



Network Update and Once-Through Cooling Program

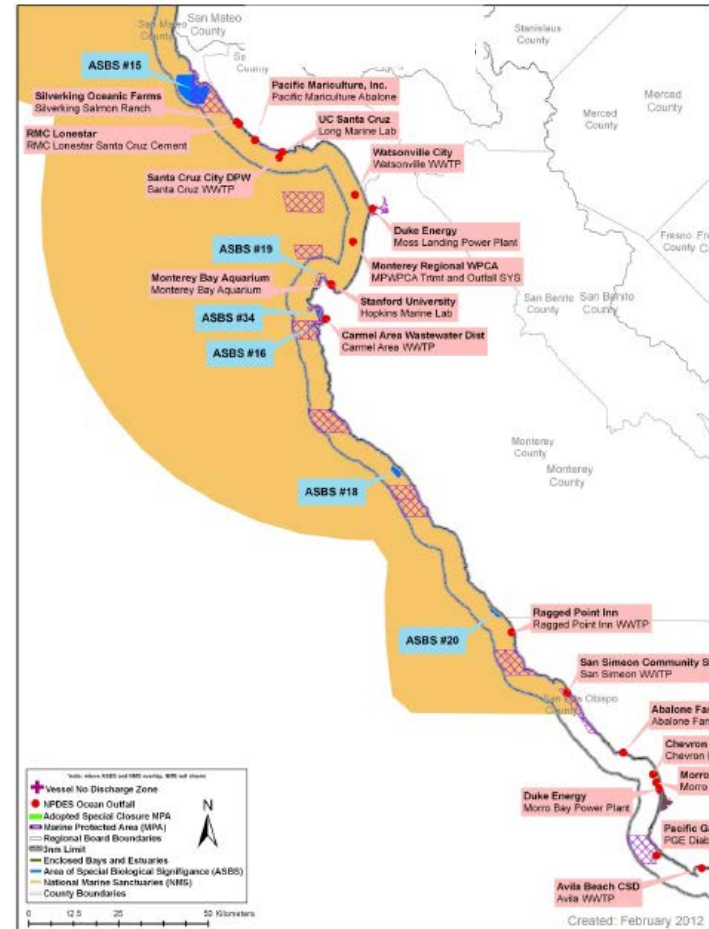
Cyndi Dawson, State of California MPA Policy Advisor/Senior Program Manager

Regional Water Quality Control Board – Central Coast

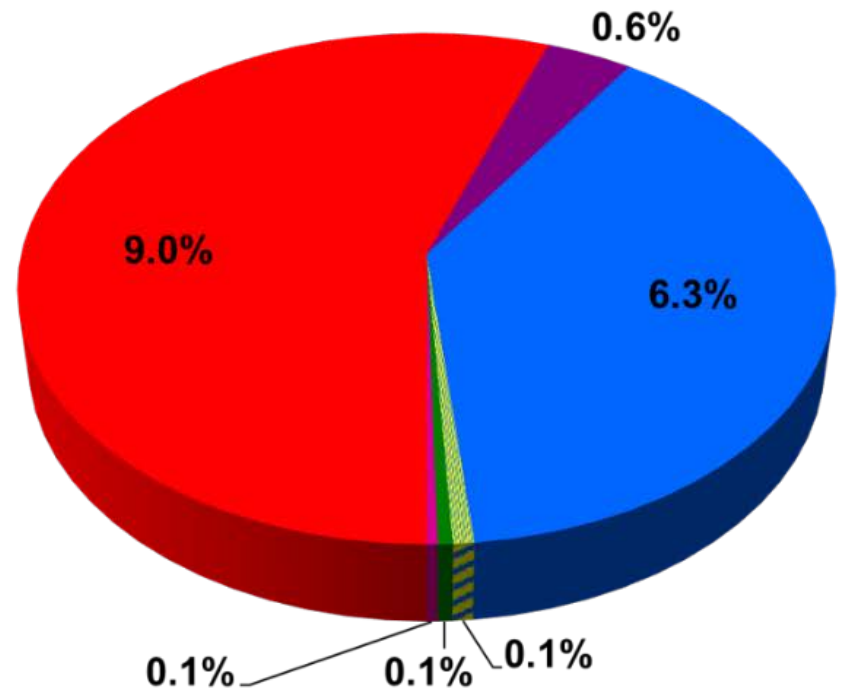
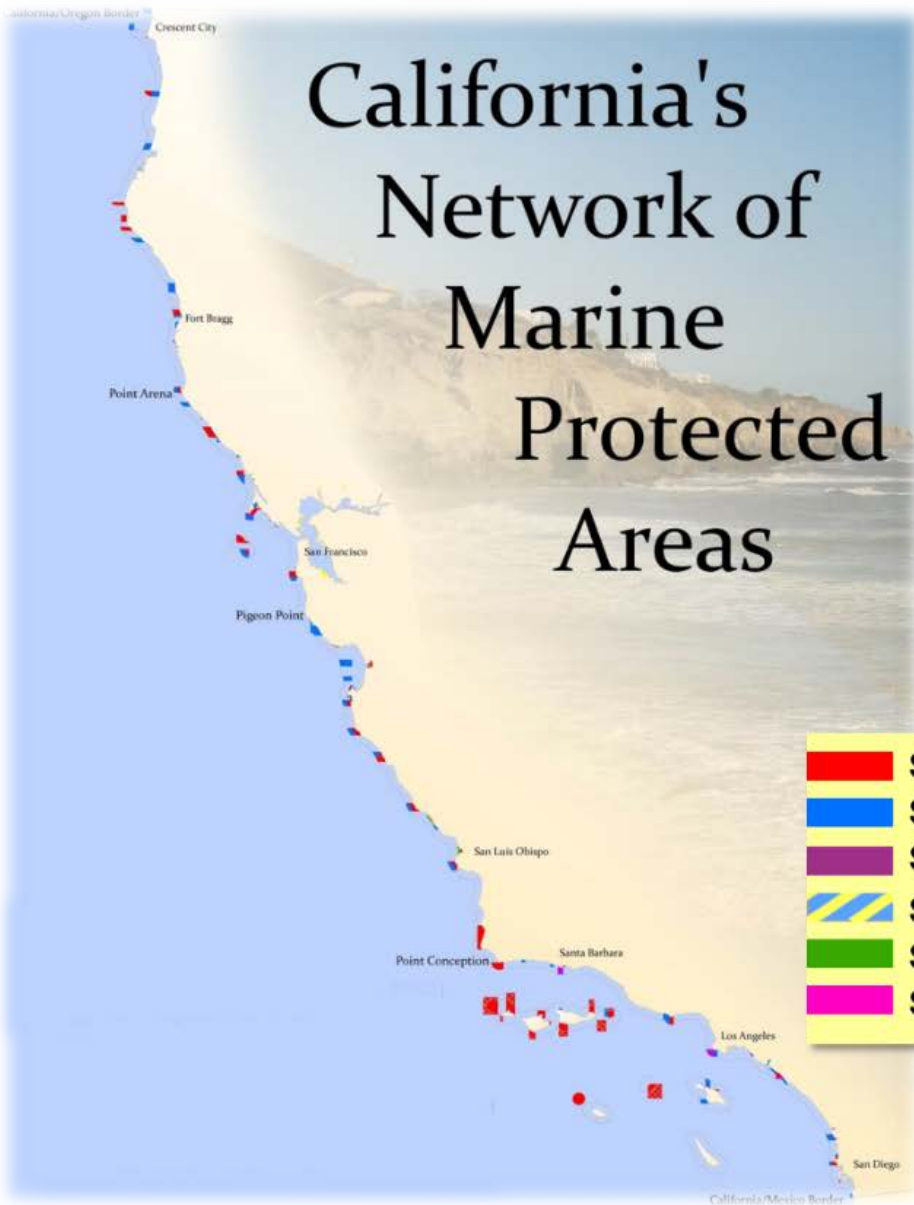
May 10, 2018

