## CALIFORNIA'S NEWEST PARKS ARE UNDERWATER



Marina Interagency Coordinating Committee Sacramento, April 26, 2017 Rikki Eriksen (Grober-Dunsmore), Ph.D. California Marine Sanctuary Foundation

### TODAY'S TALK



- 1. Provide an overview of the statewide network of California's marine protected areas
- 2. Explore ways that MPAs, marinas, and water quality improvement actions can work together on statewide outreach and education for ocean health
- 3. Share a funding opportunity for assisting harbors and marinas to improve storm water

Throughout this, we want to gain your insights and suggestions for future collaborations

### CALIFORNIA'S LONG HISTORY OF LEADERSHIP IN PROTECTING SPECIAL PLACES

### PROBLEMS BENEATH THE WAVES

- 90% of big fish that existed in 1950s are gone
- Three-fourths of California's kelp forest disappeared since 1960s.
- 1990's West coast groundfish fishery collapse
- All five commercial abalone fisheries closed





#### Our oceans are not what they were 100 yrs ago

#### WHAT IS A MARINE PROTECTED AREA?



### MAKING A DIFFERENCE AROUND THE WORLD

#### Channel Islands Scientists found that lobsters were more abundant and larger in

protected areas, with an average of 5.49 more legal-sized lobsters caught per trap inside the refuges.

#### Mexico

Marine reserves provide a refuge for abalone to grow larger and more abundant. Abalone recovered quicker inside the reserve following natural disasters, making them more resilient to a die-off.

#### Cabo Pulmo, Baja After 10 years of

After 10 years of protection, the biomass of fish boomed more than 460% inside the reserve.

#### Kenya

MPAs protect important sources of food and lure tourists, providing important economic opportunities for local communities.

#### Phillipines

Abundance and average sizes of carnivorous fishes inside reserves are much larger and higher catches nearby benefit

#### **Great Barrier Reef**

Evidence reveals that notake reserves can help restock or replenish exploited fish populations, revealing that these reserves can actually benefit nearby fisheries.

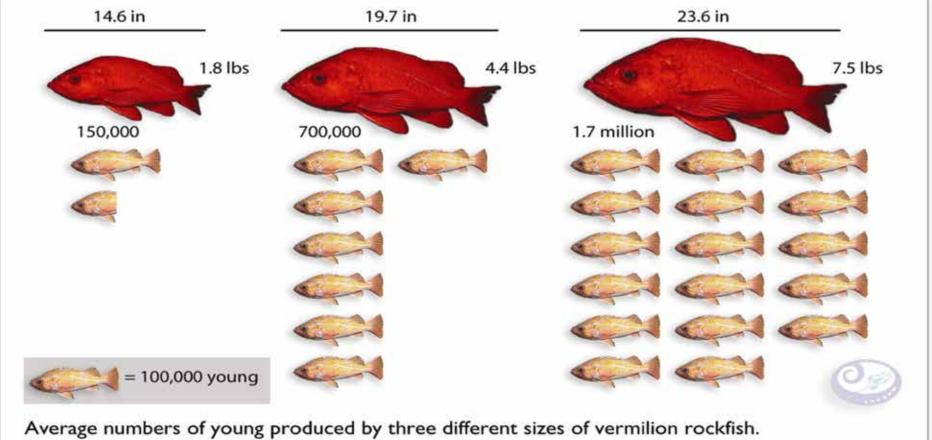
Work effectively for ecological, economic, recreational and cultural benefits around the world

