

**MONTEREY BAY NATIONAL MARINE SANCTUARY  
ADVISORY COUNCIL**

**Member Announcements  
June 2020**

**Non-Governmental seats**

**At-Large northern region**

*Dan Haifley (primary)*

- Monterey Bay Chapter of the National Marine Sanctuary Foundation has continued to raise funds for MBNMS operations (whale rescue, Bay Net, Team Ocean, and public awareness) and advocate for it. The chapter also is planning to hold our events, contingent on the public health crisis and with appropriate social distancing and precautions, including a concert at Point Sixteen in Big Sur, the Sea Stars Brunch, Sardine Factory event in Monterey and a holiday party in Santa Cruz. If needed, we may opt for virtual gatherings, where appropriate.
- On June 5, National Marine Sanctuary Foundation President and CEO Kris Sarri issued a statement on the foundation (and chapters') commitment on environmental and racial justice. The local chapter has a new website ([montereybayfoundation.org](http://montereybayfoundation.org)) and all SAC members are encouraged to engage with our social media on Instagram and Facebook.

**Business/Industry**

*Tom Rowley (alternate)*

The two major industries of the Central Coast -- Agriculture and Tourism are both struggling to regain economic momentum during the Covid-19 pandemic that shutdown all but essential businesses in mid-March. Monterey County Health Director Edward Moreno reports a high number of confirmed infections in Salinas Valley agricultural workers. Yet total fatalities in the County remain relatively low at only 11 thru June 11th. The hospitality industry has been essentially shut down since mid-March because of the state-wide order to "Shelter in Place" (SIP) and for all citizens to avoid non-essential travel. Most major hotels shuttered their respective doors.

After a relaxation of the SIP rules and the permitted reopening of "dine-in" restaurants in early June, major hotels -- including lodging facilities at Pebble Beach resorts -- began phasing in operations starting the week of June 15th. Some golf courses remain open on a limited basis. In the meantime, almost all major tourist events & conventions have been cancelled for later this year, including the Monterey Jazz Festival in September and the Big Sur Marathon (delayed until Fall from late April, but later cancelled.) The race schedule is tentatively due to resume in August at Laguna Seca Race Track, and a revised track schedule for the remainder of the year was recently announced.

Lack of new water allocations for housing and for business development is still a fact of life on the Monterey Peninsula (MP). At the August meeting of the California Coastal Commission, it is scheduled to hold a continued public hearing on the appeal by Cal-Am Water for a permit to use a slant-well feed water system at the proposed desalination plant at the former CEMEX sand plant north of Marina. The proposed desal plant is one of three components of the MP Water Supply Project (MPWSP) -- the other components are Aquifer Storage & Recovery (ASR) + Groundwater Recycling (GWR aka Pure Water Mtry).

**Commercial Fishing**

*Kathy Fosmark (primary)*

See attached comment letter to John Armor regarding the Chumash Heritage National Marine Sanctuary nomination.

## **Education**

*Pamela Neeb Wade (primary)*

### **Current Seat Activities**

- Alternate seat open

### **Upcoming Activities**

- Wahine Project is offering in person summer camp
- Seymour Marine Discovery Center virtual summer camp
- Pacific Grove Natural History Museum in person summer camp
- Monterey Bay Aquarium- new online courses

### **Your Constituent Challenges and Concerns**

- Outdoor science and environmental education programs have had a significant loss in funding due to COVID-19.
- Some programs have reported that they are unable to reopen
- A recent survey was issued by The Lawrence Hall of Science found that California is facing greater losses than other states.
- The numbers of staff furloughs and layoffs are expected to increase through December 2020.
- Students have been learning at home since March
- Distance (online) learning presents challenges for students without internet access or available technology— known as the digital divide
- School Districts have come up with creative ways to address this challenge
- The CA Department of Education has released plan for the reopening public schools

### **Related Web Links to Member Report**

- Lawrence Hall of Science- [https://www.lawrencehallofscience.org/sites/default/files/EE\\_A\\_Field\\_at\\_Risk\\_Policy\\_Brief.pdf](https://www.lawrencehallofscience.org/sites/default/files/EE_A_Field_at_Risk_Policy_Brief.pdf)
- CA Department of Education -<https://www.cde.ca.gov/ls/he/hn/strongertogether.asp>
- Wahine Project- <https://www.thewahineproject.org/programs--camps.html>
- Seymour Marine Discovery Center- <https://seymourcenter.ucsc.edu/learn/youth-teen-programs/ocean-explorers-summer-camp/>
- Pacific Grove Natural History Museum- <https://www.pgmuseum.org/summer-camp>
- Monterey Bay Aquarium- <https://www.montereybayaquarium.org/for-educators/learning-at-home>

## **Recreational Fishing**

*Jose Montes (alternate)*

The CoVid-19 pandemic has wreaked havoc with recreational fishing. Party Boats were closed to fishing until this week. They are currently fishing salmon and rockcod with some virus restrictions. For recreational anglers salmon season started with closed ramps and only those with berths or commercial permits being able to get out. There was a lot of confusion about whether you had to fish solo or only with household members. When ramps did open up, there was still confusion about who you could have on your boat and whether you had to maintain social distancing. Rockcod limits are the rule as always with party boats and salmon mooching has produced about half a fish per rod. Salmon this year has been fantastic. Lots of salmon were being caught and continue to be caught, although it's slowed down a bit. Halibut fishing has been the best it's been in years. The availability of fresh live squid has made it easier. From Monterey to Pajaro, limits have been the rule for those who regularly fish for them. For Monterey boaters Marina State Beach to Mulligans has been the hot area for salmon. Due to the unusually warm water they've been deep. Near the bottom actually. Ramps are now open and private boats are going out with multiple anglers. The winds have been relentless so any hopes of anyone taking a scouting trip to check out warm water currents offshore have been curtailed.

## **Governmental Members**

### **California Department of Fish and Wildlife**

*Paul Reilly (primary) and Chelsea Protasio (alternate)*

Both the recreational and commercial salmon seasons in the Monterey area opened on May 1. Sport anglers averaged about one fish per rod the first week while the commercial boats landed 40-100 fish per day. During the second week sport anglers averaged about one half fish per rod and the commercial boats landed about 25 fish per day.

