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STAFF REPORT: REGULAR CALENDAR

Application No.:	9-20-0458
Applicant:	Ocean Fathoms
Agent:	Padre and Associates, Inc.
Location:	2/3 mile offshore Fernald Point, Montecito, Santa Barbara County (Exhibit 1).
Project Description:	Request for after the fact authorization for installation and use of three underwater wine storage cages and proposed establishment of a seafloor wine storage facility.
Staff Recommendation:	Denial.

SUMMARY OF STAFF RECOMMENDATION

Ocean Fathoms, also known as 50 Fathoms LLC., is requesting after-the-fact authorization for the placement on the seafloor and use of three wine storage cages that were installed, maintained in place for one year, and removed without the benefit of a coastal development permit or any other required state and federal authorization. While these three wine storage cages have since been removed and are no longer on the

seafloor, placement and removal without CDP authorization is a violation of the Coastal Act. Thus, the applicant is seeking after-the-fact authorization for those activities.

In addition, Ocean Fathoms is proposing to install and operate a seafloor wine storage facility by maintaining in place six additional wine storage cages on the seafloor at a depth of 70 feet approximately 2/3 mile offshore of Fernald Point in Summerland, Santa Barbara County. The wine storage cages have an approximate seafloor footprint of 16 square feet each (four feet by four feet) and would extend approximately four feet high. The wine storage facility would be comprised of six cages installed in a two by three configuration covering roughly 150 square feet and would be maintained in place on the seafloor indefinitely. Every 3 months the cages would be brought to the surface using a hoist-equipped vessel to rotate and replace the wine bottles and every 12 months the entire cage would be carried out as a commercial operation and Ocean Fathoms also proposes to donate one percent of its profits to the Channel Islands Marine and Wildlife Institute, a marine mammal rescue, rehabilitation, research and education non-profit organization.

The proposed establishment of a seafloor wine storage facility has the potential to result in adverse impacts to commercial and recreational fishing through damage and loss of bottom contact fishing gear that comes into contact with the facility. In addition, the facility would adversely affect marine biological resources by disturbing, crushing and smothering marine life within the facility's installation footprint, altering the seafloor habitat within that area and by trapping and entangling fish and mobile marine invertebrates. Further, the proposed facility would result in the filling of coastal waters for a use not allowed by the Coastal Act.

For these reasons, the request for after-the-fact authorization and proposed installation and use of a seafloor wine storage facility would be inconsistent with the coastal waters fill policy (Sections 30233) of the Coastal Act. Were it not for this inconsistency, conformance with the marine biological resources, water quality and commercial and recreational fishing policies could be achieved through the inclusion of a variety of special conditions.

Commission staff therefore recommends that the Commission **deny** Ocean Fathoms' CDP application no. 9-20-0458. The motion and resolution are on Page 4 of this report. The standard of review for this CDP application is the Chapter 3 policies of the Coastal Act.

Table of Contents

I. MOTION AND RESOLUTION	4
II. FINDINGS AND DECLARATIONS	4
A. Background and Project Description	
B. Consultations and Other Agency Approvals	
California State Lands Commission (CSLC)	
California Department of Fish and Wildlife (CDFW)	
U.S. Army Corps of Engineers (USACE)	
Tribal Governments	
C. Filling of Open Coastal Waters	8
D. Marine Biological Resources and Water Quality	
E. Commercial and Recreational Fishing	
F. Violation	
G. California Environmental Quality Act (CEQA)	19
APPENDIX A – SUBSTANTIVE FILE DOCUMENTS.	21

EXHIBITS

Exhibit 1 – Project Location

I. MOTION AND RESOLUTION

Motion:

I move that the Commission approve Coastal Development Permit Application No. 9-20-0458 pursuant to the staff recommendation.

Staff recommends a **NO** vote on the motion. Failure of this motion will result in denial of the permit and adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of the Commissioners present.

Resolution:

The Commission hereby denies Coastal Development Permit Application No. 9-20-0458 for the proposed development on the grounds that the development will not be in conformity with the policies of Chapter 3 of the Coastal Act. Approval of the permit would not comply with the California Environmental Quality Act because there are feasible mitigation measures and/or alternatives that would substantially lessen the significant adverse effects of the development on the environment.