### PROTECTING OCEAN ECOSYSTEMS....



NOT JUST SINGLE SPECIES

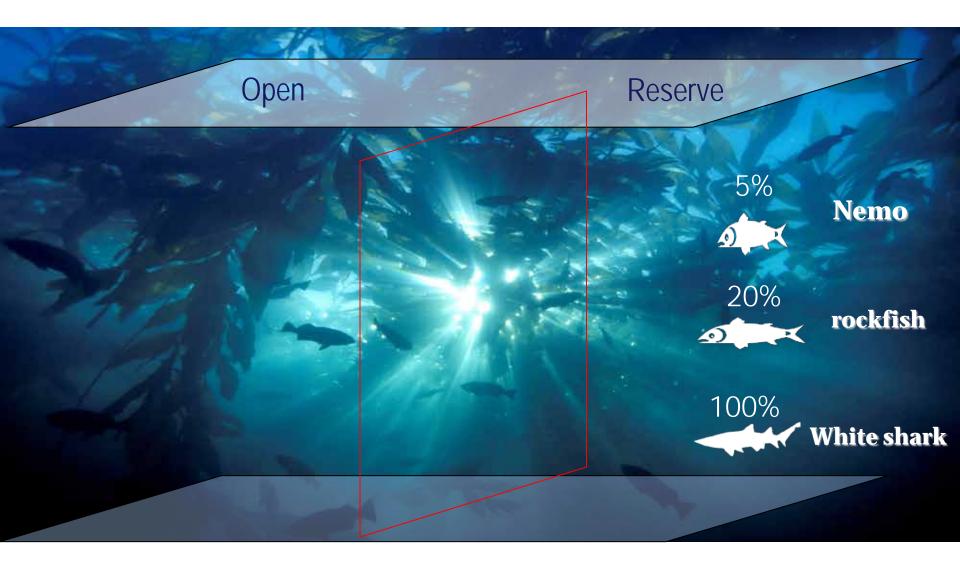
### SAFEGUARDING THE BOFFFS: BIG OLD FERTILE FEMALE FISH



Data: Love et al. (1990) NOAA Technical Report

- Protecting spawning stock is critical
- MPAs provide a place for old females to replenish the population

### SPILLOVER



## CALFORNIA RECOGNIZES THE NEED TO CREATE A NETWORK OF UNDERWATER PROTECTED AREAS



- 1999 California took bold action
- Managing Agency California Department of Fish and Wildlife

### A NOAH'S ARK APPROACH



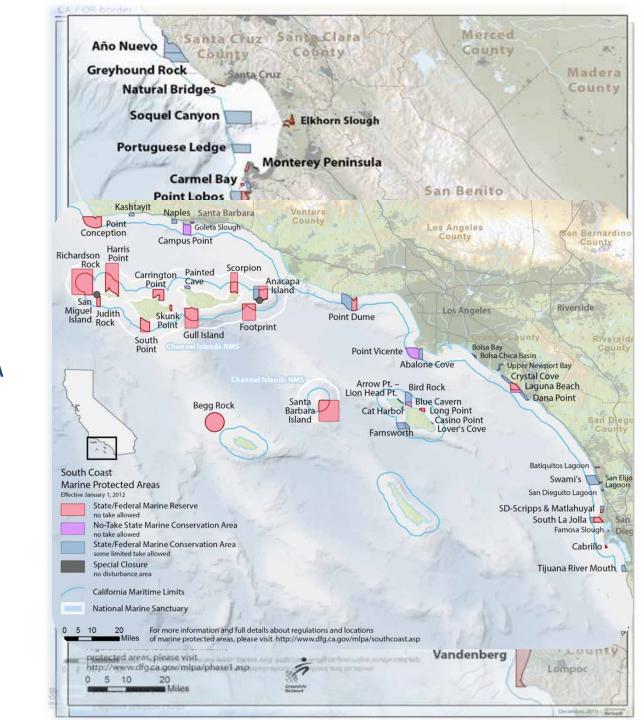
**KELP FOREST** 

## ESTUARIES, ROCKY REEF, DEEP CANYONS .....



### 124 MARINE PROTECTED AREAS

16% OF CALIFORNIA WATERS PROTECTED



#### Features of California's Marine Protected Areas

State Marine Reserve

All extractive activities are prohibited, keeping the area as free from human disturbance as possible to protect and restore ocean habitats and species while still allowing for recreation.



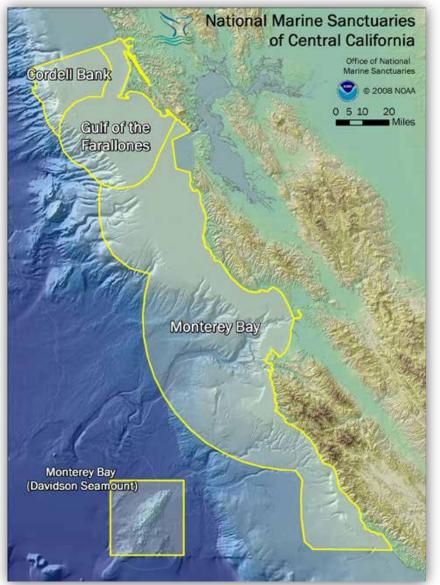
Areas with specific conservation goals that usually allow some limited recreational and/or commercial fishing.