Legal Mandate for MPAs

- Marine Life Protection Act (1999, MLPA)
- Marine Managed Areas Improvement Act (2000, MMAIA)
- Defines State Water Quality Protection Areas and names State Board as designating entity



California's Network of Marine Protected Areas



■	State Marine Reserve (SMR) (<i>n</i> = 49)
■	State Marine Conservation Area (SMCA) (<i>n</i> = 59)
■	SMCA (no-take) (<i>n</i> = 10)
■	SMCA / State Marine Park (<i>n</i> = 1)
■	State Marine Recreational Management Area (SMRMA) (5)
■	Special Closures (<i>n</i> = 15)

➤ Source: CDFW (2016), *Master Plan for MPAs*

MPA Management Program



Outreach and Education



Research and Monitoring



Enforcement and Compliance

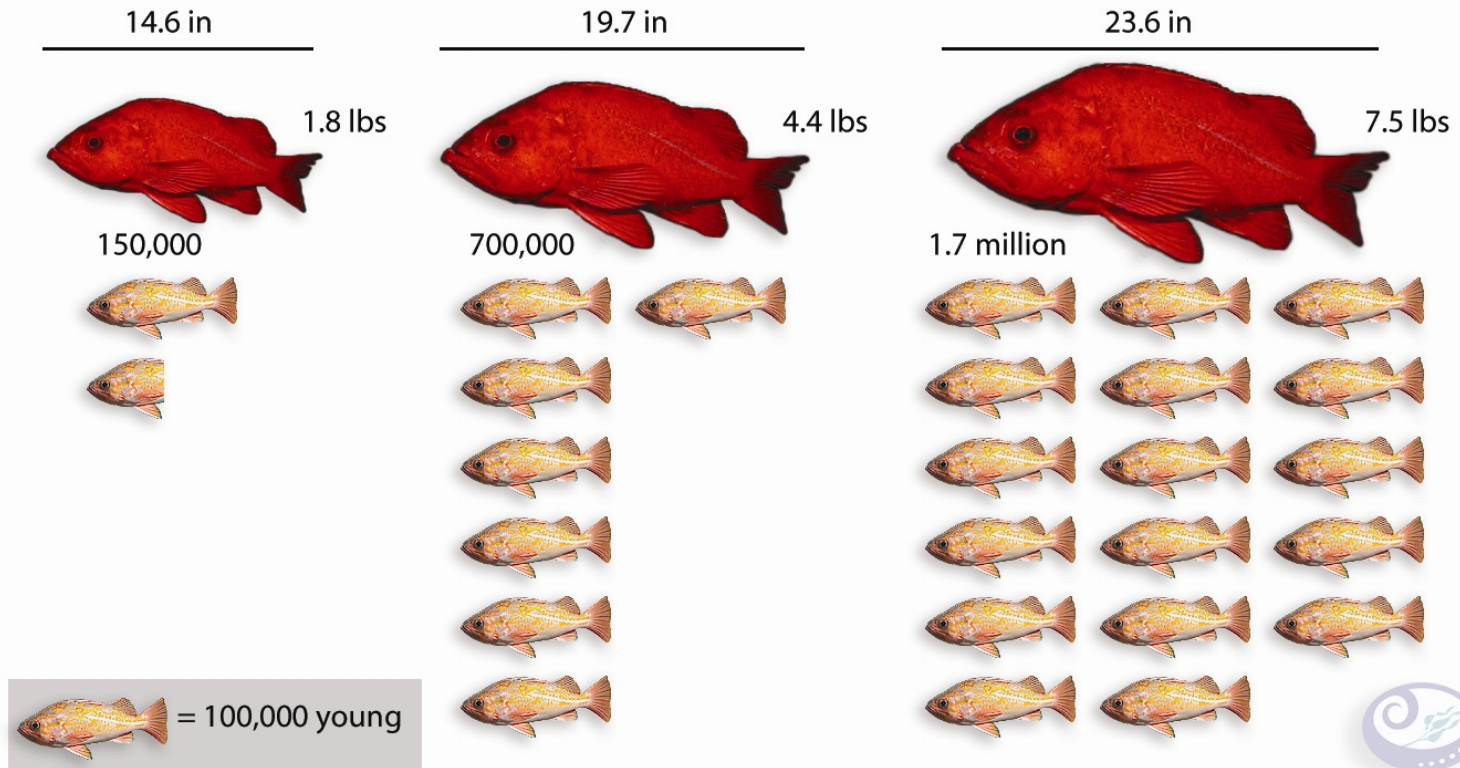


Policy and Permitting

MPAs Protect Ecosystem Health



Why bigger and older matter?

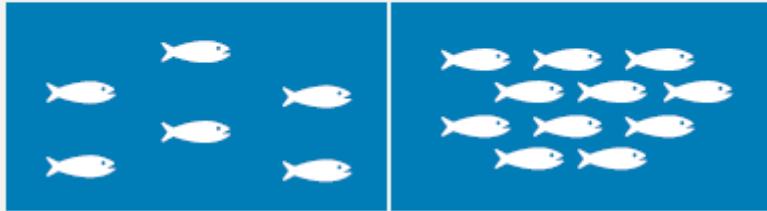


Average numbers of young produced by three different sizes of vermilion rockfish.
Data: Love et al. (1990) NOAA Technical Report

How are our MPAs performing?

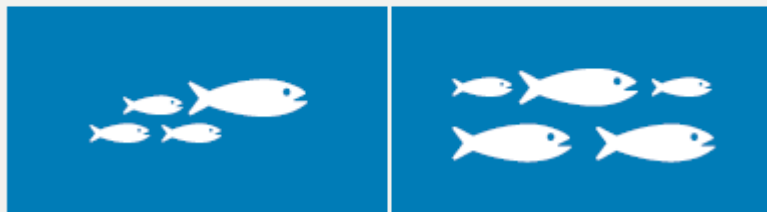
HIGHER DENSITY = MORE SEA LIFE

Density is the total number of organisms in a given area.

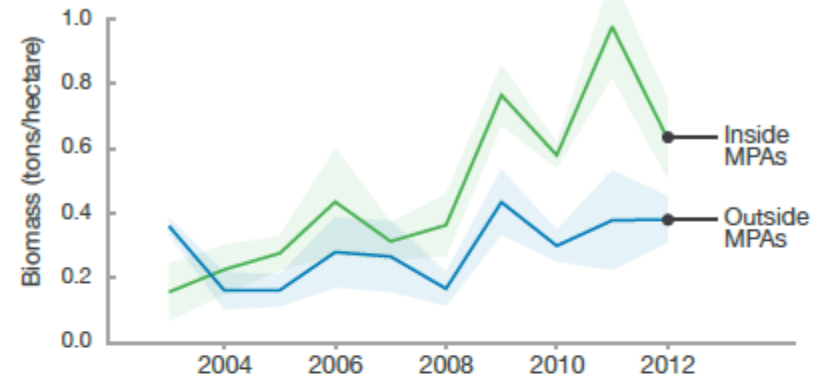


INCREASES IN BIOMASS = BIGGER AND MORE ABUNDANT SEA LIFE

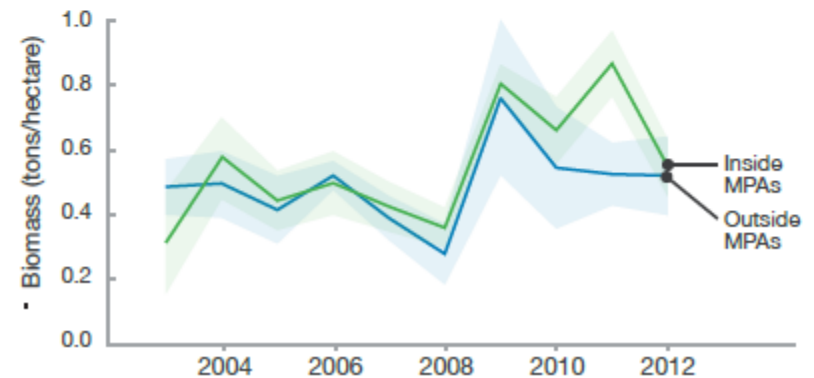
Biomass is the total weight of organisms in a given area, in terms of both size *and* number of organisms.