California Department of Fish and Wildlife (CDFW) Director Charlton H. Bonham issued a declaration closing the California commercial Dungeness crab fishery south of the Sonoma/Mendocino county line (Districts 10, 17, 18 and 19) on May 15 to protect whales and sea turtles from entanglement in fishing gear. The closure will remain in place for the remainder of the 2019-20 commercial Dungeness crab season. The commercial Dungeness crab fishery currently remains open north of the Sonoma/Mendocino county line, and the recreational crab fishery remains open statewide. Director Bonham will issue any additional declarations on or before June 15 and July 1.

Following the closure in Districts 10, 17, 18 and 19, Director Bonham authorized operations under the CDFW Lost or Abandoned Commercial Dungeness Crab Trap Gear Retrieval Program starting at 6:00 a.m. on May 22. Eligible entities (sport or commercial fishing associations, harbors, local government agencies, and non-profit organizations) can apply for a CDFW Retrieval Permit, which authorizes up to 10 individuals and vessels to remove lost or abandoned commercial Dungeness crab gear from ocean waters. Three permits have been issued thus far, including one for Monterey Bay.

CDFW has released proposed regulations which will implement the Risk Assessment and Mitigation Program. Proposed regulatory language, rationale, and associated documents are available at <https://wildlife.ca.gov/Notices/Regulations/RAMP>. Written public comments will be accepted until 11:59 p.m. on June 29, 2020 and a virtual public hearing will be held on June 29, 2020.

Market squid was the main Coastal Pelagic Species fished and sampled in Monterey. Many southern California vessels travelled north to Monterey to fish. Fishing activity occurred mostly during the day due to high winds and rough seas, which postponed vessel departures from the harbor until early morning. The majority of squid fishing was concentrated off Pacific Grove from April to mid-May, shifted to waters off Seaside in late May, and moved north of Moss Landing in early June. Additionally, Pacific sardine was landed under a federal Exempted Fishing Permit through the end of May and early June. These landings were sampled for biological data by CDFW as part of a collaborative survey with the California Wetfish Producers Association to help better inform stock status.

In May observed fishing effort along Monterey County sandy beaches was at unprecedented high levels. A combination of people out of work as a consequence of COVID-19 restrictions, few other opportunities for recreation, favorable weather, and a good Striped Bass bite likely were contributing factors. Anglers adapted to state beach parking lot closures and found the best walk-in points. In early June most parking lots with access to beaches re-opened.

All public boat launch ramps along Monterey Bay area are now open. However, due to COVID-19 concerns, our samplers are not interviewing returning recreational anglers as they normally would; instead, samplers are conducting roving effort checks to document the number of trailered vessels engaged in fishing.

### **California Natural Resources Agency**

*Mark Gold (primary) and Tova Handelman (alternate)*

Current Seat Activities

The Ocean Protection Council will be considering two MPA-related action items in its meetings on June 19<sup>th</sup> from 1:00-4:00pm (see link below).

- Item 6a: Tribal Marine Stewards Pilot Program

If approved, this project will disburse up to \$1,000,000 to the California Indian Environmental Alliance (CIEA) to establish a Tribal Marine Stewards Network pilot program composed of four partner Tribes (Tolowa Dee-ni' Nation, Resighini Rancheria, Kashia Band of Pomo Indians, and the Amah Mutsun Tribal Band), supported by two nongovernmental organizations (CIEA and Ecotrust) and focused on

MPA monitoring. The Tribal Marine Stewards Network will work closely with OPC, CDFW, and other partners to identify shared priorities, build Tribal capacity, and conduct research and monitoring activities.

- Item 6b: Communications Strategy for 2022 Adaptive Management Review  
If approved, this project will disburse up to \$500,000 to a contractor(s) selected through a competitive process to develop a comprehensive communications plan for the State of California that will help it raise awareness of California's MPA Management Program's first decadal management review of the MPA network slated to occur in or around December 2022.

MBNMSAC members may also be interested in Item 8 which will consider the authorization of funds for a statewide kelp recovery research program and Item 9 which will consider the authorization of funds to address microplastics in coastal and marine ecosystems.

Related Web Links to Member Report

Ocean Protection Council's Virtual Public Meeting agenda for June 19, 2020 from 1:00-4:00pm:

<http://www.opc.ca.gov/2020/05/ocean-protection-council-meeting-june-19-2020/>

## **Non-Voting Members**

### **United States Coast Guard**

*Commander Jason Brand (primary) and Lieutenant Jake Joseph (alternate)*

Operational Hours: In Q2 of FY20, the US Coast Guard executed 54 dedicated NMS overflight hours with an additional 36 ancillary flight hours in MBNMS. To date in Q3, 40 dedicated NMS overflight hours with an additional 82 ancillary hours.

b. Significant MPR Events:

- i. On 17 April 20, USCG conducted a surface patrol and queried vessels in Monterey Bay after reports of multiple deceased sea lions/seals in the vicinity of Del Monte Beach in Monterey were received.
- ii. On 11 May 20, USCG assisted in a deceased sea lion underneath a local pier in Monterey.
- iii. On 18 May 20, USCG along with the NOAA Response Team arrived on-scene with an entangled whale approximately 6NM NW of Moss Landing. NOAA disentanglement team onboard the SEA STATE was successful.

c. Memorandum of Agreement (MOA): On 15 April 2020, California Department of Fish and Wildlife (CDFW) and the Coast Guard entered into an enforcement agreement that expands partnership capability under state assistance for Marine Protected Areas.

## **Working Group Updates**

### **Research Activity Panel Working Group Update**

#### **RAP Meeting**

The RAP has not met since January due to the COVID-19 pandemic. The chair, vice-chair and MBNMS research staff have held conference calls to plan RAP review of the Sanctuary Management Plan Update as part of the forthcoming public comment period.