#### Multi-Use Area National Marine Sanctuaries

All tourism, fishing and aquaculture activities permitted.

Allowed activities may include large scale commercial and artisanal fishing, diving and snorkeling.

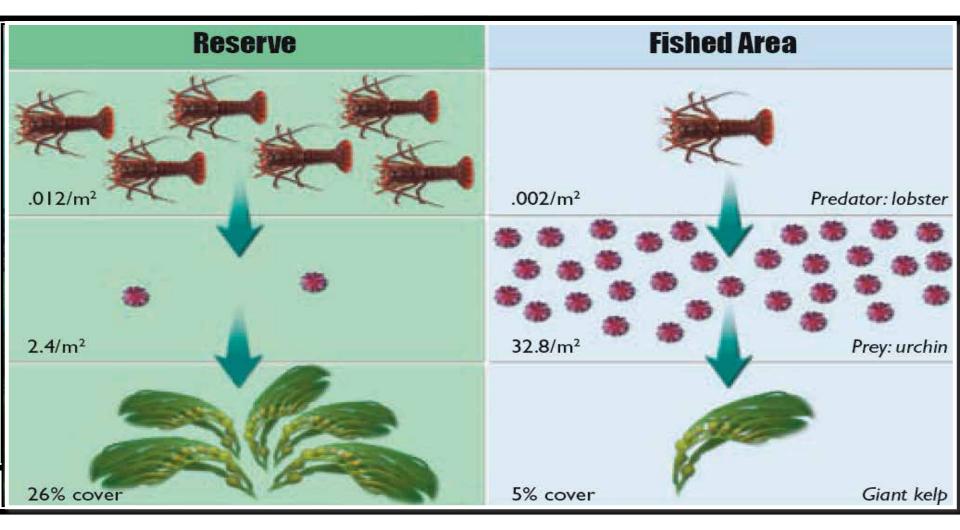
# NATIONAL MARINE SANCTUARY VS. MPA: WHAT'S THE DIFFERENCE?





- Federal vs. State
- Established for different purposes
  - State MPAs-biodiversity protection
- Sanctuary has no added fishing regulations
- State MPAs much smaller

## SHINING SUCCESSES: Older MPAs glimpse into a possible future for California



In Channel Islands and Pt. Lobos- in place for close to 20 years, kelp forest is recovering following protection of lobster populations.

Before protection, loss of lobsters allowed explosion of sea urchin, which in turn preyed on kelp

### BALANCING USES: COMMERCIAL FISHING



Throughout state, MPAs designed with extensive input from commercial fishermen to avoid areas close to port and critical fishing grounds remained open Recent study shows that in some areas 9 years after being put in place, landings and revenues are increasing. Not the case in all places, but over time the hope is that MPAs create source of future stocks.

### SPORT FISHING



- Provided Valuable input: Sport Fishing important activity in California.
- Most MPAs located away from favorite fishing areas.
- Other MPAs prohibit commercial fishing, allow recreational.
- Partners in management

## 2) EXPLORING WAYS TO WORK TOGETHER



- Jurisdiction of Waterboards, Harbors, Marinas and MPAs overlap Critical to success of MPAs and water quality
- Overlap in education and outreach
- Funding (Prop 1, Once Through Cooling and other opportunities)
- Permitting considerations of Regional Waterboards inside MPAs
- Coordinating scientific monitoring

## WHY MPAS MATTER TO MARINAS?



- May increase boat traffic to nearby harbors and marinas
- As climate change and population growth continues, increased visitation and recreational activities on our coast
- Shift in economic activities
- Changing user group demography

### WHY MARINAS MATTER TO MPAS?



- Harbors are prime opportunities for outreach and stewardship
- Entry point to most underwater parks
- Enforcement frontline

### EDUCATION AND OUTREACH in MARINAS



- We work closely with many of you on outreach and education
- Target ocean recreation users
- Multi-media approach: print publications, signage, social media, online, relationship building
- Collaborative and cross- messaging approach: (Clean Marinas, Seabird Protection, Marine Mammal Protection, Wildlife Disturbance, Water Quality)

