Southern California Bight 2018 Regional Monitoring Program

Report to SCCWRP Commission

Karen McLaughlin March 2, 2018

Overview of the Bight Program

• Bight started as a pilot program in 1994

- This is the sixth survey
- Bight is continually evolving
 - Elements added to address new management questions
- Bight has been held up as a national model for a Regional Monitoring Program
 - Reputation for success in translating science to management

Goal of Today's Talk

• Describe Bight '18 elements

- This is your opportunity to provide feedback while we are still in the planning process
- Status of planning efforts
- Schedule for field campaigns

Bight '18 Elements

- Sediment Quality
- Harmful Algal Blooms
- Ocean Acidification
- Trash
- Microbiology

Sediment Quality

- Characterize sediment quality impacts by habitat type using multiple lines of evidence
 - How wide-spread? How severe? Is it getting better or worse?
- Measure bioaccumulation of contaminants in edible fish tissue
 - Is it safe to eat the fish?
- What's New: Pilot new screening tools for contaminants of emerging concern

Harmful Algal Blooms

- Marine HABs: Measure Domoic Acid concentrations in shelf sediments
 - Are sediments a source of DA?
- Freshwater HABs: Characterize impact of cyanotoxins on shellfish at the marine/freshwater interface
 - What is the risk of cyanotoxins on the marine environment?

Ocean Acidification

 Characterize carbonate chemistry of Bight continental shelf waters

- Status with respect to known thresholds? Trends?
- Assessment of biological impacts
 - Do we see biological impacts? Where? When?

What's new: Developing new indicators and new metrics

Trash

- Characterize distribution of trash on the seafloor
 - How much? How wide-spread? What types? Trends?
- Characterize distribution of trash in streams
 - How much? How wide-spread? What types?
 - Trends related to recent policy actions?
- What's New: pilot new technologies for trash assessments

Microbiology

- Understand implications of new EPA coliphage standards for beach water quality assessments
 - Compare coliphage to fecal indicator bacteria



What's new: pilot new standards before they hit prime time

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Four-Step Process to Field Launch

- 1. Generate monitoring questions
- 2. Develop study design
- 3. Match study design to available effort
 - Workplan
- 4. Pre-survey Quality Assurance and Information Management
 - QA Plan, Intercalibrations
 - Field and Laboratory Manuals

Planning is on Track

Element	Questions	Study Design	Match Effort	Pre-survey QA & IM
Sediment Quality	✓	✓	✓	progress
Harmful Algal Blooms	~	✓	✓	progress
Trash	~	~	~	progress
Ocean Acidification	~	~	✓	progress
Microbiology	✓	✓	progress	progress

Field Program Schedule

- Sediment Quality
 - July September '18
- Harmful Algal Blooms
 - Domoic Acid: with Sediment Quality
 - Cyanotoxins: October '18 January '19
- Ocean Acidification
 - January 2019 November 2020
- Trash
 - Seafloor: with Sediment Quality
 - Streams: with Stormwater Monitoring Coalition March '18 June '18
- Microbiology
 - July September '18

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Are You Getting What You Need From Your Program?

- Do the elements adequately capture your immediate management needs?
- Is there anything we can refine to make the program more valuable?
- What is the feedback you've received from your staff?

For More Information...

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