

VENUTRA PORT DISTRICT
VENTURA SHELLFISH ENTERPRISE
RESPONSE TO 9/12/18 PUBLIC COMMENTS

Comment	Response
The project will significantly impact the commercial trawl fishery	The Ventura Shellfish Enterprise conducted a lengthy site selection process and outreach campaign prior to selecting the site in federal waters. The key factor motivating the decision to move to federal waters was feedback from the fishing community that it did not want the project to overlap with the limited areas of state waters available for the halibut trawl fishery. Two separate and independent site selection analyses, conducted by the UC Santa Barbara Bren School of Environmental Science and National Oceanic and Atmospheric Association's (NOAA) National Ocean Service (NOS), concluded that the proposed site was the best site available to minimize user conflicts, including fishing interests. The NOS study in particular conducted a six-month review of available and objective fishing data. It concluded that, while there was some amount of overlap with trawl fisheries, the proposed project site avoided the most significant fishing areas for halibut (located northwest of the project site) and market squid (located significantly south of the project site). NOS and the Ventura Port District (VPD) also reviewed actual trawl data collected by the California Department of Fish and Wildlife (CDFW) from 2010 through 2016, which provided the location (i.e. latitude and longitude) of where each trawl started and stopped. • The total trawl length within the Santa Barbara Channel during that time period was 40,480 nautical miles. • The total trawl length within the Area of Interest was 1,508 nautical miles. • The total trawl length within proposed project site was 145 nautical miles. Therefore, based upon CDFW trawl data, the project will require the commercial trawling fishery to relocate approximately 0.4% of their total trawls within the Santa Barbara Channel. The project site also avoids the three blocks within the region with the most reported commercial fishing landings.

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VSE needs to take into account that this area has more than just trawling. There is gillnetting, hook and line, lobster and seabass fisheries.	The project site analysis considered the most economically important regional fisheries, market squid and halibut; however, the essential fish habitat assessment takes into account all fisheries under their respective fishery management plan (FMP) prepared by the Pacific Fisheries Management Council. Block-specific and regional landing data for species covered under the FMPs, including all gear types, are sufficiently assessed. Note that the proposed longlines will be spaced sufficiently to permit hook and line fishing to the extent that it does not interfere with the proposed shellfish operation.
We need to make sure that one large entity isn't able to buy up all of the permitted areas. We need to make sure small growers have a chance.	VPD is committed to ensuring that the project site accommodates a variety of commercial shellfish interests, including both large and small companies and local sea farmers. One of the key objectives in the Ventura Shellfish Enterprise's Task 1 document and Sea Grant application was to "provide economies of scale and technical support to small producers who would not otherwise be able to participate in shellfish aquaculture." This goal is reiterated in the VPD staff report, the project's biological assessment that will be submitted to the U.S. Army Corps of Engineers (Corps), and VPD's Coastal Commission application. It is important to note that without the project, it will be difficult, if not impossible, for small, local sea farmers to start their own shellfish aquaculture farm. The current costs of permitting, environmental review, and monitoring (currently estimated to average \$400,000 per farm in California) have prevented all but the largest shellfish companies from obtaining new aquaculture permits in California. One of the critical objectives of the project is for the VPD to obtain the permits and provide economies of scale so that small and local growers can take advantage of a turn-key sub-permit without the need of going through the costly and time-consuming regulatory process.
The VPD must utilize all available fishing data.	The Ventura Shellfish Enterprise gathered feedback from commercial fishermen regarding key fishing locations as part of its previous outreach process and NOS did an exhaustive search for sources of objective fishing data. The CASS Technical Report has been updated to provide additional detail and context regarding data sources and the screening process for incorporating data. The CASS Report includes the best available, verifiable fisheries data for the region. VPD would be willing to consider any additional objective and verifiable fishing data.