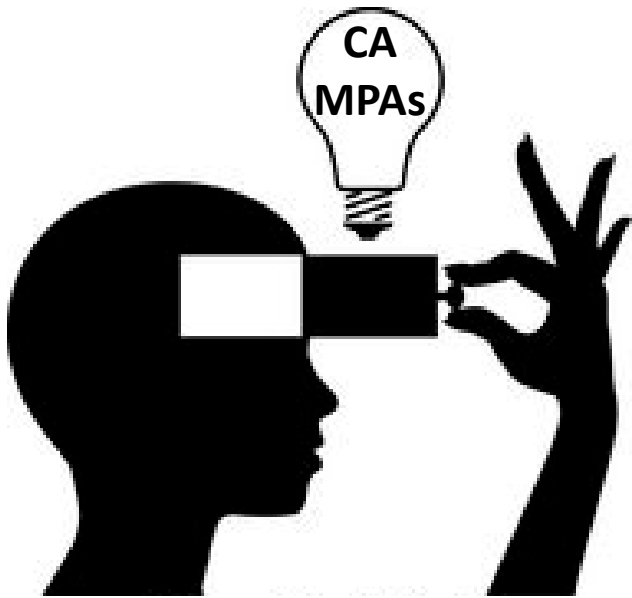
BIOMASS OF TARGETED SPECIES



BIOMASS OF NON-TARGETED SPECIES



MPAs work if....