#### **Items of Interest contributed by RAP Members**

##### **Humpback Whale Observation during COVID-19-related Decreases in Vessel Traffic**

Brandon Southall reports that a multi-partner team has been doing tissue sampling in Monterey Bay over the past few months to look at possible changes/reductions in stress hormone levels in humpback whales as a result of the decreased vessel traffic and whale watching presence related to COVID-19. (The crew uses specific protocols and approvals for social distancing and other safety measures.) This has expanded to a multi-site analysis with sampling in Stellwagen Bank NMS and the Olympic Coast. The work is being done under existing permits and authorizations with costs covered by the team and support from the non-profit California Ocean Alliance. The researchers have grant proposals submitted to try and support some of the analyses. Ari

Friedlaender (UCSC) is the lead on this effort, which is coordinated with Stanford/Hopkins (Jeremy Goldbogen), MBARI (John Ryan), Marine Mammal Center, California Ocean Alliance, and others nationally.

### Moss Landing Marine Laboratories forms a new partnership with NOAA through the Cooperative Institute for Marine, Earth, and Atmospheric Systems (CIMEAS)

Moss Landing Marine Laboratories and San Jose State University have partnered with the National Oceanic and Atmospheric Administration (NOAA) as a founding organization in the Cooperative Institute for Marine, Earth, and Atmospheric Systems (CIMEAS). Hosted at UC San Diego, this cooperative institute will conduct collaborative, multidisciplinary research on climate, oceans, and ecosystems while training the next generation of scientists. Partners in this exciting new venture include the Scripps Institution of Oceanography, Humboldt State University, California State University Los Angeles, Farallon Institute, UC Davis, UC Los Angeles, UC Santa Barbara, and UC Santa Cruz.

### New Laser System Provides 3D Reconstructions of Living Deep-Sea Animals and Mucus Filters

MBARI Principal Engineer Kakani Katija is a partner on MBNMS Sur Ridge cruises and hopes to use the Fulmar to launch a vehicle that automatically follows gelatinous animals, and the research described below is relevant to climate change and microplastics. This is fascinating high-tech stuff recently published in one of science's most prestigious journals, NATURE.

Full Story:

MOSS LANDING, CA—Living in an essentially zero-gravity environment, many deep-sea animals have evolved soft, gelatinous bodies and collect food using elaborate mucus filters. Until now, studying these delicate structures has been virtually impossible. A new study published in the journal Nature describes a unique laser-based system for constructing 3D models of diaphanous marine animals and the mucus structures they secrete.

According to Kakani Katija, MBARI Principal Engineer and the lead author on the new paper, “Mucus is ubiquitous in the ocean, and complex mucus structures are made by animals for feeding, health, and protection. Now that we have a way to visualize these structures deep below the surface we can finally understand how they function and what roles they play in the ocean.”

For this study, the researchers focused on one of the most prolific mucus architects, deep-sea animals called larvaceans. Larvaceans are abundant throughout the world’s ocean basins and range from less than one centimeter to about 10 centimeters in length. So-called “giant” larvaceans create balloon-like mucus webs that can be up to a meter across. Inside these outer filters are smaller, fist-sized inner filters that the animals use to feed on tiny particles and organisms, ranging from less than a micron to a few millimeters in size.

Despite their insubstantial bodies, larvaceans remove vast amounts of carbon-rich food out of the surrounding water. When their mucus filters become clogged the animals release the mucus, which sinks rapidly to the seafloor. This helps the ocean remove carbon dioxide from the atmosphere and carries microplastics from the water column down to the seafloor.

Researchers, like MBARI Senior Scientist and co-author Bruce Robison, have long been interested in how larvaceans can filter a wide variety of particles while processing very large volumes of water (up to 80 liters an hour). Previous studies have looked at smaller larvacean filters in the laboratory, but this is the first study to provide quantitative data about these mucus structures in the open ocean.

To gather these data, Katija, who heads MBARI’s Bioinspiration Lab, worked with a team of engineers, scientists, and submersible pilots to develop an instrument called DeepPIV (PIV stands for particle imaging velocimetry). Mounted on a remotely operated vehicle (ROV), the DeepPIV instrument projects a sheet of laser light that illuminates particles in the water, like dust motes in a sunbeam. By recording the movement of these particles in video, researchers can quantify tiny currents around marine animals as well as water flowing through their filters and their transparent bodies.

During field deployments of the DeepPIV system, Katija and her colleagues discovered that, as the ROV moved back and forth, the sheet of laser light revealed a series of cross sections through the transparent, gelatinous bodies and the mucus filters of giant larvaceans. By assembling a series of these cross-sectional images, the team was able to create three-dimensional reconstructions of individual larvaceans and their filters, much as radiologists do following a CAT scan of a human body.

Collecting high-fidelity video imagery required skilled piloting of MBARI's ROVs. "Using DeepPIV to collect these 3D cross sections is probably the hardest thing I've ever done with an ROV," said Knute Brekke, chief pilot for ROV Doc Ricketts. "We were using a 12,000-pound robot to move a millimeter-thick laser sheet back and forth through a larvacean and its fist-sized mucus filter that was drifting hundreds of meters below the ocean surface."

Combining three-dimensional models of larvacean filters with observations of flow patterns through the filters, Katija and her collaborators were able, for the first time, to identify the shape and function of different parts of the larvacean's inner filter. Using 3D rendering software, they were able to virtually "fly through" the inner filter and study the flow of fluid and particles through different parts of the filter.

"Now we have a technique for understanding the form of these complex structures, and how they function," Katija explained. "No one has done in situ 3D reconstructions of mucus forms like this before."

"Among other things, we're hoping to understand how larvaceans build and inflate these structures," she continued. "This could help us design better 3D printers or build complex inflatable structures that could be used in a number of environments," including underwater and in outer space.

Expanding on this work, members of the Bioinspiration Lab are experimenting with new 3D plenoptic imaging systems that can capture highly-precise information about the intensity, color, and direction of light in a scene. They are also collaborating on the development of new underwater robots that will be able to follow gelatinous animals through the water for hours or days at a time.

