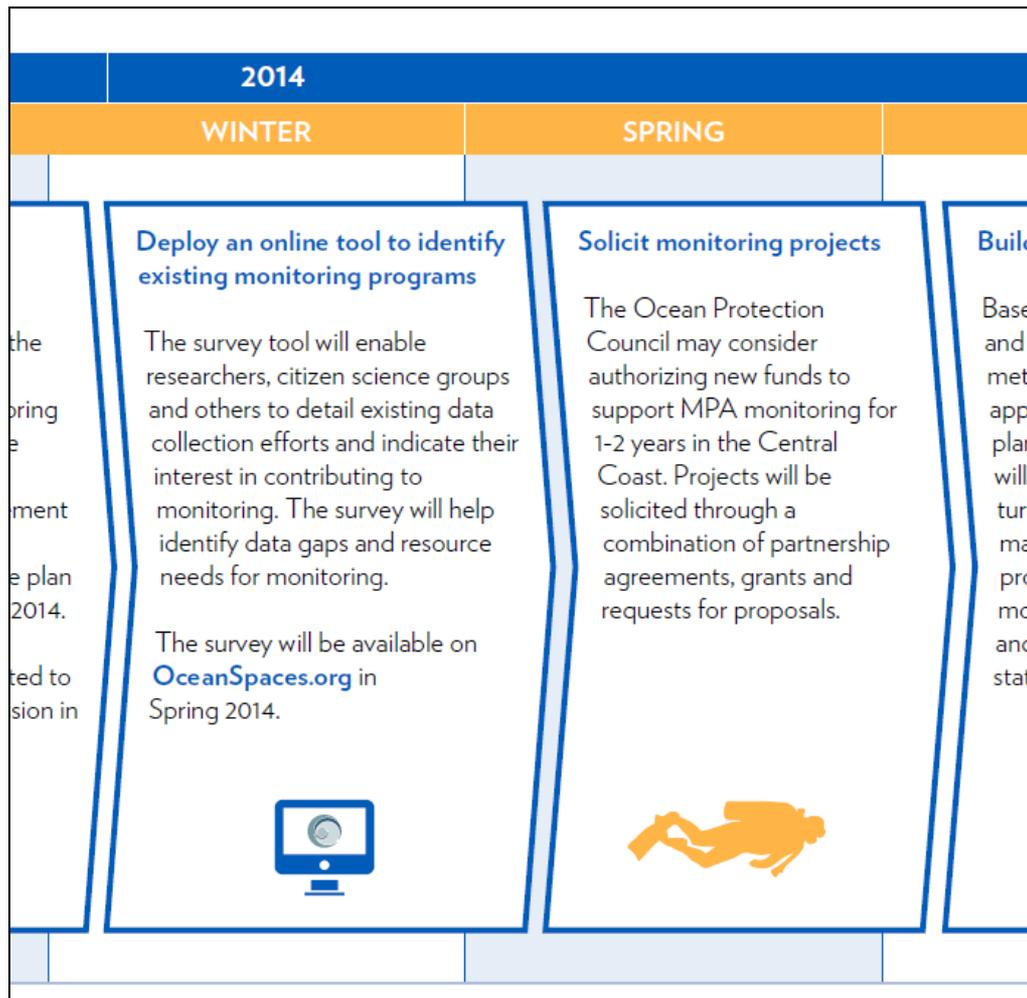


Thank you to those who recently contributed to informing continued marine protected area (MPA) monitoring in the Central Coast. A summary of key themes captured during our conversations with members of the Central Coast ocean community is now available on the [Central Coast Monitoring Community page at OceanSpaces.org](#).

During the week of January 13, a series of community gatherings were held throughout the Central Coast to learn about local interests and priorities for continued MPA monitoring in the region. Over 180 community members representing a wide variety of ocean users, interests, and perspectives participated in the conversations. Input was also shared during small group discussions held with a number of Central Coast tribes, and commercial and recreational fishermen, as well as via written/online input forms and emails. Input received will help California Ocean Science Trust and the California Department of Fish and Wildlife update the Central Coast MPA Monitoring Plan, which will guide continued MPA monitoring in the region.