SUPPORT HEALTHY HABITATS & DIVERSITY

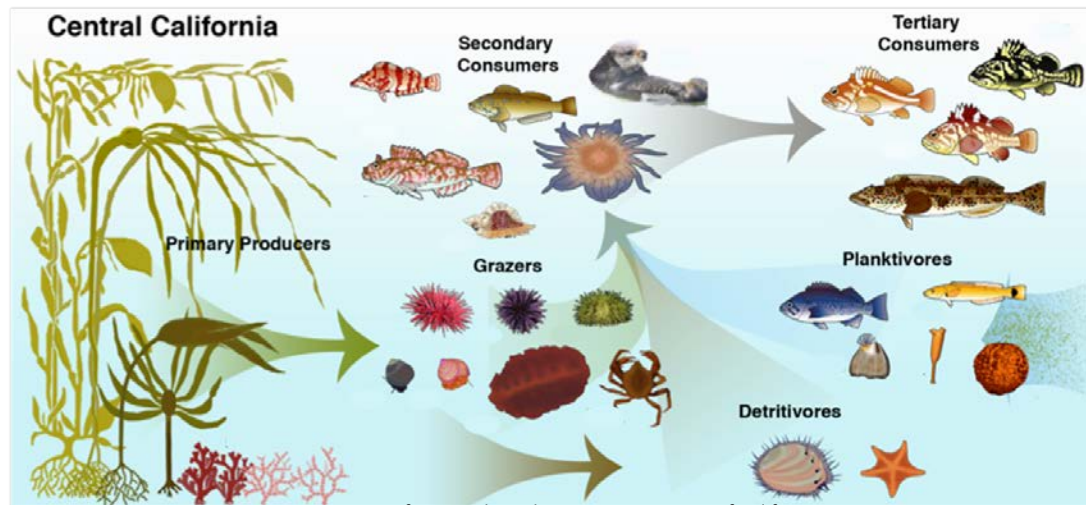


Figure courtesy of Carr and Reed 2016 in Ecosystems of California

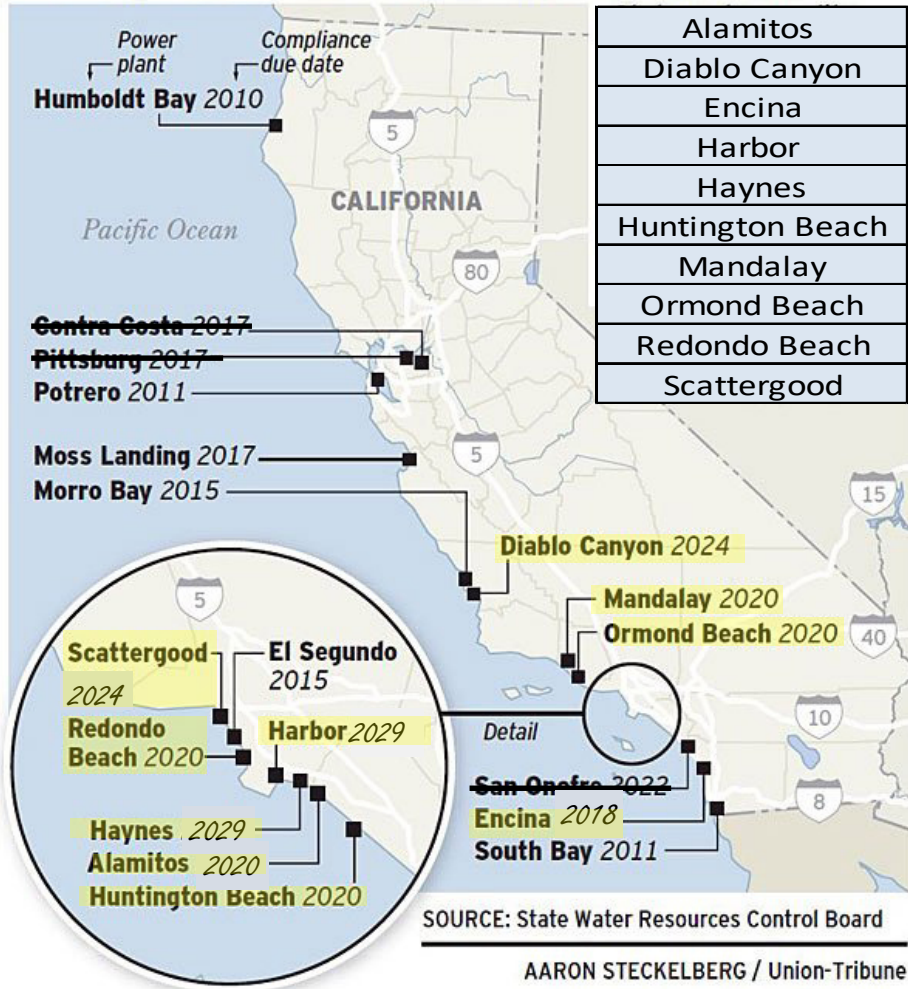
UNDERSTAND



ENFORCED

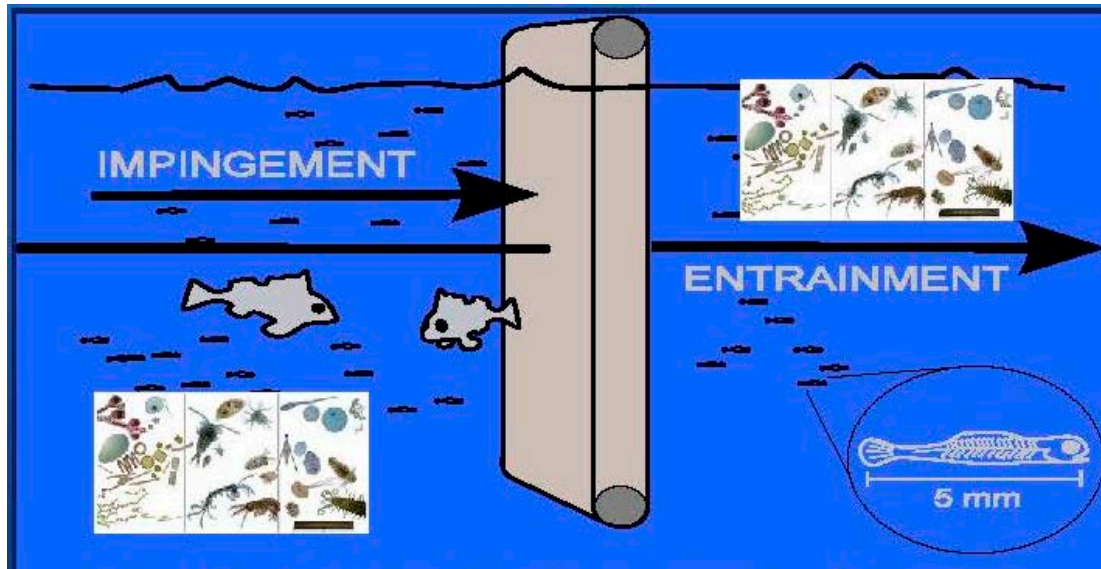
Adopted Policy Directives

ONCE-THROUGH COOLING POWER PLANTS IN CALIFORNIA



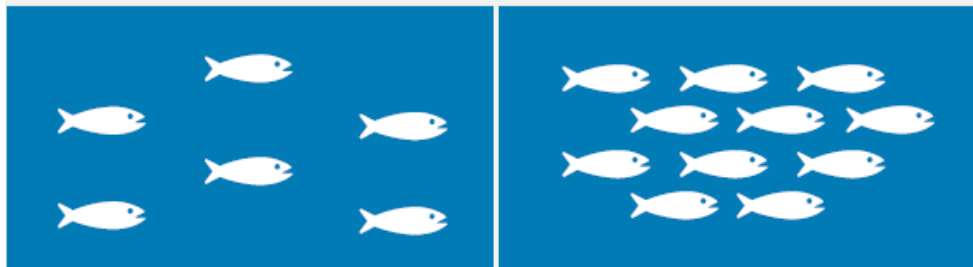
- SWRCB’s OTC Policy directs the payments to support “**mitigation projects directed toward increases in marine life associated with the State’s Marine Protected Areas in the geographic region of the facility.**”
- “...each year 5.4 million dollars (\$5,400,000) of the Funds shall be provided to the OPC for mitigation of impacts to the State Marine Protected Areas”