"In this paper, we have demonstrated a new system that operates well with a variety of underwater vehicles and midwater organisms," said Katija. "Now that we have a tool to study the mucus filtering systems found throughout the ocean, we can finally bring to light some of nature's most complex structures."

"DeepPIV has revealed a marvel of natural engineering in the structure of these complex and intricate filtering webs," said Robison. "And in DeepPIV, human engineering has produced a powerful new tool for investigating these and other mysteries of the deep ocean."

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Original journal article:

Katija, K., G. Troni J. Daniels, K. Lance, R. Sherlock, A.D. Sherman, and B.H. Robison (Posted online June 3, 2020). Revealing enigmatic mucus structures in the deep sea using DeepPIV. *Nature*. doi 10.1038/s41586-020-2345-2

**Alliance of Communities for Sustainable Fisheries**

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Mr. John Armor, Director

June 12, 2020

NOAA Office of National Marine Sanctuaries

1305 East-West Highway, 11<sup>th</sup> Floor

Silver Springs, MD 20910

**Re: Docket Number NOAA–NOS–2020–0063.**

<https://www.regulations.gov>

**RE: Remove the Nomination of the Chumash Heritage National Marine Sanctuary (CHNMS)**

Dear Director Armor,

Please accept these comments from the Alliance of Communities for Sustainable Fisheries (ACSF) on the reasons the CHNMS nomination should be removed from the Site Evaluation List. The ACSF appreciates that NOAA has provided this opportunity to comment.

**About the Alliance of Communities for Sustainable Fisheries**

The ACSF is an 18-year-old 501(c) 3 not-for-profit organization, founded for the purposes of educating the public on fisheries issues, connecting fishing men and women (“fishermen”) with their communities, and to represent fishing interests in state and federal processes. The ACSF is a regional organization, comprised of commercial fishing leaders representing Monterey, Moss Landing, Santa Cruz, Morro Bay, Pillar Point, and Port San Luis, on our Board of Directors. Port communities, several recreational fishing organizations, and the California Wetfish Producers Association (squid, sardines, etc), also have representatives on our Board. Thus, the ACSF represents a large cross-section of fishing and community interests for the Central Coast of California, which includes the proposed CHNMS area. ACSF members have extensive experience in working with California’s National Marine Sanctuaries (NMS).

This long experience has demonstrated certain benefits of NMS designation, but also revealed chronic governance, and therefore trust issues and skepticism, with how NMS’s are managed.

The set of comments found below represent the reasons Central Coast fishermen have been joined by numerous statewide and even national organizations to oppose extending the nomination of the CHNMS. We understand that some citizens and organizations, expressing their beliefs and values, support the nomination. For fishermen, however, having a NMS manage areas they fish will mean that they will always have to watch their backs, wondering what NMS management will do.

Note that a wide variety of interests oppose this nomination, beyond commercial and recreational fishing organizations.

Having listened carefully to the comments of CHNMS supporters, we observed that the great majority hold significant misinformation about the status of ocean resources, are not aware of the many strong laws that exist for protection and management of those resources, and have unrealistic views of the strength of NMS management.

### **Accepting the 2015 CHNMS nomination was a mistake**

The ACSF provides comments specific to changes in the past five years that affect the eleven Sanctuary Nomination Process (SNP) Criteria, below. We also submit that the Office of National Marine Sanctuaries (ONMS) received bad information about the level of public opposition to the CHNMS nomination, and the reasons for that opposition. We hope it was not the case that the ONMS chose to ignore the opposition. Therefore it erred in placing the CHNMS nomination on the Site Evaluation List (SEL). Because inclusion of the CHNMS on the SEL was in error, the review process currently being undertaken is based on a false premise. NOAA, by now only accepting information about *changes* that have occurred in the last five years affecting the eleven listed criteria, effectively presumes the validity of the initial application...a presumption we do not share.

The statement that CHNMS received “broad community support” in 2015 is at best less than half true. The following is a partial list of those opposing the nomination in 2015, and are still opposed:

#### Elected Officials:

- California State Assemblyman Jordan Cunningham
- Grover Beach Mayor John Shoals (now former Mayor)
- Former Pismo Beach Mayor Shelly Higginbotham
- Former Morro Bay Mayors Janice Peters, Bill Yates, Cathy Novak, and Rodger Anderson
- The late California Assemblyman Katcho Achadjian

#### Agencies:

- Port San Luis Harbor District (see - Resolution # 15-08)



- City of Morro Bay, (see - Resolution #'s 00-36; 01-15; 03-27; and 12-18)
- Morro Bay Harbor Advisory Committee
- San Luis Obispo County Board of Supervisors

Organizations:

- San Luis Obispo Chamber of Commerce
- Morro Bay Chamber of Commerce
- Coalition of Agriculture, Labor, and Business, San Luis Obispo County
- Coalition of Agriculture, Labor, and Business, Santa Barbara County
- Pacific Coast Federation of Fishermen's Associations—the largest commercial fishing organization on the west coast
- Recreational Fishing Alliance—the largest recreational fishing organization in the US
- Alliance of Communities for Sustainable Fisheries—a 501-c-3 organization representing commercial and recreational fishing for six Central Coast port communities
- Morro Bay Commercial Fishermen's Organization
- Port San Luis Commercial Fishermen's Organization
- Commercial Fishermen of Santa Barbara
- Southern California Trawler's Association
- Morro Bay Community Quota Fund
- California Salmon Council
- Arroyo Grande Sportsman's Club
- San Luis Obispo County Cattlemen's Association
- Forest Preservation Society
- California Marine Affairs and Navigation Conference—representing all CA ports, including the very largest
- California Association of Harbormasters and Port Captains—a 72 year old professional organization of mostly public small craft harbors
- Republican Party of San Luis Obispo County

**The Sanctuary Nomination Review Process as Proposed in the Federal Register is Inadequate**

Quoting the Federal Register notice,

*“Comments which do not address the Sanctuary Nomination Process and new information NOAA should evaluate will not be considered in determining whether to extend the Chumash nomination for another five years”.*

Thus, in deciding whether or not to extend the Chumash nomination, the ONMS dictates that the public is ONLY allowed to comment on what may have changed within the past five years, and only in reference to the eleven Criteria, also provided from Sanctuary leaders. Comments on other concerns will not be considered. Therefore, all the many agencies, organizations, and

individuals who expressed objections, in great detail, in 2015, won't count, and the reasons for opposition then and now, will not be heard. This is clear from the Federal Register notice, and is a serious flaw, leading to disenfranchisement.