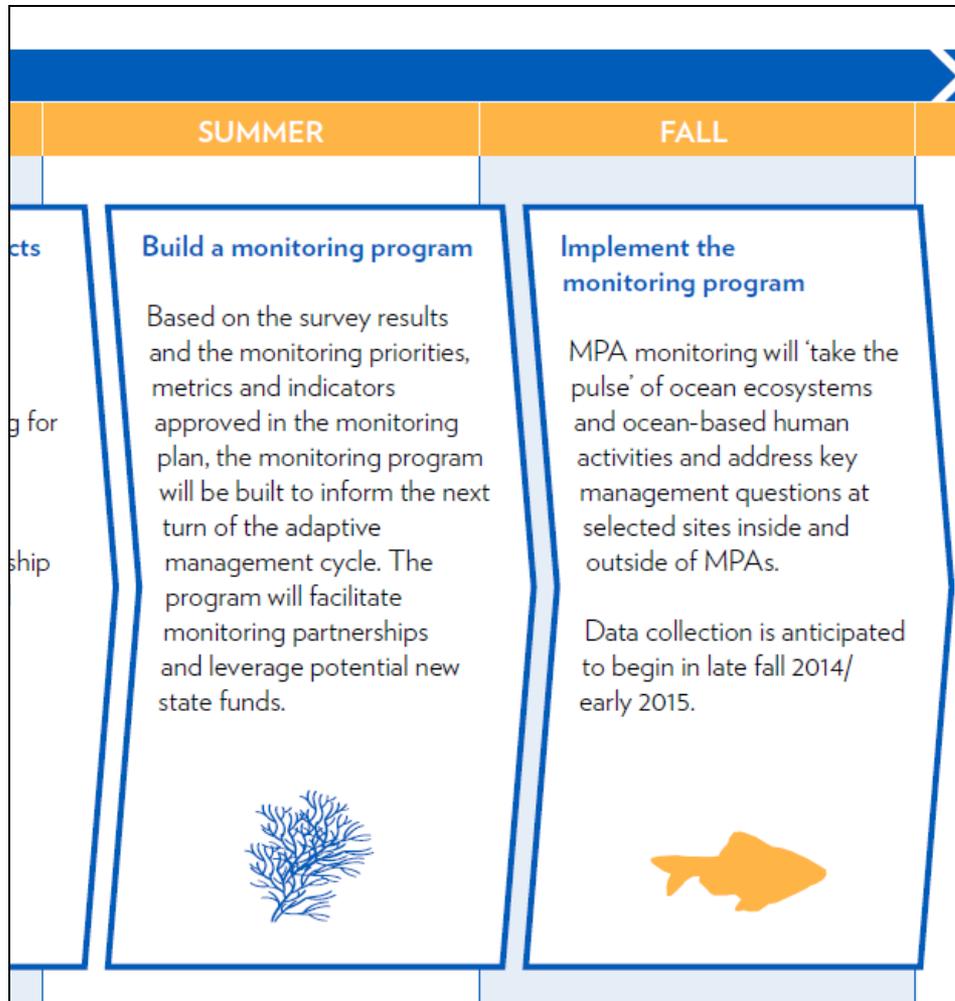
- Focusing on management needs
- Reflecting stakeholder priorities
- Applying the best-available science

Step 2. Survey existing programs



- Leverage existing capacity
- Understand interest
- Identify gaps
- Shape resource needs

Step 3. Build a monitoring program



- Solicit project proposals through RFP
- Identify monitoring contracts through RFQs
- Engage in data sharing and analysis partnerships

Beyond monitoring...



Partnerships to implement MLPA...

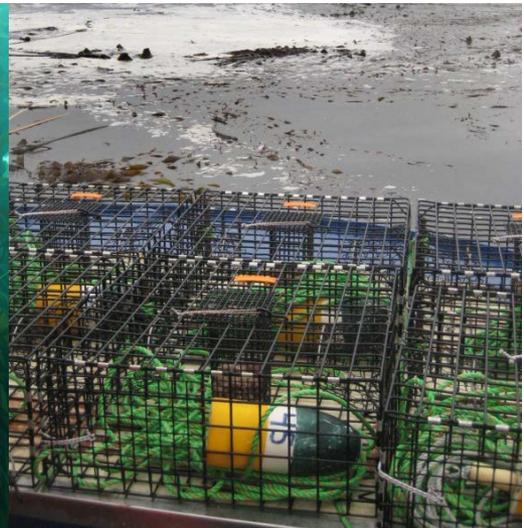
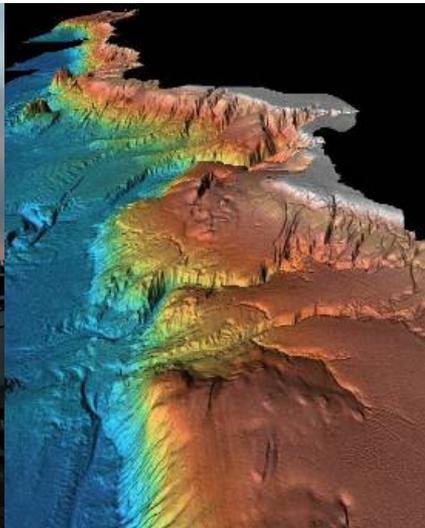
- Participate in the California Citizen Science Initiative
- Join an MPA Watch Program
- Find out more about the Partnership Plan being developed by the Ocean Protection Council: opc.ca.gov
- Get involved in a local MPA Community Collaborative
- Learn about California's MPA education, management and enforcement: dfg.ca.gov/marine/mpa

‘Putting the MPAs to work’