MPA Nexus with OTC Impacts



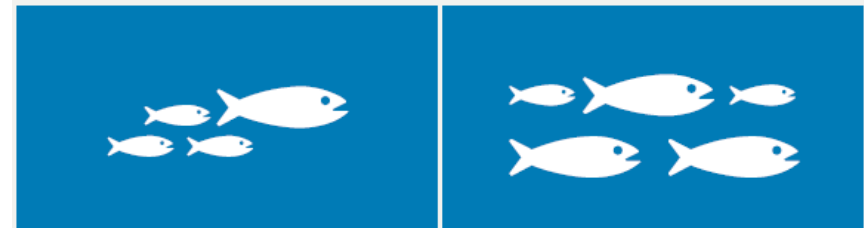
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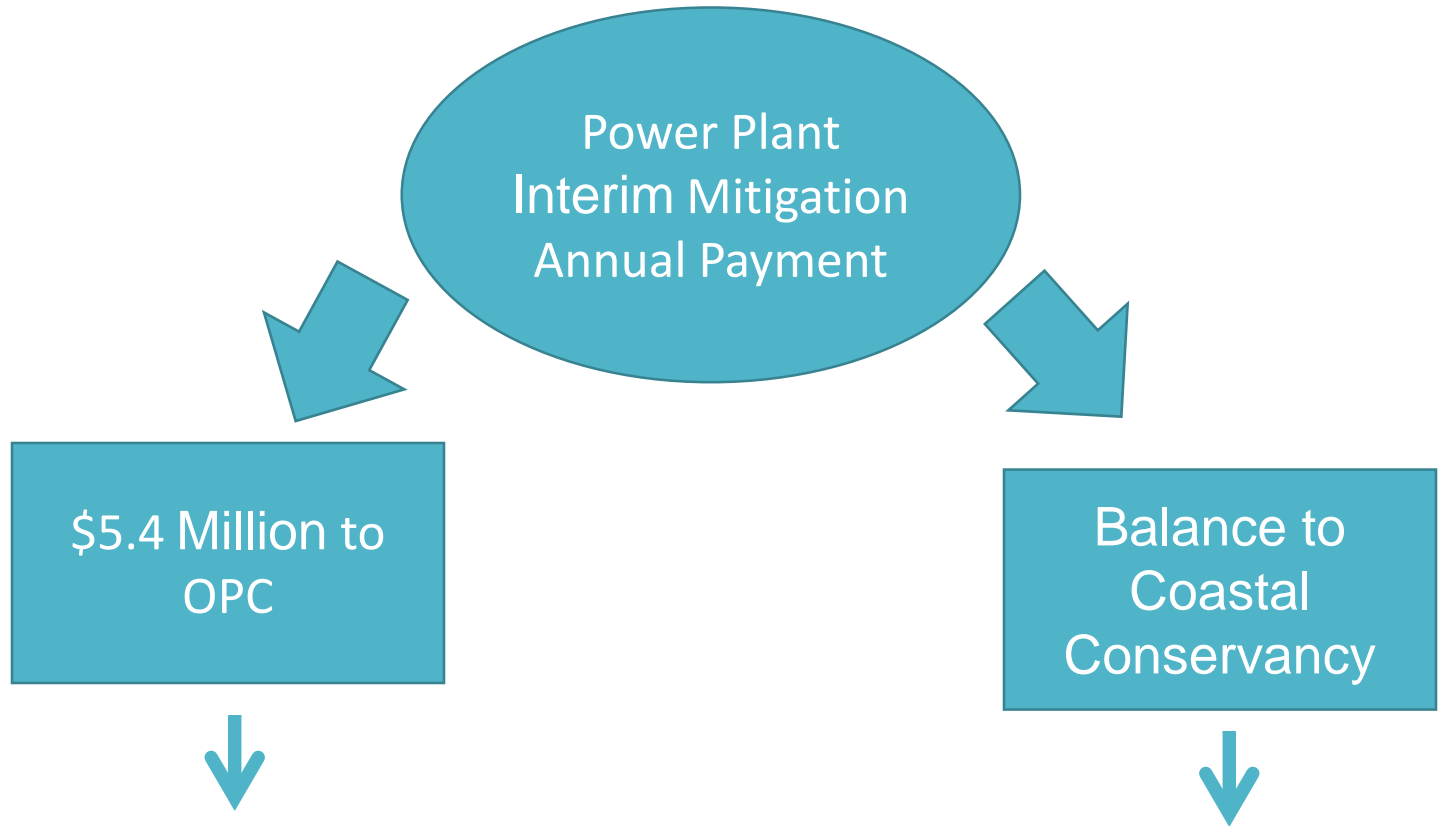


INCREASES IN BIOMASS = BIGGER AND MORE ABUNDANT SEA LIFE

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Annual Process for Fee Allocation



1. Restoration Projects/
Research mitigation provided by MPA Network
2. Improve Compliance
3. Improve Enforcement

Wetland Restoration

Next Steps

OTC Interim Mitigation Program

Finalize Approach
Nov. 2017

Expert Science
Panel Report
June 2018

Create
Guidelines
Public
Workshops &
Comment Period
(July – Sept. 2018)