## Crescent City Docation TBD STATEWIDE OUTREACH

Pelican State Beach Trailhead

Redwood Creek Parking Lot

Humboldt Bay location TBD South Cape Mendocino southern border South of Big Flat Creek mouth Sea Lion Gulch northern borderUsal Beach Up Ten Mile River @39 32.382 Mouth of Navarro River Schooner Gulch State Beach Sea Ranch - Middle HedgFort Ross Point Arena Trailhe Miller Boat Launch Jenner Boat Launch Maverick's / Pillar Point Bluff Parking Lot

Main entrance Fitzgerald main ramp Seal Cove Stairs Pillar Point Harbor Santa Cruz Harbor

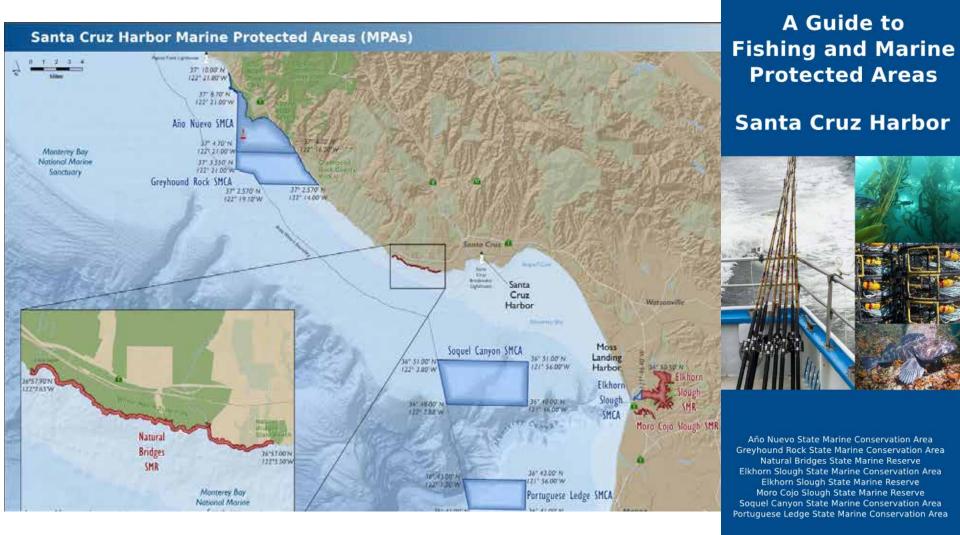
Ano Nuevo Greyhound Rock Natural Bridges Monterey Breakwater Andrew Molera Leffingwell Piedras Blancas Piedras Blancas @VP3 or VP4 Tidelands Park UCSB pumphouse Coal Oil Point Ellwood

Ellwood Bluffs Trailhead

Gaviota State Beachroad Beach/Thancas Lagoon

El Matador State Beach Point Vicente Interpretive Center Trail Casino Point Dive Park Moonlight-Beach Harbor Island Location (BD

### EDUCATION AND OUTREACH TOOLS



Waterproof boating brochures available to harbors and marinas throughout the state Cross- messaging, resource distribution, getting to the right audience

## BROCHURES

A Guide to Fishing and Marine Protected Areas

#### **Ventura Harbor**



Vandenberg, Point Conception, Point Dume, Judith Rock, Carrington Point, Skunk Point, and Begg Rock State Marine Reserves

Richardson Rock, Harris Point, South Point, Gull Island, Scorpion, Footprint, Anacapa Island, and Santa Barbara Island State & Federal Marine Reserves

Campus Point and Goleta Slough No-Take State Marine Conservation Areas

Kashtayit, Naples, Point Dume, and Painted Cave State Marine Conservation Areas

Anacapa Island State & Federal Marine Conservation Area

San Miguel Island and Anacapa Island Special Closures

A Guide to Fishing and Marine Protected Areas

> San Francisco Coastal Region

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A Guide to Fishing and Marine Protected Areas

#### Humboldt Bay Harbor

A Guide to Fishing and Marin Protected Areas

#### **Noyo Harbor**



Reading Rock State Marine Reserve Reading Rock State Marine Conservation Samoa State Marine Conservation Are South Humboldt Bay State Marine Recrea Management Area Sugarloaf Island Special Closure South Cape Mendocino State Marine Res Steamboat Rock Special Closure

