Introduction

- We are considering the Questions:
  How much protection is enough?
  Do we need more MPAs?
- Is 64% of the Sanctuary already in MPA enough?
- I know that you take your SAC responsibilities seriously, and want the Sanctuary resources to last for generations, so I will try and be complete in my analysis of this protection question; please bear with me.

WHY THIS ISSUE IS IMPORTANT TO HARBORS AND THEIR COMMUNITIES

- Simple Answer: because fishing is important to the culture and heritage of these communities, and because fishing provides both a direct and even more powerful indirect economic benefit in these communities.
- Direct is jobs, rents, and wharfage.
- Indirect is the role that fishing plays in these communities’ much greater tourism economies.
- The MPA issue represents the potential to take away even more fishing opportunities.
- If the Sanctuary process goes the same as the State process, the best, most continually productive - but not overfished – areas will be taken away – this time in Federal waters.
- For many reasons, fishing in these coastal communities has been in sharp decline over the past 15 years. Dr. Parrish will speak to this.
- In Monterey, we had about 150 commercial vessels in 1995 – now we have just fewer than 80 and soon to be less.
- There are lots of reasons for these declines: higher costs for fuel and insurance, competition from farm raised products and imports
from other nations – many with far less environmental safeguards. Perhaps most of the decline is from increasingly precautionary fishery management, and now, MPAs.

- Regarding MPAs, I have advised my City Council that we stand to loose another 30 or so commercial boats due to the State’s new MPAs.
- Some fishermen, who were already right on the margin of staying in business, see the loss of productive fishing grounds as the last straw.
- There is another, very real phenomenon that I observe: The fleet is emotionally depressed. They do not feel like society values what they do as hard working food producers.
- Do you know that fishing is the #1 most dangerous occupation in the US? My port has lost 8 men just since 1995.
- When fishermen expressed concern that putting closer, productive areas off-limits to fishing would increase their at-sea time, and therefore expense and risk, this was ignored.
- When they expressed concern, and suggested viable alternatives, to losing their most productive areas, they were ignored.
- It is no wonder to me that they feel depressed. I predict that many will leave the profession that seems so little valued.
- Now, I think that there will always be some fishermen who survive, perhaps by carving out niche markets.
- But that being said, the harbors in this region are quite concerned about the reduction in the volume of fish, and that there will be a point where we lose our fishing infrastructure: the fish buyers, ice, fuel piers, etc.
- We are very close to this point in the Monterey Bay; and Morro Bay has lost its infrastructure, with there now being no resident buyers and the City is subsidizing ice production and the operation of the fuel pier.
- When I read the letter from the Coastal Commission Staff, I wonder how they can reconcile the Coastal Act requirement to protect fishing infrastructure with the reality of what is happening to the fleet.

**THE PROMISE**
• I’m not going to belabor The Promise at this point, but it is a fact that fishermen were promised that the MBNMS would not be a threat to them, and would not create regulations affecting them.
• I heard it first hand in 1991 and 1992, when I was the Harbormaster at Santa Cruz Harbor.
• This is why the cities of Monterey and Morro Bay, the Monterey County Board of Supervisors, AMBAG, the Santa Cruz Port District, the Moss Landing, San Mateo County and Point San Luis Harbor Districts, and the Monterey Peninsula Chamber of Commerce – have all voted to ask the MBNMS not to try and change the Sanctuary’s Designation Document to allow it to create its own fishing regulations.
• Therefore, I want the SAC to recognize that, should this promise be broken, what the fishermen think about that might be the least of concerns for the Sanctuary.
• It is fair and accurate to say that civic and business leaders would be deeply concerned about such a breach of trust by the MBNMS.
• Still, considerations of economic consequences and of the promise made to fishermen are not the only, and perhaps not even the most important, consideration in answering the “How much protection do we need?” question.