Ocean Protection
Council
Consideration
October 25, 2018

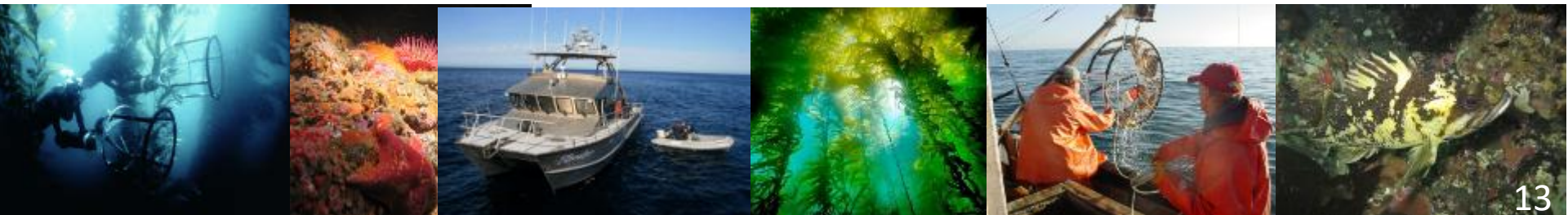
California Ocean Protection Council

OPC-SAT
Science Advisory Team



Summary of OTC Program

1. Ensuring MPAs have the greatest chance to accrue their maximum range of ecological benefits
2. Funding restoration projects that are scientifically proven to increase marine wildlife
3. Identifying opportunities to improve enforcement and compliance



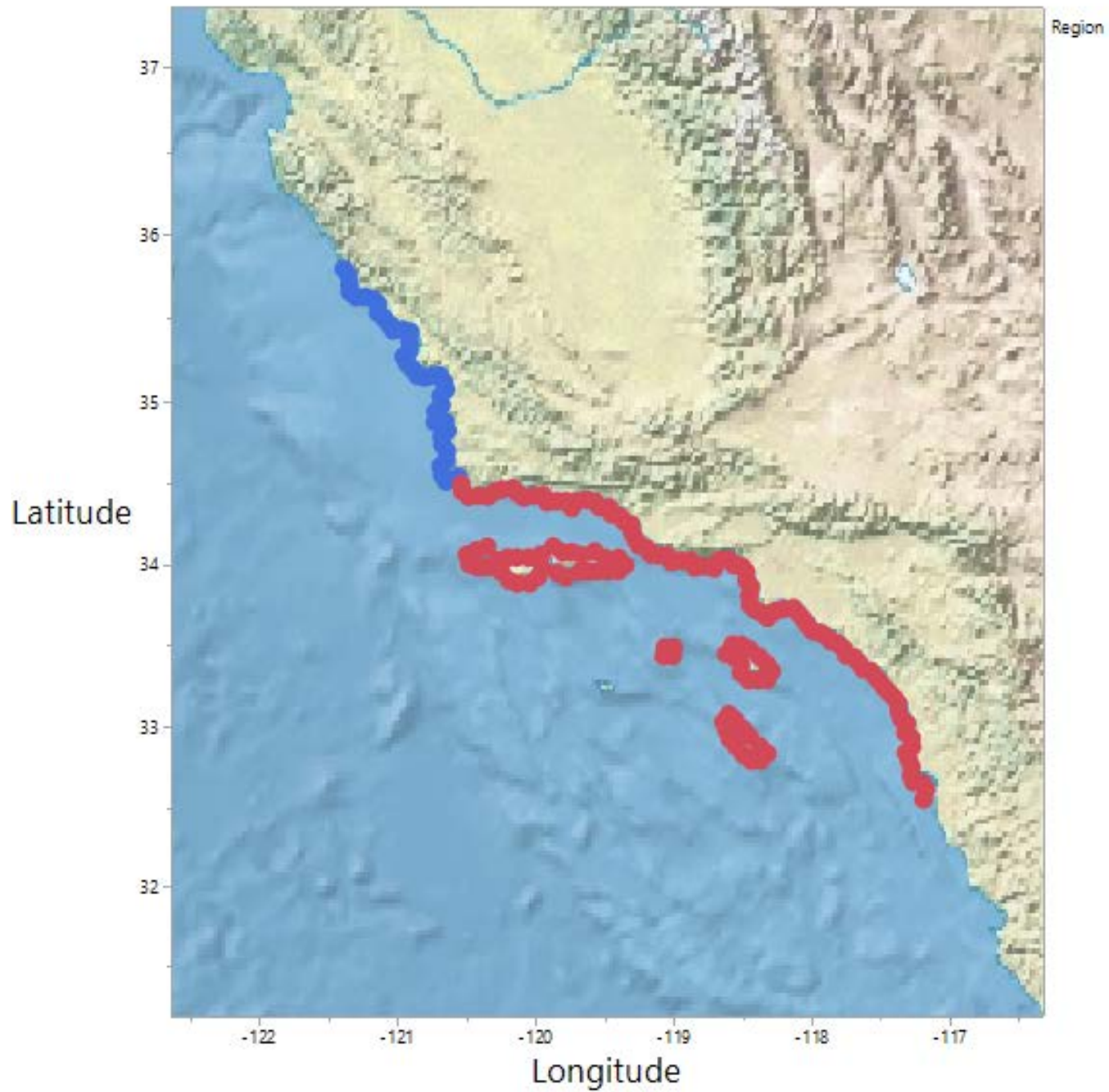


OCEAN PROTECTION COUNCIL

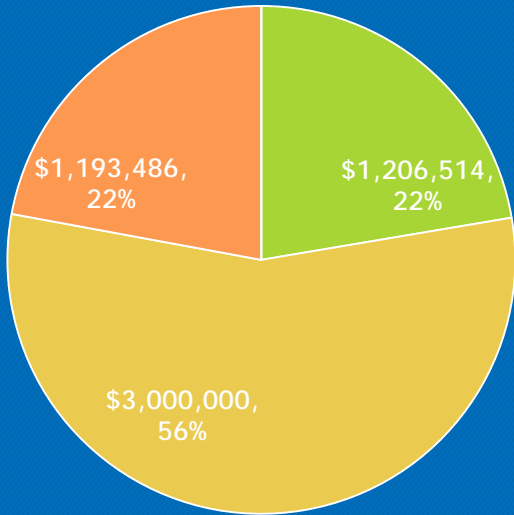
Questions?