A Guide to Fishing and Marine Protected Areas

#### **Dana Point Harbor**

Laguna Beach and Long Point State Marine Reserves

Point Vicente, Bolsa Chica Basin, Laguna Beach, Casino Point, and Blue Cavern Onshore No-Take State Marine Conservation Areas

Abalone Cove, Bolsa Bay, Upper Newport Bay, Crystal Cove, Dana Point, Lover's Cove, Blue Cavern Offshore, Arrow Point to Llon Head Point, Cat Harbor, Farnsworth Onshore, and Farnsworth Offshore State Marine Conservation Areas

Ten Mile and Point Cabrillo State Marine Reserves

Ten Mile Beach, Ten Mile Estuary, MacKerricher, and Russian Gulch State Marine Conservation Areas

### HARBOR SIGNAGE AT > 50 LOCATIONS

#### **Conserving California's Coastal Treasures**



California's marine protected areas (MPAs) conserve, restore, and improve the health of our ocean, similar to national parks and forests on land. The California MPA network includes MPAs and other protected areas. Each area is unique in its purpose and allowed uses.

#### Protected areas around Emeryville Marina are:

- Point Reyes, Estero de Limantour, North Farallon Islands, Southeast Farallon Island, and Montara State Marine Reserves (SMR)
  No table domage, injury, or procession of any living, yet k oir, or contural marine resource is alloyed
- Drake's Estero, Point Reyes, Duxbury Reef, Southeast Farallon Island, and Pillar Point State Marine Conservation Areas (SMCA) Some recreational and/or commercial take of marine resources may be allowed.
- Point Reyes Headlands, Point Resistance Rock, Double Point/Stormy Stack, North Farallon Islands, Southeast Farallon Island, and Egg (Devil's Slide) Rock Special Closures

Prohibits access or restricts boating activities in waters adjacent to seabird nesting and rookery sites, and marine mammal haul-out sites.

#### MPAs — Good for the Ocean; Good for You! Know the Rules Before You Head Out.

For Ocean Fishing Laws and Regulations, go to: www.dfg.ca.gov/marine/regulations

Additional MPAs exist within San Francisco Bay. For MPA boundaries, maps, coordinates, and allowed uses, go to: www.dfg.ca.gov/marine/MPA



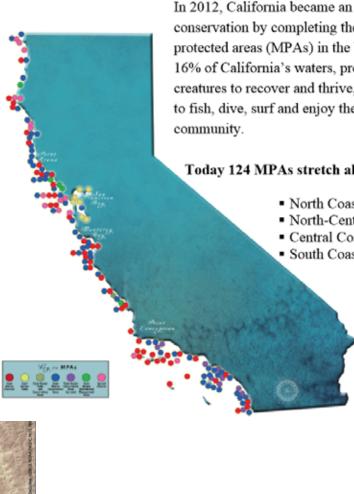
CROSS MESSAGING OPPORTUNITIES: Clean marinas, pumpout stations, coast guard, contact information