II. FINDINGS AND DECLARATIONS

A. Background and Project Description

In approximately 2016, Ocean Fathoms, without the benefit of required state and federal authorizations, began to deploy and maintain wine storage devices on the seafloor offshore of Santa Barbara County as a "proof of concept." These efforts continued and were expanded over the intervening years, and in March of 2019 resulted in the placement of a 64 cubic foot steel wine storage cage on the seafloor approximately 2/3 mile offshore of Fernald Point in Montecito for one year. This cage was recovered in March of 2020 and replaced with two cages of similar design for another one-year testing effort. In July of 2020, staff of the U.S. Army Corps of Engineers became aware of the activity, and on August 4, 2020, brought the situation to the attention of Commission staff and alerted Ocean Fathoms that authorization from several state and federal agencies was likely needed. After investigating the matter, Commission enforcement staff provided Ocean Fathoms with a Notice of Violation on February 2, 2021. In this letter Commission enforcement staff informed Ocean Fathoms that the placement and maintenance of wine storage structures on the seafloor without benefit of a coastal development permit was unpermitted development and should be removed from the seafloor as soon as possible but in no case later than February 14, 2021. Further, the letter stated that to install and operate this type of structure, Ocean Fathoms would need to obtain authorization from the Coastal Commission, U.S. Army Corps of Engineers, California State Lands Commission, and the Regional Water Quality Control Board. In the Notice of Violation letter, Commission staff also provided Ocean Fathoms with notification that the placement and maintenance of wine storage devices in coastal waters was likely not consistent with Section 30233 of the Coastal

Act, which describes allowable diking, filling, or dredging activities in open coastal waters, wetlands, estuaries, and lakes. These allowable activities include such things as new or expanded port facilities, new or expanded boating facilities, activities for restoration purposes, and nature study. On February 4, 2021, Ocean Fathoms responded to the Notice of Violation and requested an extension of the removal deadline. By letter on February 9, 2021, Commission enforcement staff granted a one-month extension to March 15, 2021. Consistent with its originally planned one-year deployment of the wine storage devices, Ocean Fathoms removed them on March 13, 2021, approximately six weeks after receipt of the Notice of Violation.

As Commission staff was investigating and working to resolve the Coastal Act violation, Ocean Fathoms submitted a CDP application for after-the-fact authorization for its past unpermitted development as described above. In addition, Ocean Fathoms' application included a request for authorization of future installation and operation of an even larger structure, described as follows in its CDP application materials:

The installation will involve placement of six storage cages on the seafloor. The cages are constructed utilizing recycled commercial spill pallets and iron. The 64 cubic foot recycled stainless-steel outer cages are lined with one quarter inch gage steel inner steel mesh... the installation of the six individual cages will cover an approximately 8' x 16' area (128 square feet or 0.003 acre) on the seafloor.

Each storage cage would contain up to 800 individual wine bottles. The images included below show the construction of the cages and their condition prior to installation and upon recovery after 12 months on the seafloor. Ocean Fathoms proposes to install the six cages in a 2x3 configuration (two cages wide and three long). Installation would be carried out by a hoist-equipped surface vessel moored in place with a three-point anchoring system and assisted by divers. The proposed installation site for the wine storage structures has a depth of approximately 70 feet and is located approximately 2/3 mile offshore of Fernald Point in Montecito, Santa Barbara County (as shown in **Exhibit 1**).

Figure 1 – Storage Cage Design and Installation



Figure 2 – Storage cages on deck of recovery vessel



The wine storage cages would not be marked with surface buoys but their installation site would be located through the use of GPS coordinates and divers. As shown in the images above, the cages would be installed and recovered one-by-one using a vessel mounted hoist to lower them to the seafloor and position them in place. Divers would then attach/detach lifting straps. The storage structures would be brought to the surface every three months to replace or rotate the stored wine bottles, and then recovered and replaced on an annual basis. During the proposed annual recovery, the cages would be brought aboard the recovery vessel for transit to shore. No cleaning or removal of biofouling material is proposed to occur at sea and no maintenance inspections or monitoring activities are proposed to occur outside of the annual recovery/replacement activities.

During installation, recovery and replacement of the storage structures, the support vessel would be moored in place with a three-point mooring system comprised of three anchors and associated cables. The anchors would be installed in a triangular configuration and would be made up of claw types anchors between 4 square feet and 16 square feet in size. During each recovery/replacement event (up to five per year for storage structure and wine bottle replacement), new mooring locations would likely be used around the perimeter of the project site due to the difficulty of locating and installing anchors within the same sites from a surface vessel.

Ocean Fathoms describes the installation and use of these six storage structures as a pilot project and plans to pursue a full project comprised of up to 30 seafloor wine storage structures in the future. Ocean Fathoms has not provided information to Commission staff about the monitoring activities or performance criteria that would be

assessed during this pilot project to determine if or when to move forward with the expanded project.

