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Public Comment from Ed Tavasieff on the California Ocean Protection Council Draft 5 Year Strategic Plan

Hello, my name is Ed Tavasieff.

My life has revolved around ocean events and participation since I was a child 60 years ago when my parents took me to Ocean Beach in San Francisco. At that young age, totally enamored with the ocean, I knew this was home for me and it has been just that ever since. I have been a diver, both recreationally and commercially, a surfer, wind and board, a fisherman, both recreationally and commercially, and an observer who has documented many events geologically, oceanographically, and those of natural history. Having such a long time observing oceanic changes both natural and anthropogenic, allows me to have a good understanding of what the future might be like with the abilities of human interaction.

With world population increasing, the contribution of ocean resources to the wellbeing of this populace will be vital. That said, how we will go about undertaking steps now to achieve this goal for the future.

Reading the mission statement of the OPC, first impressions are why is the DFG not able to undertake this task as one might expect?

Global Warming consequences are something we have no meaningful ability to counteract in a reasonable time frame. That said global wisdom would dictate not to build anything within the sea rise event platform and plan to move existing infrastructure to higher ground. Natural ecosystems will react naturally and adjust as they do on a daily basis. To give you an example, here in the Gulf of the Farallons, and at Ocean Beach, I have observed pelagic red crabs by the millions and have seen frigate birds fly overhead. Sea turtles and sun fish are not uncommon. So I would not worry about the natural ecosystem, since it has the ability to take care of its self.

One big thing we are able to do, and I find vital, is the removal of marine debris. Marine debris is not in the best interest of a healthy ocean. Sunken vessels, however, may provide habitat able to produce abundant sea life and seafood for consumption. The marine debris that plays no role in habitat creation or has a direct negative interaction with existing sea life needs to be removed. This kind of debris includes lost fishing gear, garbage, any plastics, partially sunken vessels, or any other kind of item not providing any benefit to the oceanic infrastructure. This is one of my most important issues and one I work on locally personally.

Ocean protection in the form of MPA's is really outdated and not in the best interest of the growing population. Granted a few marine reserves with no anthropogenic interaction, including scientific or monitoring is desirable, however, the extensive use of MPA's found now through the MLPAI (2004) to rebuild depleted species and "protect" ecosystem integrity, is not in the best solution for the people of California, California's economy, or its user groups.

Instead, we should be considering species enhancement as the solution. I am NOT referring to aquaculture, which I will explain later. I am referring to our ability to obtain broodstock, maintain an open system aquaculture that provides larval stage development for release into the ecosystem from the original source of its broodstock. With this kind of fisheries management practice we will be able to balance our ecosystem needs and provide the necessary protection for larval stage development during that critical life stage. One example of this kind of management is the White Seabass program at Scripps, so, it is not something new it just needs to be expanded. We have the abilities and the money; they are just being diverted in the wrong direction; that being, a "protection" agenda. The protection agenda only provides less harvest opportunities, decreased State revenues, negatively effects traditional marine business infrastructure, causes a shift of effort from one fishery to another, thereby causing overfishing of another species that then necessitates more closures or restrictions.

There was a time when a protection agenda would have been beneficial, but that time has passed. Previous to Proposition 132 fisheries management was at work correcting the effects and destructive use of gillnets in California. The MMA was on the right track but the MLPA (1999) was not necessary and was counter to responsible fisheries management.

Sustainable harvest of seafood is a vital part of responsible fisheries management but you must have viable fisheries in order to have a fishery at all. Again, enhancement is a more acceptable solution for this goal since it actually aids in the rebuilding of a species rather than removing access. Funding for fisheries enhancement can be gained from increased fish landing taxes. A direct connection to more fish means more money to make more fish available is a great incentive for this approach. If philanthropic organizations were truly sincere in their desire to rebuild any species and nurture and provide for a healthy marine ecosystem then their money would be well spent on fisheries enhancement.

The science community would also benefit through institutions specifically designed for fish culture, study, and the sharing of information and data. Can you imagine a complex able to accommodate larval aquaculture techniques with the ability to directly involve science, have a location that provides the public with hands on learning experience and educational environment, while being a focal point for global ecosystem management? Now imagine one of these complexes in each study region and around the world placed strategically using specific ecosystem needs to do so. This scenario is what real fisheries management for the future must be.