The ACSF therefore believes that NOAA, when considering the merits of extending the CHNMS nomination, must revisit the veracity of the original claim that the nomination had widespread support. To effectively make that determination, NOAA should consider the reasons that these agencies, organizations, and individuals OPPOSED the nomination. All reasons to oppose the extended nomination must also be given consideration, and weight, in this SNP.

### **The SNP Criteria are vague and open to vast interpretations**

A second flaw is found in the eleven SNP criteria. They are vague and open ended. Most of the US West Coast can be described as meeting multiple criteria, as great habitat and resources abound. Arguably, the entire US west coast is nationally significant. Our West Coast contains many hundreds of miles of terrific habitat, abundant sea life, seamounts and canyons, transition zones, vessel wrecks, and ancient tribal sites near shore, all providing for a healthy California Current Large Ecosystem, and sustaining ocean resource-dependent coastal communities. SNP criteria must be far more precise about the qualities that make an area so unique as to be of national importance.

Once again, the sanctuary has structured this evaluation so that ONLY comments about *changes* affecting sanctuary-dictated Criteria will be considered. Other comments, such as about the criteria themselves, will be ignored. As examples, concerns that the public has over the near-complete control that sanctuary managers have over sanctuary advisory council's representation, agenda-setting, and outside communications, aren't going to be considered in this process. Likewise, public concern over the great redundancy of sanctuary management relative to the many other federal and state protections that exist can be ignored—even in a time of economic crisis.

Note that the ACSF submitted a comment letter on May 6, 2020, in response to the Federal Register Notice about the SNP.

The CHNMS nomination's claims of "national significance" must be placed into contrast with the rich natural heritage found on 80% of the coasts of California, Oregon, and Washington.

The ACSF further submits there is an additional Criteria that must be weighed when considering a NMS nomination - the degree to which primary resource users TRUST the NMS program to managing those resources and the interests of directly affected stakeholders. Had this TRUST

been considered in 2015, the ONMS would have heard of a very low level of trust, based on long experiences with neighboring NMS's. (See Roff T. 2012. Bait and Switch? Fishermen's Difficult Relationship with the Monterey Sanctuary. Available from: [http://alliancefisheries.org/ACSF\\_Reports.html](http://alliancefisheries.org/ACSF_Reports.html).)

Since these criteria are federal regulations, a new rulemaking process should be begun to make the changes described above.

**Comments and information relative to *changes* within the eleven nomination criteria within the past five years (and other relevant comments about the criteria):**

**National Significance Criteria 1**

The area's natural resources and ecological qualities are of special significance and contribute to: biological productivity or diversity; maintenance or enhancement of ecosystem structure and function; maintenance of ecologically or commercially important species or species assemblages; maintenance or enhancement of critical habitat, representative biogeographic assemblages, or both; or maintenance or enhancement of connectivity to other ecologically significant resources.

ACSF Comments:

- 1) As noted above, virtually all of the attributes listed as significant can also be found in most of the West Coast's ocean waters. In 2015, and since, no rigorous comparative analysis has been done to determine what is of *national* significance about the proposed CHNMS area, more than other areas. Certainly, the Chumash, and other nomination supporters, have catalogued several features, such as the diversity break at Point Conception, Arguello Canyon, and the Rodriguez Seamount. This said, these features are found elsewhere (eg, there at least 4,000 seamounts world-wide). Further, such a list begs the question: What will a NMS do to protect this feature? (eg, protect upwelling?).

Every area of the ocean is special; and if all areas of the ocean are special, care must be taken to ensure all are managed with care.

- 2) Care of many of the resources or qualities listed in this Criteria are within the management of existing agencies (NMFS, CDFW, etc) and their applicable statutes and regulations. If anything, the last five years has seen even stronger, science-based management, such as refinement of NMFS's Integrated Ecosystem Assessment, and annual summary reports to the PFMC. Revisions to groundfish Essential Fish Habitat and the success of rebuilding a number of groundfish stocks are examples, as discussed below. This point goes to the larger question: Does the nation need NMS's to protect these features and qualities? We submit it does not.

- 3) The recent large expansion of the Cordell Bank/Gulf of the Farallones NMS's (now Greater Farallones NMS) has changed and diluted any unique, nationally significant need for an additional designation.

### **National Significance Criteria 2**

The area contains submerged maritime heritage resources of special historical, cultural, or archaeological significance, that individually or collectively are consistent with the criteria of eligibility for listing on the National Register of Historic Places; have met or which would meet the criteria for designation as a National Historic Landmark; or have special or sacred meaning to the indigenous people of the region or nation.

ACSF Comment:

- 1) As pointed out above, maritime artifacts (ship and small vessel wrecks, etc) are extremely common along the US West Coast. Likewise, Native American historical sites also exist all along the coast.
- 2) The *Montebello* shipwreck site is deteriorated, has already been extensively studied, and is picked over. Fishermen avoid it to not lose gear.
- 3) No analysis has been done to compare the CHNMS area with other West Coast areas (eg, the mouth of the Columbia River).
- 4) No known analysis has been done to determine how many, if any, ancient Native American sites exist within state Marine Protected Areas. There are nine MPAs within the proposed CHNMS: Piedras Blanca State Marine Reserve; Piedras Blancas State Marine Conservation Area; Cambria State Marine Conservation Area and State Marine Park; White Rock State Marine Conservation Area; Morro Bay State Marine Recreational Management Area; Morro Bay State Marine Reserve; Point Buchon State Marine Reserve; Point Buchon State Marine Conservation Area; and, Vandenberg State Marine Reserve. In addition to these areas, Diablo Canyon Nuclear Plant has a large exclusion zone, providing de-facto preservation of any sites located within.
- 5) The Northern Chumash Tribe is not a federally recognized tribe, It is significant to note that the last five years has NOT seen any public support expressed for the CHNMS from the federally recognized tribe, the Santa Ynez Band of Chumash Indians.
- 6) Any ancient tribal sites that might be located underwater would have to be in less than 130 meters depth, that being the lowest point of ocean level during the last 20,000 years (Hallam et al. (1983) and "Exxon", composite from several reconstructions published by the Exxon corporation (Haq et al. 1987, Ross & Ross 1987, Ross & Ross 1988). Both curves are adjusted to the 2004 ICS geologic timescale.) There is, therefore, no justification for extending the CHNMS out to greater depths for cultural purposes. The Native American Graves and

Repatriation Act, a federal statute, may offer protections. A federal NMS is not needed to preserve these sites.