### TAILORED WEB PAGES

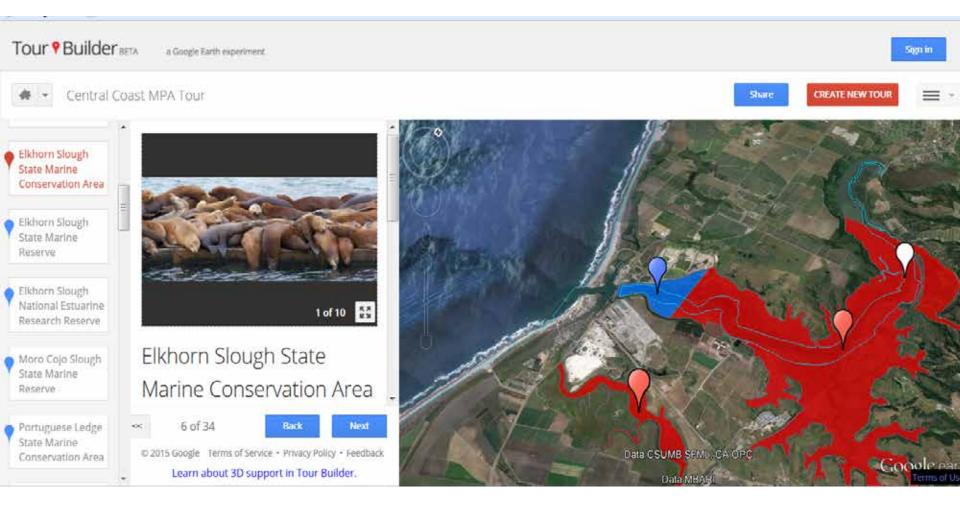
#### **MPAs Near Humboldt**

Situated along the Pacific coast in Northern California's rugged coastal mountain rang Humboldt County is known for its remoteness, old growth redwood trees and 110 mil coastline. Humboldt Bay, located in the middle of Humboldt County is the largest protected body of water on the West Coast between San Francisco Bay and Puget Sou home to more than 100 plant species, 300 invertebrate species, 100 fish species, and 2 species, the bay and its complex system of marshes and grasses support thousands of 1 and local shore birds. Additionally, the nearby coastal waters offer some of the best bo fishing and recreational opportunities along the California Coast.





## ON-LINE OUTREACH Google Earth tours



Chamber of Commerce, Visitor websites, Harbor websites, ocean recreation businesses Are there linkages that we should be making? Are there websites that we should be cross –promoting?

### TARGETING TRADE SHOWS AND BOAT SHOWS

California is leading the nation in ocean protection with the completion of the first statewide network of marine protected areas.

Marine protected areas, often called underwater parks, conserve our "Yosemites of the Sea." Places like Big Sur's submarine canyons and rocky pinnacles that are home to playful sea otters, rare coldwater corals, and large rockfish.

Scientific studies show that protecting special underwater places leads to bigger fish, more fish, and provides a place for marine life to recover and thrive. parks, protect our "Yosemites of the Sea". California's NPAs add to the fasting legacy of healthy coasts for future generations to enjoy.

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network of marine protected areas.

Marine protected areas, often called underwater

California's coastal ocean supports a multi-billion dollar economy. Safeguarding this natural capital through marine protection is a wise investment in the state's future.



There are many ways to enjoy California's marine protected areas. You can swim, dive, surf, kayak, watch birds and marine mammals, and much more. Or, simply relax in nature.

## MARINA EXHIBITS

#### TURNING THE FIDE CALIFORNIA'S UNDERWATER PARKS

#### **WELCOME to Pillar Point Harbor**

#### Working and Playing on the Water

Enjoy the history and activities of Pillar Point. You can buy fresh fish, watch commercial fishing fleets, rent a kayak, or go whalewatching, All from right here.

Pillar Point is home to a hundreds of recreational and commercial boats. With 369 berths tucked in behind a protective breakwater, Pillar Point is one of the safest harbors in the country.

#### A Gateway to the Ocean's Bounty



Pillar Point Harbor is a gateway to the "Serengeti of the Sea", one of the most productive, diverse stretches of coastline. These underwater treasures are protected by a state network of marine protected areas and federally designated national marine sanctuaries. To learn more see the marine protected areas section of this kiosk.

#### Salmon Hallbut Surfperch Inversibrates Greundfish Harber Marine Protected Areas Information not iphighted above can be found on adjacent signs.

#### Harbor Celebrations

The Harbor hosts many public events including the annual Mavericks surfing competition, and the Christmas boat decorating contest, Check out the harbor website for a schedule of events.

#### Clean Marina Program



Pillar Point Harbor Saves Lives! Search and Rescue Operations



Pillar Point Harbor provides search and rescue services to all boaters. Our well-trained and dedicated crew performs an average of 110 rescues each year, saving many lives and millions of dollars in boats and equipment.

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#### **Built as a Safe Haven**

Coastal residents wanted a breakwater built to protect their vital fishing fleet, and San Mateo County responded. With help from Army Corps of Engineers, work started after World War II.

For more information visit www.smharbor.com

California leads the nation in safeguarding our ocean habitats and marine life. New hope is being secured for ocean ecosystems as California's network of marine protected areas, or underwater parks, establishes safe havens for our future.