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Based on experience with crab fisheries, there will be marine mammal entanglement.	There have been very few reported incidents of marine mammal entanglement with mussel aquaculture longlines. Reported entanglements are predominantly from crab, gillnet and spiny lobster fisheries. Fixed fisheries gear (e.g., pot and trap gear) is the most commonly recognized and reported gear type causing entanglements since 2000. Documented entangled animals and disentanglement efforts in the Pacific Northwest have mostly involved gray whales and humpback whales and have involved both gill nets and crab gear. While not as common, both fin and blue whales are sometimes entangled in gill nets and crab gear based on a few stranded animals and scarring on live animals. More recently, from 2014 to 2017, the majority of the whale entanglements involved humpback whales and most of the entanglements were from commercial Californian and Washington Dungeness crab traps, and gillnet fisheries. Large whale species appear to be more vulnerable to entanglement than smaller cetacean species, such as dolphins and porpoises, which are more prone to be caught as bycatch in nets due to their smaller size. Furthermore, juveniles are more likely to be entangled due to their inquisitive nature and inexperience. The proposed mussel culture techniques have some significant differences as compared to crab and fishing gear that reduce the potential for marine mammal entanglement. As opposed to fishery gear, the mussel aquaculture gear is stationary, the lines are larger, and the gear is not designed to catch or ensnare fish. Further, as described below, the lines will be highly tensioned, which reduces the risk of marine mammals being caught in slack lines. Therefore, the project design is expected to pose a much smaller risk to marine mammal entanglement compared to longline fishing methods. In contrast to fishing gear, there are far fewer documented entanglement cases in mussel aquaculture gear. Interactions and entanglements with longline aquaculture gear worldwide are rare, and close approaches by protected species are seldom documented (Price et al. 2016). West coast entanglement summaries for 2015 and 2016 report no entanglements from mussel aquaculture fisheries (NOAA 2017). There have been no reported marine mammal entanglements associated with Santa Barbara Mariculture, which has operated a 25-acre mussel aquaculture farm in the Santa Barbara Channel, using similar cultivation techniques, for over a decade (CDFG 2018). Project operation and construction are also designed to reduce the risk of entanglement. The mussel grow-out ropes are planted with seed 3-inches thick and may grow to be stiff with byssus at diameters of 10-inches or more at harvest, thus making them very unlikely sources of entanglement. Spat collection lines, which have been known Grow ropes will be attached to the headrope with a low-breaking-strength twine which will facilitate rapid detachment in the unlikely event of any interaction. Furthermore, a 1,100-pound breakaway link will be installed between the surface buoys and vertical lines. Mitigation measures include a marine wildlife entanglement plan.

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The project will create marine debris.	The proposed aquaculture gear is robust and designed to withstand rough sea conditions. Siting consideration included a minimum of 80' bottom depth to reduce potential storm surge and gear is located 15-45 feet below the water surface, which will avoid the most significant wave activity. Helical screw anchors have been shown to exhibit superior holding power as compared to other anchoring systems. The combination of surface and submerged buoyancy is designed to create a tensioned but flexible structure that is capable of responding dynamically to surface waves and storms. To address this concern, Mitigation Measure BIO-10 incorporates an aquaculture gear monitoring and escapement plan to routinely check and maintain aquaculture gear to prevent breakage and quickly retrieve any gear that breaks free.
Closures have already impacted many fishermen's sites. Block 665 is a highly used fishing area. A lot of what local fishermen catch is from this block. If you take this block away, fishermen's livelihoods are at stake.	The project only covers a small area within Block 665. The total acreage of Block 665 is 58,602 acres (taking into consideration that fishermen cannot trawl less than 1 mile offshore). The total revenue for Block 665 over a six-year period (2012 - 2017) was \$8,022,254, and the project proportionally would only impact 3.4% (\$272,756) of that total amount. Eliminating those species not impacted by the mussel aquaculture farm (lobster, ridgeback prawns, etc.), the total six-year period revenue is \$982,914 and the total corresponding impact is \$33,419. The small area that the project occupies in Block 665 will therefore not substantially impact fisheries. Further, VPD anticipates that some fishermen may seek to replace this lost income through participating in the project, which is anticipated to provide a sustainable and significant source of potential income that would more than offset the above estimated financial impact.
Can you fish in the area if no one is leasing it?	Areas that are not sub-permitted will be available for fishing, provided that such fishing does not interfere with other sub-permitted areas.
Who will police the area?	The Ventura Port District is responsible for the area and individual growers will have responsibility to follow the Best Management Practices (BMPs).