- 7) Along with Native American heritage and culture, there also exists the more recent culture and heritage of commercial fishing to community identity. Morro Bay and Avila are such communities, among others. It is significant that the last five years has shown fishermen from these communities express concern and growing opposition to the CHNMS nomination (see Management Consideration 7). Their political subdivisions, the City of Morro Bay and the Port San Luis Harbor District, stand opposed to the CHNS nomination.

### **National Significance Criteria 3**

The area supports present and potential economic uses, such as: tourism; commercial and recreational fishing; subsistence and traditional uses; diving; and other recreational uses that depend on conservation and management of the area's resources.

ACF Comment:

- 1) Of course it does! There is hardly a coastal community anywhere that doesn't rely on many if not all of these uses.
- 2) This criteria presumes that there are threats to resources, and extra protections are required to protect them for their economic value. This presumption will be challenged in "Management Consideration 4", below.
- 3) Outside of limited federal spending on staff, rents, etc, there is little evidence that new private sector jobs are created as a consequence of NMS designation. This is because coastal communities already fully exploit their natural heritage features to attract visitors. Restaurants do not open, or hire new workers, hotels are not built, etc, in response to the designation of an area as a NMS. Using the 27-year-old MBNMS as an example, one would be hard-pressed to find an East Coast or international visitor who comes "to see the MBNMS". Rather, they will come stating they wish to visit the Monterey Bay Aquarium, Fishermen's Wharf, or Monterey's historic working waterfront, and to see the scenic beauty that existed long before NMS designation. NMS's do not cause economic growth, rather, they exist because these qualities still exist from the nation's strong laws. For example, whale watching businesses that have grown in the past five years, owe their existence and growth to the Marine Mammal Protection Act, and not to sanctuaries.
- 4) Senior officials from the Monterey Bay NMS lobbied hard and used the stature of the NMS program to get the state to close 29 areas of high quality habitat (and therefore prime fishing grounds) to fishing during the California Marine Protected Area designation process. Nine of these MPA's were put into place in the area of the CHNMS in 2007-8, but they continue, through the last five years, to

economically harm regional fishermen, and to harmfully displace and concentrate their fishing effort.

- 5) The existence of a NMS offers very little as new protections or management of our ocean resources. Existing federal and state laws are strong, and have directly restored and protected quality ocean resources all along the West Coast.
- 6) The recent Trump administration effort to open up the west coast continental shelf to oil and gas development failed due to the power of the West Coast congressional delegation and the strength of state and local laws (eg, the CA Coastal Act). NMS designation ultimately is not the protector against such threats, as sanctuary regulations can be overturned by a willing congress and president. The economic value of ocean resources do not need NMS protection as they already have these protections.
- 7) The NMS program already has over 12,000 square miles of sanctuaries off the California Coast, Really, how much is enough?
- 8) There has been no credible, peer-reviewed economic study of future likely effects of NMS designation on this region. One opinion piece by Scorse, et all, was riddled with false assumptions and speculation. The only known study of before/after effects of a sanctuary was done by the University of Michigan, studying the Thunder Bay NMS. It found that businesses in the area did not credit the existence of that NMS with creating new jobs, or economic growth. The study did contain recommendations for how that NMS might become economically relevant.
- 9) Last, but certainly not least, is the economic question of how the nation will be able to afford a new federal program during a pandemic and for years and years to follow. As a nation, we will surely face economic uncertainty in the future. This is especially true for establishing a new program that is so largely redundant to existing laws and protections. We also question how much, if any, new funding was provided for the expansion of the Gulf of the Farallones NMS? Has the MBNMS been able to fully fund its existing Management Plan during the past five years?

In the most recent reauthorization of the NMSA (2000), Congress included a limitation on designating a new sanctuary, amending the Act to require the Secretary of Commerce to first publish a finding that (a) a new sanctuary will not negatively impact the sanctuary system and (b) sufficient resources are available to implement sanctuary management plans and complete site characterizations for the sanctuaries.

The ACSF believes that any assertion that the NMS Program is meeting all its management plan goals within its existing budget, notwithstanding an expansion or new NMS, will not pass the “straight face” test.

#### **National Significance Criteria 4**

The publically-derived benefits of the area, such as aesthetic value, public recreation, and access to places depend on conservation and management of the area's resources.

ACSF Comment:

- 1) True enough for most coastal areas, but what does this have to do with establishing a new NMS? Again, this is true for nearly all the US West Coast. Strong laws already provide needed protection and management.
- 2) Through the action of the California State legislature and Coastal Commission, Hollister Ranch may soon be opened to the public, which includes new access to coastal resources.
- 3) The CA Coastal Act is a strong law protecting beach and ocean access all along California's coast. The California Coastal Commission (CCC) has responsibility for implementing the Coastal Act. During the last five years, there are many examples of CCC action in protecting access.
- 4) It's noteworthy that the MBNMS's actions in the Central Coast CA MPA process resulted in a LOSS of certain public access to areas of the ocean and their resources. This loss has continued during the past five years.

#### **Section IV – Management Consideration Information**

Provide as much detailed information as you are able on each of the seven considerations, with an emphasis on describing the community support (Consideration #7).

##### **Management Consideration 1**

The area provides or enhances opportunities for research in marine science, including marine archaeology.