THE NEED FOR GOOD SCIENCE

• I believe that the heart of answering this question lies in very good site specific science and data collection regarding the status and trends in Sanctuary resources.
• I also believe that some wrong information has been put forward, and some generalizations have been made that are not true in this region.
• Do you remember the headline that said, “90% of the world’s big fish are gone?” Do you know that study was debunked as being based on inaccurate data?
• How about the other headlines, that the world’s fisheries will be completely depleted by 2048 and we’ll all be eating jellyfish? Are you aware that study received scathing peer reviews, and is not considered to be at all accurate?
• What about the common belief that the ocean is in crisis? Maybe in some parts of the world, but not here. The biggest problem we
have here is localized polluted runoff, but for which there are many new programs that are reducing this.

- And, very to the point, is the mantra you’ve been hearing that MPAs and MRs are the answer for much of what ails the ocean. But is it true?
- The answer is that it depends. It depends on the exact circumstances. General statements about the value of MPAs won’t cut it.
- Generally, if the important fish or invertebrate species are sedentary, and/or if fishery management is nonexistent or weak, MPAs will show very positive results, including potentially improved fishery yield.
- However, if the species are mobile and/or fishery management is strongly science-based and enforced, MPAs will show either no or very little benefit, but they can also become an environmental problem, as fishing effort gets shifted from the productive areas that are now in MPAs – to less productive areas.
- In this regard, MPAs are like a medicine that must be prescribed for the right illness and in the right dose, or problems will arise.
- Have you ever heard the saying about the MRs? That the MRs are a solution looking for a problem?
- This saying did not come out of the fishing community, it came from scientists.
- I’m not anti-MPA, and I do think they have been used correctly in some cases, but have been misapplied as a tool in other cases.

THE ROLE OF SCIENCE IS ALSO DEFINED BY LAW AND NOAA POLICY

- First, I need to tell you about the recent reauthorization of the Magnuson-Stevens Fishery Conservation and Management Act.
- This reauthorization, combined with the NOAA Strategic Plan, directs NOAA fisheries and the regional councils to adopt ecosystem-based resource management.
- Importantly, it also does two other things
- It gives the councils explicit authority to create MPAs – and guidelines as to how to do that, and
- It requires the regional fishery management councils to follow the advice of their science committees.
• Congress passed these changes by a unanimous vote.
• Regarding the role of science in determining a need and role for MPAs, Congress told the councils very clearly that personal interests must be set aside and resource management must be based on very good science.
• The science committees are represented by the leaders in the fields of fishery biology, oceanography, social and economic sciences.
• Any proposals for MPAs, coming either from the council or from the Sanctuary Program, would have its proposal “tested” – peer reviewed, by the science committee.
• Because the new Magnuson-Stevens Act is so explicit regarding the creation of MPAs, any Sanctuary proposal would have to meet, and could not violate the criteria set up under the law.
• This also means that the Sanctuary, even if its Designation Document were changed to allow it to create a fishing regulation, would probably not be able to override the PFMC if the Sanctuary’s MPA proposal did not have a strong science rationale.
• Broad claims about the effectiveness of MPAs/MR won’t be enough.
• Related to this is the actual language of the NMSA.
• This Act clearly is not a “wilderness” law, and does not contain any directive that the NMSP is to limit or exclude human use of sanctuary resources purely on the basis of our intrinsic values.
• In Monterey, 99% of the reason a Sanctuary was created was to try and keep oil out.
• An exhaustive and authoritative study of the history of congressional intent as the NMSA was developed and reauthorized over the years was done by Chandler and Gillelan in 2004. They are environmental attorneys. They reluctantly conclude that Congress has consistently encouraged both preservation and extractive uses, and that Congress has repeatedly confirmed multiple use as a significant purpose of the Act.
• So even though some Sanctuary Staff and members of the SAC may hold strong personal values that all or part of the Sanctuary must be protected against human use – that is not enough under the law. Scientific assessment must support that there is a credible threat to those resources and that the Sanctuary
regulation proposed (an MPA or otherwise) is the correct tool to solve the problem.

