Monitoring California’s MPAs: 
Building a partnerships-based monitoring portfolio

Liz Whiteman, California Ocean Science Trust
A significant investment for our future

A statewide network of MPAs to protect and restore ocean ecosystems
...requires a new monitoring approach

- Start with stakeholder priorities
- Engage the best scientists
- Foster new ways to participate
- Share timely information broadly
Re-framing the discussion

- Plan monitoring
- Adapt monitoring
- Implement data collection
- Analyze data
- Report results

Study Region:
- North Coast
- North Central Coast
- San Francisco Bay
- Central Coast
- South Coast

(Central Coast)  (North Coast)  (North Central Coast)  (South Coast)
Central Coast baseline monitoring: A quick recap...
Understanding our starting point

Setting a benchmark of ecological and socioeconomic conditions through baseline monitoring

$16M invested by OPC: >50 programs
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
Poised to work together

‘Taking the pulse’ of ocean ecosystems
Evaluating the effectiveness of MPA management
What’s next…long-term monitoring in the Central Coast
Updating the monitoring plan

- Draw on knowledge from baseline monitoring
- Apply the monitoring framework
- Reflect management, stakeholder priorities
- Serve multiple mandates

Policy guidance document that needs to meet MLPA requirements but can serve CA broadly
Survey existing programs

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

Opportunity to identify location, habitat, species, etc overlap with water quality monitoring programs
Build a monitoring program

Deploy financial instruments creatively, strategically:

• Solicit project proposals through RFPs
  – Answer management questions e.g., connectivity

• Identify monitoring contracts through RFQs
  – Efficiently align data collection e.g., rocky shores

• Engage in data sharing and analysis partnerships
  – Solidify data partnerships with e.g., PISCO, CenCOOS
  – Collaborate on cross-cutting research e.g., ocean acidification
Advance research priorities together

- Understanding the spatial scales of variability in ocean acidification and hypoxia
- Developing risk models of threats to ASBS’s
- Refining monitoring methods and tools (e.g., indicators)
Ongoing now...building a foundation in the South Coast
Linking Bight 13 and MPA monitoring

• Building institutional partnerships
  – Joint SCCWRP and OST Science Integration Fellow

• Programmatic collaborations to answer shared science questions
  – What is the relative effects of fishing and water quality on ecosystem condition?
Linking Bight 13 and MPA monitoring

- Advancing novel research
  - Developing indices/score cards of ecosystem health

- Leveraging technology assets
  - MyWaterQuality
  - CEDEN
  - OceanSpaces
How does this all add up?
Realizing the value in our investment

‘Putting the MPAs to work’

Climate change :: Ocean acidification :: Fisheries management
A foundation for science-informed decisions

And an investment portfolio for our oceans
Monitoring California’s MPAs: 
What is a partnerships-based monitoring portfolio?

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