ACSF Comment:

- 1) Yes, but no more so than many other areas on the US West Coast.

##### **Management Consideration 2**

The area provides or enhances opportunities for education, including the understanding and appreciation of the marine and Great Lakes environments.

ACSF Comment:

- 1) Yes, but no more so than many other areas on the US West Coast
- 2) The social distancing effect of the pandemic may last for a long time, undermining educational opportunities everywhere.

### **Management Consideration 3**

Adverse impacts from current or future uses and activities threaten the area's significance, values, qualities, and resources.

ACSF Comment:

- 1) A state law banning the use of Drift Gillnets, a fishery for swordfish and sharks that utilizes large areas of the proposed CHNMS, was put into place in 2018.
- 2) The Pacific Fishery Management Council (PFMC) and National Marine Fisheries Service (NMFS) conducted a lengthy review of Essential Fish Habitat (EFH) for groundfish between 2014-19. This resulted in numerous modifications to EFH, putting the new closed areas (to bottom trawling) on a scientific basis. The new closed areas include areas of high coral abundance. Several federal agencies and one private company are collaborating to map Deep Sea Corals all along the West Coast; this data gathering will inform further management and protections by the agencies.
- 3) The state, working with Dungeness crab fishermen, put into place numerous requirements and Best Management Practices to minimize entanglements with whales and sea turtles.
- 4) Through strong federal and state management, nearly all "overfished" groundfish species are recovered. This has occurred during the past five years.
- 5) Climate change is a threat that a new NMS will have ZERO ability to affect. Sanctuary designations have not prevented or diminished hypoxia zones, domoic acid, warming oceans, loss of kelp forest, purple sea urchin outbreaks, ocean acidification, and other harmful effects of climate change. These conditions all exist in California's four long-existing NMS. In fact, since NMS's tend to be located in areas of high upwelling, ocean acidification is more pronounced. In addition, other existing agencies are already doing work to prepare for the likely effects of climate change. For example, the PFMC is conducting planning exercises to identify and plan for the effects of climate change on coastal communities. Likewise, the CA Ocean Protection Council is now doing similar work.
- 6) As discussed above, threats from oil and gas development are extremely unlikely, and NMS status will not necessarily be able to stop such development.
- 7) Offshore Wind (OSW) project(s) are likely to be proposed for the area just north west of Morro Bay. First, NMS status would make it undesirable for OSW developers, as most fishermen (as do most of the public) view such a large industrial development as being incompatible with NMS designation. Some years



ago the MBNMS discouraged three fiber optic cable proposals, each of which would have required cables to be buried under shallow sediments. These projects came with vastly fewer environmental effects than an OSW development. Given that, and the protective language likely to be found in a new CHNMS designation document, it seems unlikely that a new NMS would allow such a project. Thus, should a CHNMS be designated, this may prevent or severely restrict OSW projects.

The West Coast Office of NMS's, in a March 2020 report to the PFMC, listed OSW as a THREAT to the resources of the proposed CHNMS area, so one would not expect the sanctuary to support OSW. This will confound the state's ambition for OSW as a response to climate change and compliance with State law requiring 100% renewable energy by 2045.

Although related to an East Coast project, the Bureau of Offshore Energy Management released a new environmental assessment of offshore wind projects, allowing for more rigorous scrutiny of offshore wind's impacts to sea life and industries, especially commercial fishing. The report finds that offshore wind will have major cumulative fisheries impacts. The notice was officially published on Friday, June 12, 2020. This is bound to affect future environmental assessments for future projects, and calls into question whether a NMS could ever permit such a project.

Importantly, should the Bureau of Ocean Energy Management award a lease, or leases, to such projects BEFORE a NMS designation, the new sanctuary will necessarily have to honor the lease(s).

Another consideration, relative to whether the NMS Program views OSW development as a threat, or not, bears mentioning. It seems likely that should an OSW project be permitted by a NMS (old or new), such a private development could be an economic windfall to the NMS. This is because, at minimum, fees could be collected, and existing federal law allows the sanctuary to keep those fees within the program. Further, should legislation occur that allowed a NMS to lease submerged lands, the financial gain to the NMS could be huge. It is unknown the degree, if any, to which economic gain might prejudice NMS decisions on OSW proposals.

A second consideration as to whether or not the NMS program views OSW projects as a threat to resources stems from the question: Considering the state's clear ambition and statute goal to increase non-carbon based energy production,

including OSW, will the state extract a guarantee from NMS management that sanctuary designation will not stand in the way of such development? If such an agreement exists, or were to be made, OSW could not be viewed as a threat which would be prevented by a future NMS. Of course, any such discussion and decision between the state and NMS officials should be part of a public, open, and fully transparent process.

- 8) The announced de-commissioning of the Diablo Canyon Nuclear plant will eliminate the thermal plume associated with its discharge water—an improvement.
- 9) Water quality will be improved in the proposed NMS area as a new treatment plant is being built in Morro Bay, and the new Los Osos plant, completed prior to the last five years, will continue to improve water quality. These plants do/will produce tertiary-treated effluent, largely used for groundwater replenishment.
- 10) The effectiveness of the Marine Mammal Protection Act has seen the population of Northern Elephant Seals grow by 6% a year, with their population now standing at @ 150,000 animals. (NOAA/NMFS). Gray Whales have also hugely expanded their population to be @ 22,000. (NOAA/NMFS). Both of these animals are believed to be at pre-hunting levels. CA sea lions are now thought to be significantly over their pre-European level, and likely over their natural carrying capacity, at @350,000 animals. One distinct population segment (“DPS”) of Humpback whales is growing rapidly, while another DPS is stalled in growth. Sea Otters have been growing, and expanding their range, except the past year has seen their population contract a little, due to great white shark attacks (another protected, growing species). Since these animals are managed by other federal laws and agencies, NMS designation will have little, if any, effect on their survival or growth.
- 11) The area of the proposed CHNMS is already listed as “critical habitat” for the Pacific Leatherback sea turtle (with a large seasonal fishing closure in place).
- 12) The May, 2015 oil pipeline spill near Refugio is an example of a threat to resources for which a new (or existing) NMS will have little effect. For example, there have been numerous small oil and larger sewage spills within the MBNMS. In 2018, a sewage spill of nearly three million gallons occurred within Monterey Bay, and only about three miles from the headquarters of the MBNMS.
- 13) Further, Governor Newsom, in November of 2019, signed AB 342 into law. AB 342 addresses the concerns expressed in the Nomination surrounding protections from oil and gas development, making it illegal for pipelines to cross over state lands, including tidelands or submerged lands.