- I have heard it asserted that the Sanctuary Act “purpose” to “maintain the natural biological communities in the national marine sanctuaries, and to protect, and where appropriate, restore and enhance natural habitats, populations, and ecological processes” – somehow will require the MBNMS to adopt a network of new MPAs.
- This is not true. The NMSP also has the purpose of providing comprehensive and coordinated conservation and management which coordinates and compliments existing regulatory authorities, and provides for the wise and sustainable use of those resources.
- So the NMSP doesn’t have to do anything more to provide protection if other programs are meeting that goal.
- And, of course, the Sanctuary would have to show scientifically valid reasons why that goal is not being met.
- If we try to interpret the Sanctuary Program goal regarding “natural biological communities” as a mandate to stop human usage of the Sanctuary, or parts of it, this would conflict with other Sanctuary Program goals and findings.
- Specifically, for the “wise and sustainable use of marine resources” (finding 4)(A)
- To manage the resources in a way that “compliments existing regulatory authorities” (purpose (2) i.e., the Magnuson-Stevens Act.
- And, it would conflict with the congressional intent to facilitate multiple uses of Sanctuary resources.
- Therefore, the interpretation of the word “natural” in the NMSA is best interpreted as “naturally functioning,” and for the Sanctuary to “protect” these resources is to protect them from non-sustainable human use.
- This is an important distinction, because it would be a mistake for SAC members to think that the law says you are supposed to restore the Sanctuary to a time before humans were present.
- There is one other part of the NMSA that the SAC should be aware of.
- Purpose (7) directs the sanctuaries to “develop and implement coordinated plans for the protection and management of these areas (the sanctuaries) with appropriate Federal, State, and local agencies…”
• Purpose (2) also “provides authority for comprehensive and coordinated conservation and management of these marine areas, and activities affecting them, in a manner that compliments existing regulatory authority.
• I bring this to your attention because these sections of the law point to the role that the MBNMS should play in the MPA issue – to coordinate this effort between agencies.
• Because the Sanctuary has failed to coordinate efforts as mandated by law, we have several uncoordinated MPA efforts – which also affect and are affected by fishing quotas and other rules.
• The State placed its MLPA-MPAs, without regard for the Federal EFH areas, the Rockfish Conservation area – and without regard for the consequences on and from the highly restrictive quota system now in place.
• In fact, for the State MLPA – the State took the position that no other rules or closures mattered.
• And the Sanctuary never said a word.
• I believe that this violated the Sanctuary’s mandate, along with being just really bad policy and a failure to do ecosystem-based management.
• It’s also why I think that the Sanctuary can’t possibly answer the question about hooking up the State’s MPAs with new Federal ones.
• This is a design issue and goes to the overall coordination of effort that never happened.
• It also goes to the question of whether the State’s MPA network actually provides for ecosystem protection.
• Some top marine scientists don’t think it does.

THE NOAA STRATEGIC PLAN

• Although not a law, NOAA has recently revised its Strategic Plan.
• This Plan is to give direction to all NOAA agencies, including the Sanctuary Program and NOAA fisheries, about how to implement their governing laws, and what the expectations of NOAA are.
• Among others, the NOAA Strategic Plan asserts that “NOAA is a science-based agency” and
• All NOAA agencies will adopt ecosystem-based management.”
• On this point, it is no longer true that the Sanctuary Program is the only one with an ecosystem perspective. Ecosystem based management has been evolving since the 1976 passage of the first Magnuson-Stevens Act
• Another directive in the NOAA Plan requires NOAA agencies to use science-based predictive modeling for resource management.
• During the MLPA process, no predictive modeling was ever completed, and this failure to model is one of several severe criticisms that have been leveled at the Central Coast SAT for the MLPA.
• When a model was finally constructed it predicted what the new MPA network would do – or not do – and it was then that the criticism of the network as “creating only the illusion of protection” arose.
• Despite the fact that the NOAA-SP directs NOAA agencies to utilize the best available science, specifically including the use of predictive models, the Sanctuary representatives to the MLPA process never even brought the subject up to the State, let alone insisted that this occur.
• The Sanctuary was silent when the State refused to consider the effects of existing fishery management, was silent about the use of predictive modeling, and was silent when the State brought forth crummy, inadequate, and misleading socioeconomic information.
• I want you all to know that I’ve had several, one-on-one conversations with both Admiral Lautenbacher and Dan Basta. Both of these men told me the same thing: NOAA, and the NMSP will utilize rigorous science in its decision making.
• I will take them at their word, which is why I’m pressing this point.