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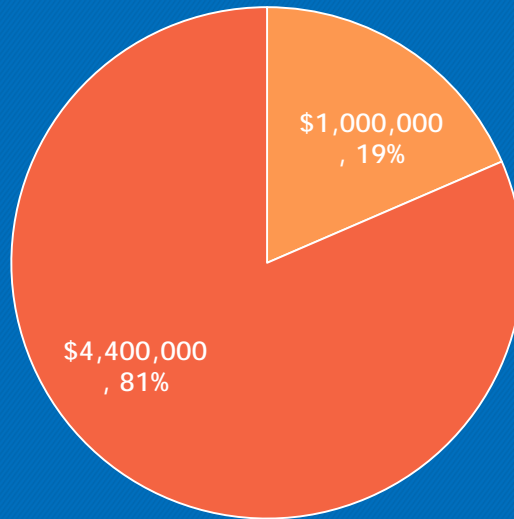
cyndi.dawson@resources.ca.gov



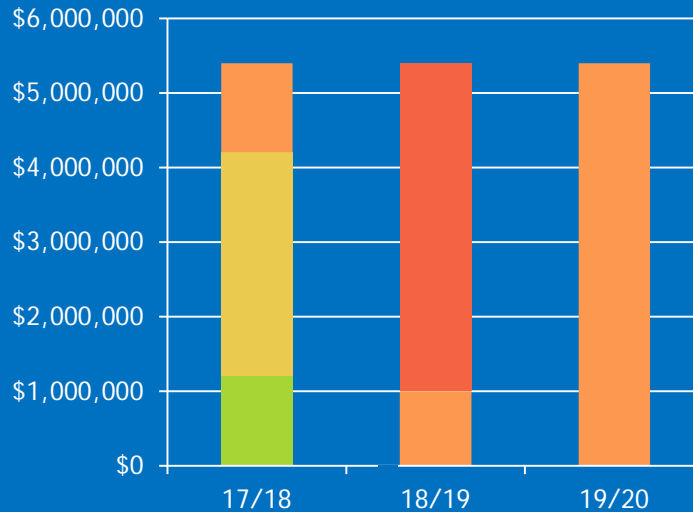
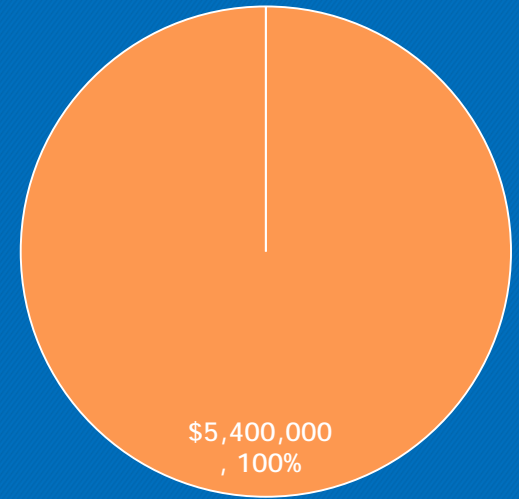
FY 17/18



FY 18/19



FY 19/20



■ Outreach & Education (Contract)

■ Enforcement (Contract)

■ Outreach & Education; Restoration; Enforcement (Competitive)

■ Evaluation (Competitive)

Marine Managed Area Improvement Act

§36700(f). A "state water quality protection area" is a nonterrestrial marine or estuarine area designated to protect marine species or biological communities from an undesirable alteration in natural water quality, including, but not limited to, areas of special biological significance that have been designated by the State Water Resources Control Board through its water quality control planning process. "Areas of special biological significance" are a subset of state water quality protection areas, and require special protection as determined by the State Water Resources Control Board pursuant to the California Ocean Plan adopted and reviewed pursuant to Article 4 (commencing with Section 13160) of Chapter 3 of Division 7 of the Water Code and pursuant to the Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays and Estuaries of California (California Thermal Plan) adopted by the state board

<https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=104566&inline>



California Ocean Plan - 2015

§III(E) – Implementation Provisions for Marine Managed Areas

3. The State Water Board may designate SWQPAs* to prevent the undesirable alteration of natural water quality within MPAs. These designations may include either SWQPAASBS or SWQPA-GP or in combination. In considering the designation of SWQPAs over MPAs, the State Water Board will consult with the affected Regional Water Quality Control Board, the Department of Fish and Game and the Department of Parks and Recreation, in accordance with the requirements of Appendix IV.

https://www.waterboards.ca.gov/water_issues/programs/ocean/docs/cop2015.pdf



Status of OTC Plants

- 9 plants achieved compliance - some early
- 6 plants are on track to achieve compliance
- 3 plants – replacement projects under construction
- *1 plant (Diablo) has announced plans to retire

