## Data Sets and information to include when considering the impacts to commerical fishing:

\*\*\* We have to account for more than just loss of fishing in the Call Area. We must also consider lost fishing area being taken for cable routing and shipping lanes. Also, the potential for wind turbine construction and operation noise, electromagnetic field emmissions (especially if cable is damaged), and large ship traffic in the nearshore that will have the likelihood of altering sea life behaviour in a several mile radius from the call area. A study in the UK showed a 91% decline in fish landings in all bottom fish including rock cod, petrale, and halibut like fish etc. in and around the wind farms. Salmon are very sensitive to emfs, they have electromagnetic sensitive material in their bodies, their migratory patterns may be seriously impacted. Squid and other wetfish are very sensitive to noise and may avoid the area. There are studies showing evidence of this in Europe. The truth is, we truly don't know all the potential impacts but we should consider all the possibilities. This is not a singlular oil platform, this is a large swath of ocean in an active commercial fishing region. BOEM can not use the same processes of only studying the lease area. We are able to fish around an oil platform, we will not be able to fish safely in and around a wind farm array. Also, the impacts to the local ports are considerable. We have one fuel dock that holds 15,000 gallons. We have issues with eel grass being uprooted by large vessels. We have old piers that would need upgrading. There is so much more than just the Call Area to study. If we end up getting another Deep Water Port near Diablo, this will be yet another defacto MPA causing more lost fishing area. It will be next to the Pt. Buchon MPA will the cummulative loss of fishing area be mitigated? Perhaps opening state MPAs?

Here is a list of our suggestions of data sets and questions that should be analysed for a better understanding of the commercial fishing impacts:

- 1. Albacore and Swordfish log books
- 2. F and G landing data for all commercial fisheries including deepwater groundfish, sable fish, albacore, swordfish, dungenous crab, rock crab, shallow and deep water rockfish, salmon, spot prawns, hagfish, pink

- shrimp, all wet fish, squid, sea bass, and halibut using any blocks in 1036 and 1037 including 525-650.
- 3. Economic reports going back to 2007 by Lisa Wise Consulting of Morro Bay and Port San Luis commercial fishing (located on mbcfo.org)
- 4. Groundfish Observer data if you can use VMS data, you should be able to use observer data.
- 5. Groundfishing data before the RCA went in and the TNC bought out the trawlers (during the 70s, 80s, and 90s)
- 6. What is the number and current value of the limited access permits used in our area? Shallow Nearshore and Deeper Nearshore used in the live fisheries, A permits, Squid and Light boats permits, Halibut trawl, Spot Prawn, Salmon, Swordfish drift net, Dungenous Crab, and rock crab permits.
- 7. What is the current number of active fishermen in Morro Bay and Port San Luis?
- 8. What is the number of commercial fishing vessels, what is the value of their vessels and fishing gear?
- 9. Stock assessment reports by the Pacific Fisheries Management Council
- 10. What is the size of the "safety shipping corridors"?
- 11. How many cables will be coming from the project if their are multiple leasors and how much of an exclusion area will each one need?
- 12. What is the exclusion perimeter around the project?
- 13. What infrastructure will be required? What will be that cost if it includes a Deep Water Port? (We are told that this port will be absolutely necessary for the economic viability of OSW in our area).
- 14. How will a Deep Water Port at Diablo affect local small boat fishermen? Especially since the Pt. Buchon MPA exists there as well.
- 15. How much farther are fishermen going to have to travel to fish?
- 16. How will shipping traffic be rerouted? Will there be an increased density of boat traffic on the inside of the Project affecting fishing grounds?
- 17. How will radar interferance from the wind turbines affect safety, especially in the fog and at night? Will there be mitigation to reimburse for radars with new technology to adjust for the doppler affect of the wind turbine blades causing false targets? How far does the radar interferance reach? Who is liable for collisions near the wind turbines? Will insurance rates be affected?
- 18. Will the wind turbines affect the weather buoy accuracy? Will we need new weather buoys?

- 19. Fishing dependant businesses and support impacted- fish buyers, the fuel dock, bait providers, ice providers, maintenance and repair people, supply vendors, insurance providers, slip maintenance and improvements needed, coast guard and harbor department expansions needed.
- 20. Will that massive of a wind farm (almost 400 sq. Miles of possibly 300 wind turbines) have an affect on blocking our North West winds? Will it affect upwellings south of the wind farm???? What fisheries are sensitive to upwellings? All of them.
- 21. Include areas of the ocean already closed to fishing show cummulative effects.
- 22. What safety measures will need to be instituted? Any vessel that breaks down near the wind farm is in signficant danger and can't wait several hours for help as is the current situation. Will there have to be a 24 hr tug service in the array?