HOW MUCH PROTECTION IS ENOUGH?

• There is more, though, and I’d like to speak to the fundamental questions:
  “How much protection is enough? How do we know when we have enough?” If more protection is needed, what’s the right tool?
• First, please recognize that
• Sanctuaries have many programs to provide for the protection and conservation of marine resources, and the health of the ecosystem.
I will presume that these programs accomplish many of the purposes of the NMSA.

But when I asked, Sanctuary Staff could not tell me to what degree these goals are being met.

This does lead to the question: How does the Sanctuary measure its progress towards meeting its goals?

If the Sanctuary has no way of doing that, or it’s just not being done, then how does the Sanctuary know when it’s not meeting its goals?

And, how could the Sanctuary ask for more protection, like more MPAs, if it doesn’t know the extent to which its own programs, or the programs of other agencies, are meeting its goals?

You have been shown, at the October meeting, a very long list of other Federal and State laws and programs that are aimed at protecting our marine and coastal resources.

I hope you spent some time considering that list, because you can see that there is very little that doesn’t have some management or protection in place.

In regard to this question: How much protection is enough to meet the NMSA goals?

Let’s look at what the MBNMS says on its website about what extra protection, or needs, MPAs can fill – and ask if it’s true?

The Sanctuary lists 3 reasons they are looking at MPAs as a tool.

#1 “to restore naturally functioning ecosystems and ecological health in Sanctuary waters”

Let’s examine that

1st – there’s that word “natural” again – for which the Sanctuary and science has no definition.

2nd – what science does the Sanctuary offer to claim that this ecosystem is not functioning “naturally?”

No science, but there is the example of bocaccio cited on the website – a fish that certainly was overfished in the 1980s-1990s.

Bocaccio is one of six species that are in low numbers and fishery managers are rebuilding those species,

Even more to the point, since 2000, the PFMC put in place several strong measures to rebuild those species:

- Drastically cut back the fishable quotas
- Created the RCA (entire habitat for bocaccio)
- Created EFH areas
- The last two are MPAs
• NOAA fisheries scientists have publicly stated “No more MPAs are needed to rebuild these stocks.”
• Therefore, the Sanctuary website claim that more MPAs might be needed for this does not hold up to scrutiny.
• The next reason cited on the Sanctuary website to consider new MPAs is
• “to provide areas where marine research and monitoring can occur apart from the extraction of animals and plants”
• I have always thought, and I think that fishermen also think, that this is one of the stronger arguments to have some MPAs.
• However, we now have a very large number of MPAs within the Sanctuary, and they cover all of the key habitats, and 64% of the area from Cambria to Pigeon Point plus the DSM.
• I believe that there is more monitoring and research to be done on those over the next many years than the Sanctuary has the capabilities, let alone a need, to do.
• So even though this might be a valid reason generally, the MBNMS does not actually have this research need. I believe that many on the RAP would agree with this statement.
• The last reason given on the Sanctuary website to consider new MPAs is:
• “to provide ecological “insurance” against environmental variability and unintentional mismanagement”
• The questions are, can MPAs really do that?
• And, if they do, do we already have enough?
• First, what about the claim that MPAs insure against “environmental variability?”
• If that means changing coast wide oceanographic conditions –
• Then this claim is false – MPAs will be as subject to those changes as anyplace else.
• If this means that MPAs will offer some insurance against pollution events – like an oil spill – this is also a false claim. Resources inside an MPA will be just as affected by an oil spill as outside.
• The SAC was recently sent an opinion-editorial about the lessons to be learned from the San Francisco spill.
• The writer claimed that a lesson was that we need MPAs to “help restore the ecosystem in the event of another spill.”
• However, there’s no scientific merit behind that claim.
• So, I think that MPAs offer very limited insurance against “environmental variability.”
What about the other Sanctuary website claim? That they offer insurance against mismanagement?