#### **Management Consideration 4**

A national marine sanctuary would provide unique conservation and management value for this area or adjacent areas.

ACSF Comment:

- 1) As has been previously noted, NMS management is largely redundant to existing federal laws. NMS is really on the margins of conservation and management. Therefore, it can be strongly argued that the CHNMS nomination does not provide for UNIQUE conservation or management.
- 2) It is very noteworthy how many supporters of the CHNMS nomination believe that the area is “unprotected”, or “needs more protection”, with many believing that NMS designation is akin to a Marine (no-take) Reserve. This, of course, is not true.
- 3) Central Coast communities have already experienced what future NMS management will be like when the ONMS ignored wide opposition in 2015 to the CHNMS nomination. It is also known from the MBNMS that sanctuary management will ignore recommendations from elected leaders—as it did from the Association of Monterey Bay Area Governments. And the MBNMS Superintendent has lectured its community Advisory Council (SAC), “If you can’t support expanded and new sanctuaries, you don’t belong on the SAC!” This is the kind of unique management a NMS will bring to the Central Coast.

### **Management Consideration 5**

The existing regulatory and management authorities for the area could be supplemented or complemented to meet the conservation and management goals for the area.

ACSF Comment:

- 1) Perhaps, but only on the margins. Using the MBNMS as an example, with the exceptions of its regulation against new oil projects, (which can be overturned by congress), and new offshore dredged material disposal sites (no new ones are proposed for the CHNMS area), it has enacted no significant conservation or protection measures since its designation 27 years ago. It has enacted small measures, like a controversial near-complete ban on the use of personal watercraft, a ban on shark chumming, etc.
- 2) Of course, this Management Consideration begs the questions: What goals? Who’s goals?
- 3) The Clean Water Act, the Marine Mammal Protection Act, the Magnuson-Stevens Fishery and Conservation Act, the Endangered Species Act, the

Migratory Bird Act, the Coastal Zone Management Act, the Native American Graves and Repatriation Act, and National Environmental Policy Act—all federal statutes, already address the wide range of management needs for the proposed CHNMS area. On the state side, the California Coastal Act and Commission, the Marine Life Protection and Management Acts, the Fish and Wildlife Code and Fish and Game Commission, the Regional Water Quality Control Boards, the State Lands Act and Commission, California Endangered Species Act and the CA Environmental Quality Act, all currently provide additional and strongly integrated protection and management.

- 4) Additionally, in 2018 the FGC voted to adopt the 2018 Master Plan for Fisheries: A Guide for Implementation of the Marine Life Management Act (“MLMA”). This will amend the MLMA Master Plan to: 1) Enhance the sustainability of the state’s ocean fisheries; 2) Elevate ecosystem health in decision-making; 3) Help promote more efficient, effective, and streamlined fisheries management; 4) Establish a clear pathway for improving the management of individual fisheries; 5) Set clear expectations for managers and the public; and, 6) Foster transparency and flexibility in fisheries management with Tribes and native communities, stakeholders, and interested members of the public

### **Management Consideration 6**

There are commitments or possible commitments for partnerships opportunities such as cost sharing, office space, exhibit space, vessel time, or other collaborations to aid conservation or management programs for the area.

ACSF Comment:

- 1) Unknown.

### **Management Consideration 7**

There is community-based support for the nomination expressed by a broad range of interests, such as: individuals or locally-based groups (e.g., friends of group, chamber of commerce); local, tribal, state, or national elected officials; or topic-based stakeholder groups, at the local, regional or national level (e.g., a local chapter of an environmental organization, a regionally-based fishing group, a national-level recreation or tourism organization, academia or science-based group, or an industry association).

ACSF Comment:

- 1) As referenced above, there has been and continues to be a growing list of wide and diverse opposition to the creation of this new federal program, and of

extending the CHNMS nomination. Additional organizations in opposition, now includes:

- Ventura County Commercial Fishermen's Association,
  - Point Conception Groundfish Fishermen's Association,
  - Western Fishboat Owners Association,
  - American Albacore Fishing Association,
  - San Diego Fishermen's Working Group,
  - California Wetfish Producers Association
- 2) Importantly, the San Luis Obispo County Board of Supervisors had a recent election and the same majority of Board members who opposed the 2015 CHNMS nomination were re-elected (by a wide margin) or remain on the Board.
  - 3) Virtually all commercial and nearly all recreational fishing organizations remain opposed. The ONMS appears to have violated its own criteria in placing the CHNMS onto the SEL in 2015, in as much as it ignored this opposition, despite "regionally-based fishing groups" is one of the listed stakeholders from whom support is needed. For fishing, opposition includes local, regional, West Coast, and National organizations. Since 2015, new, additional fishing organizations have voiced opposition. (see 1), above).
  - 4) The many agencies, organizations, and individuals listed above as opposing the 2015 nomination remain opposed. Thus, broad community support for the CHNMS does not exist. At best, it is mixed, but with key primary stakeholders, opposed.
  - 5) The ACSF hopes that the ONMS will value and give weight to detailed and well reasoned comments from those in the region directly affected by a new, federal management regime.

To close, many reasons exist to oppose the CHNMS nomination, and the extension of this nomination for another five years. The SNP by the way it's structured, will be able to dismiss many of these reasons as not occurring within the past five years, and/or not being relevant to the ONMS's eleven criteria. The ACSF hopes that this is not the case, and that ALL reasons for support or opposition will be carefully considered.

Thank you for considering these comments.



Kathy Fosmark

Co-Chair



Frank Emerson

CO-Chair