Together we can realize the value in our investment

Climate change :: Ocean acidification :: Fisheries management

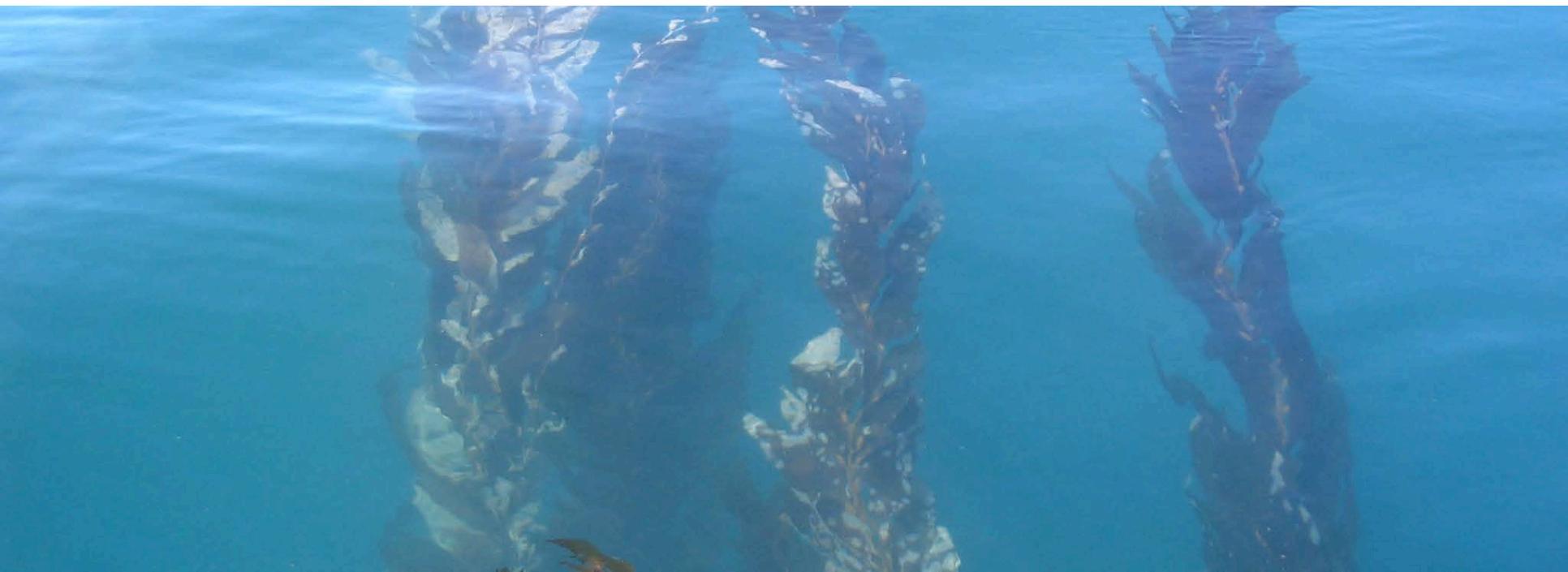
Intergovernmental relationships :: Co-management



Thank you!

Liz Whiteman, California Ocean Science Trust

liz.whiteman@calost.org



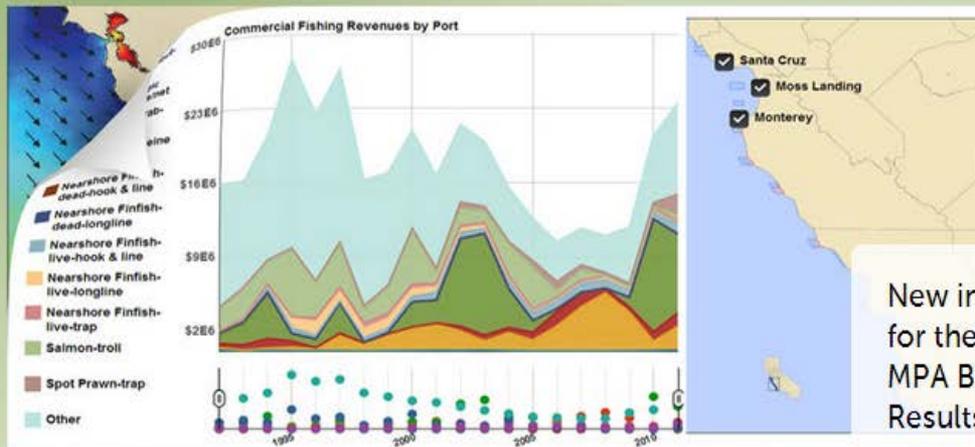
A new monitoring community formed



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WELCOME CONNECT LEARN EXPLORE DATA

Welcome, Liz **DASHBOARD** WORKSPACE



New interactive e-book for the Central Coast MPA Baseline Monitoring Results now available

[LEARN MORE »](#)

join oceanspaces!

OceanSpaces is an online community that fosters new knowledge of ocean health. Here you'll find opportunities to communicate, create and share information among everyone with a stake in the health of California's oceans — scientists, fishermen, policymakers and citizens.

monitoring in action



featured members

 State of the California Central Coast Symposium MEMBER GROUP »

 North Coast Monitoring Community MEMBER GROUP »

 Bob Bertelli