There has been recent work on this question, and it has cast doubt about whether MPAs could ever offer enough larval production and recruitment opportunities to provide the “insurance” desired, unless they are huge areas. The EFH and RCA areas are such huge areas, but we already have them.

With regard to insuring a full range of age structure, if the species of fish is more mobile than the size of the MPAs, then the MPA will not protect age structure either.

Science will tell you that Lower protection of larger areas do more than high protection of a small area.

With that being said, we do already have MPAs – the EFH areas and the RCA, which are large enough to help with protecting age structure.

And isn’t research a better insurance against mismanagement?

Therefore, the need for more MPAs is not obvious.

I hope that you can see, by going through the stated reasons for more MPAs found on the Sanctuary website, that these reasons are very, very weak.

So the question remains for the SAC, and the MBNMS –

How much protection is enough?

Each SAC member will bring their own values to that question.

Science will play a role in shaping values, because it can inform about the effectiveness of our conservation and management.

Ultimately, regarding our personal views, interests, and values, remember that Congress just stated clearly that they want good science, not personal interests, to be the foundation of Marine Resource Management.

It is because fishermen and others on the MPA workgroup felt that the workgroup was never going to conduct the in-depth site specific scientific analysis that the subject deserved, that the “alternative analysis” was commissioned.

Some of the very best marine science minds in the US are participating:

- Dr. Richard Parrish
- Dr. Barbara Walker
- Dr. Doyle Hanon
- Dr. Ray Hilborn
- Dr. Carl Walters
• Bud Walsh

• You’ll hear from Dr. Parrish, and you’ll be pleased to hear that the marine resources in the MBNMS region are being managed in a way that preserves ecosystem health, and meets the purposes of the NMSA.

• The alternate analysis will inform this Sanctuary MPA process.

• I know that I’ve been hard on the Sanctuary at times, but we are here to offer our advice to the Program.

• My advice is constructive about what the MBNMS should and should not be doing with this issue:
  1. Improve their understanding of the circumstances in which MPAs are a useful tool, and the circumstances in which they are not the correct tool, or will not meet their goals. I think it’s been shown that some Sanctuary assertions about MPAs are either wrong, or incomplete.
     • Update the website
     • Communicate with the public
     • The Sanctuary needs to provide responsible leadership, to educate. Its OK to say “Things are OK.”
  2. Improve its science capabilities, including the use of predictive modeling, for resource management issues (not just MPAs).
     • The MBNMS could have contracted for an analysis such as has been done by the ACSF.
  3. Since the NMSA does not specify the way the MBNMS should protect, but it does require that the Sanctuary provide leadership for “coordinated and comprehensive management” between State and Federal agencies, then the Sanctuary should do that.
     • Might well mean asking the State to re-evaluate its MPA networks relative to the strength of existing management.
  4. A good Socio-economic analysis must be done for any MPA considerations—including pressing the State to do this analysis.
  5. I strongly encourage the MBNMS to restructure the basic questions:
     • Should be:
       1. Is the ecosystem that encompasses the MBNMS showing any evidence of distress from fishing related activities?
2. If so, are there management measures already in place to address these issues?
3. If not, what are the appropriate management tools to address these issues?
6. You will hear from Dr. Parrish later, and the results of the Scientific Analysis. You will hear that the fishing industry is in bad shape, but you will hear very good news about the level of resource protection. That it is in place, and how it works

Thank you.