#### COASTAL TREASURES

Special places such as kelp forests, rocky reefs, and coastal wetlands

Over 124 state marine protected areas and special closure zones (16% of California's coastal waters) Point

nception

Homes for sea otters and elephant seals; rockfish and garibaldis; abalone and spiny lobsters; and millions of other marine organisms

Improved opportunities for research, recreation, exploration and education



### **MPA COLLABORATIVES**





- County by county locally organized state, federal, local agencies, tribes
- Education and outreach, Enforcement and compliance, and Research and Monitoring
- Please join in- ask for more information to get on list serve and participate

### 3) STORMWATER IMPROVEMENT PROJECT HARBORS AND MARINAS CALIFORNIA-WIDE



Timeline- Late 2017 RFP Funding 2018 Opportunities for coordination

#### MARINAS:STRATEGIC FRONTLINE OF DEFENSE AGAINST NONPOINT SOURCE POLLUTION



Over 400 statewide

Improve water quality and critical in restoring and protecting important coastal species and habitats Could help MPAs meet their statutory goals Water quality: reflection of pollutants (sewage, parking lots, dockside cleaning, fuel and boat maintenance) Multiple upstream sources

## EQUIPMENT OFFERED



- Trash skimmers
- Bilge pumpout stations
- Solar trash compactors
- Cigarette butt containers
- Oil response trailers

### PROPOSAL



- Install nonpoint source prevention equipment spanning from Crescent City to San Diego
- Will improve coastal water quality in at least 18 Marine Managed Areas (including ASBS, MPAs, National sanctuaries, national estuaries)
- Tailored menu of equipment at each harbor to account for coastal morphology, progress on implementing clean boating standards and stressor loading.

#### Storm Drain Improvements and Trash Capture Devices

#### **Product- FleXstorm Pure: Permanent Inlet Protection**

#### **Product Description-**

FleXstorm storm drain filter systems will prevent oil, sediment and other debris from entering storm drains. Filters range from 80%-99% removal efficiency of street-sweep sized particles.





For More Information: http://www.inletfilters.com/products/flexstorm-pure-permanent-inlet-protection

#### **Bilgewater Pumpout System**

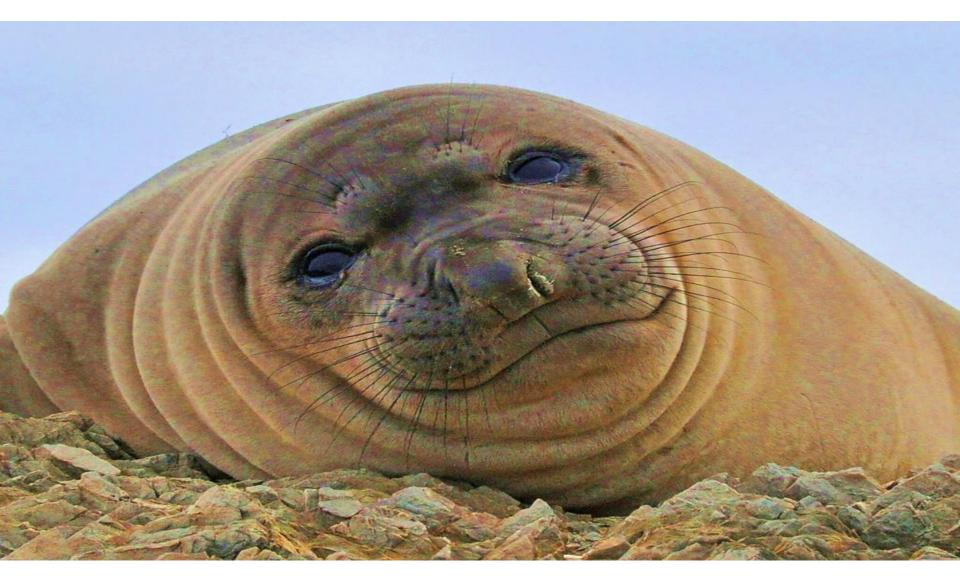
#### Product Description-The Keco Bilge Pump will remove and process recreational and commercial vessels bilge water to levels, which exceed the guidelines for ultimate discharge to municipal sewage connection. The cutting edge system will collect and store waste oil for proper removal and disposal.

## **QUESTIONS FOR YOU?**



- Can you suggest locations?
- Who else can we coordinate with?
- Suggestions for dealing with CEQA?
- Suggestions for other types of equipment?
- Other ways to collaborate?

### THANK YOU FOR ALL YOU DO IN SUPPORT OF OUR OCEAN



### WWW.CALIFORNIAMPAS.ORG