There are those who claim aquaculture is a sustainable fishery and should be approached as such. I disagree and do NOT favor finfish aquaculture in closed systems or genetically altered species being introduced into the ecosystem. This practice is a dangerous path and has the very strong potential for negative natural ecosystem alterations. With all the associated negative elements of commercial aquaculture, such as bacterial and viral pathogens, fecal contamination, parasitic infestations, genetic pollution on native species, chemical treatments effecting surrounding habitat and biota, and the dependence on natural forage base to feed the fish, we must reconsider its use and not allow any new instance to occur.

Shell fish aquaculture, done as it is in Tomales and Drakes Bay on the other hand, is actually beneficial for the ecosystem and should be encouraged.

Sediment management is another issue that is fruitless to spend time or money. The natural events that occur seasonally move more sediment than anything anyone can possibly do. The sands of the San Francisco Bay and Gulf of the Farallons are in constant motion, like very slow moving swells in the ocean. Should we really waste time on this? A dredge is moving material that will be moved eventually anyway.

Integrated water policy is interesting when you consider how much effluent and how many point sources there are. Given the ever increasing use of new chemicals and their extensive use and interaction, we must have a strong program able to determine the effects of any new chemical that might be introduced into the marine ecosystem and the ability to make timely regulations if one is found to have negative effects. On the other hand there are actually benefits to some discharge elements and we also need to recognize these. Filter and planktonic level feeders actually benefit from many elements of sewage discharge. Since the planktonic feeders are the base of the food chain this can have significant benefits for top level predators. Not all discharge is bad and what we need to watch out for is changes in municipal treatments such as the change from chlorine to chloramine for final discharge treatment.

Water issues, that are prevalent in the Delta region, have logical solutions and their management needs to be addressed realizing the needs of the traditional natural species that depend on abundant clean water flow. Growing water intensive crops in a desert environment is not logical and should be altered to take advantage of advanced methods, such as drip irrigation, to grow crops more conducive to a desert environment.

Desalinization plants are interesting and should be explored further. The question is what to do with all the salt. With the closing of the Morton salt flats in the south bay it is possible there is now a source of salt lost as a result of the closing. The further treatment of the salt and its economic viability in doing so is at question, however.

Marine renewable energy has the potential of becoming a real problem as well as a solution. On one hand the technology exists to convert ocean energy into useful energy. That's great but at what cost to the environment and traditional user groups. It will be possible the use of structures, of any form, will attract and create new habitat for species and actually increase overall biomass, but, will it remove access of traditional geography from traditional fisheries; if done using stakeholder input probably not.

One problem that will occur and already has in tests in Northern California is the loss of energy producing structures during weather events. Searches for these devices after loss has proven ineffective and adds to marine debris. Also, as technology advances and these structures are no longer useful will they be like old oil rigs? No one wants to deal with their removal and disposal. What about energy leaking into the ecosystem from deteriorating or malfunctioning equipment? Marine life is very sensitive to electrical influences. There are still many concerns that need to be addressed before we can give a green light to spacial management for marine renewable energy.

Aquaculture has a place in global seafood production as long as there is no connection to the open ocean or reliance upon the natural forage base for its operations. I have explained these associated issues earlier.

Science based decision making is a critical element of fisheries management and must be considered during any decision making process as long as the science is valid and has profound evidence to back it up. Science, thus far, has relied on the "best readily available" sources and does not accurately reflect a condition upon which responsible, effective and meaningful management can be made. Utilizing scant data from distant locations that may reflect the same species but not the same habitat is not in the best interest of the user groups as well for managing and developing sustainable seafood sources. Again, this is where ecosystem enhancement, and the institutions mentioned earlier, has their greatest value in fisheries management along with data collection and distribution. I cannot stress enough the importance of ecosystem enhancement and its associated institutions, not only for California fisheries management, but the global system, as well.

If you have gotten this far, Thank You.

Sincerely, Ed Tavasieff
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More to come. -ED