B. Consultations and Other Agency Approvals

California State Lands Commission (CSLC)

The proposed project site is on submerged state tidelands. The proposed long-term use of this area requires approval by CSLC through the issuance of a lease. Ocean Fathoms submitted a lease application to CSLC in February of 2020. As part of its interagency coordination efforts, Commission staff alerted CSLC staff that Ocean Fathoms had been engaged in the use of the proposed area since 2019 without state and federal authorization. CSLC staff opted to wait until after the Commission acts on the CDP application before continuing review of the lease application.

California Department of Fish and Wildlife (CDFW)

The proposed project site is located within an administrative kelp lease managed by the California Department of Fish and Wildlife. While no one currently holds this lease, in other situations, CDFW staff have expressed concern regarding the placement of permanent structures within a kelp lease that may adversely affect or limit commercial kelp harvesting activities. As such, Commission staff have reached out to CDFW staff for clarification about potential conflicts between the proposed project and the kelp lease. Were the project to be approved, a special condition could be included to address this issue by requiring Ocean Fathoms to consult with all relevant state agencies (including CDFW and the California Fish and Game Commission) regarding potential impacts to the kelp bed lease and to provide evidence of authorization by all relevant state agencies prior to permit issuance.

U.S. Army Corps of Engineers (USACE)

The U.S. Army Corps of Engineers has regulatory authority over the proposed project under Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 1344) and Section 404 of the Clean Water Act. Section 10 of the Rivers and Harbors Act regulates structures or work in navigable waters of the United States. Section 404 of the Clean Water Act regulates fill or discharge of materials into waters and ocean waters. Although it had been installing and using wine storage cages on the seafloor for more than a year at that time, Ocean Fathoms applied for authorization from USACE in July of 2020. During its review of this application, USACE staff became aware that unpermitted activity was ongoing and notified several state and federal agency partners, including Commission staff.

Pursuant to Section 307(c)(3)(A) of the Coastal Zone Management Act (CZMA), any applicant for a required federal permit to conduct an activity affecting any land or water use or natural resource in the coastal zone must obtain the Commission's concurrence in a certification to the permitting agency that the project will be conducted consistent with California's approved coastal management program. As such, USACE's review

would only proceed pending issuance of a CDP for the proposed project, which (if it were approved) would also serve as a concurrence under the CZMA.

Tribal Governments

As part of its review process Commission staff reached out to the following ten tribal contacts obtained from the Native American Heritage Commission and received no comments or concerns:

- Gino Altamirano, Chairperson, Coastal Band of the Chumash Nation
- Eleanor Arrellanes, Barbareño / Ventureño Band of Mission Indians
- Raudel Banuelos, Barbareño / Ventureño Band of Mission Indians
- Fred Collins, Spokesperson, Northern Chumash Tribal Council
- Kenneth Kahn, Chairperson, Santa Ynez Band of Chumash Indians
- Julio Quair, Chairperson, Chumash Council of Bakersfield
- Mona Tucker, Chairperson, yak tityu tityu tithini Northern Chumash Tribe
- Julie Lynn Tumamait-Stennslie, Chair, Barbareño / Ventureño Band of Mission Indians
- Patrick Tumamait, Barbareño / Ventureño Band of Mission Indians
- Mark Vigil, Chief, San Luis Obispo County Chumash Council

C. Filling of Open Coastal Waters

Section 30233(a) of the Coastal Act states:

(a) The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following:

(I) New or expanded port, energy, and coastal-dependent industrial facilities, including commercial fishing facilities.

(2) Maintaining existing, or restoring previously dredged, depths in existing navigational channels, turning basins, vessel berthing and mooring areas, and boat launching ramps.

(3) In open coastal waters, other than wetlands, including streams, estuaries, and lakes, new or expanded boating facilities and the placement of structural pilings for public recreational piers that provide public access and recreational opportunities.
(4) Incidental public service purposes, including but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines.

(5) Mineral extraction, including sand for restoring beaches, except in environmentally sensitive areas.

(6) Restoration purposes.

(7) Nature study, aquaculture, or similar resource dependent activities.

•••

(c) In addition to the other provisions of this section, diking, filling, or dredging in existing estuaries and wetlands shall maintain or enhance the functional capacity of the wetland or estuary.

The three wine storage structures that Ocean Fathoms has installed and recovered from the seafloor over the past two years and the six additional structures that it proposes to install and maintain on the seafloor on a continuous basis meet the Coastal Act's definition of "fill."¹ Each of the proposed wine storage structures would have a volume of 64 cubic feet. The total volume of fill proposed to be placed in open coastal waters for the purposes of storing wine would be 384 cubic feet (six cages) and would have a seafloor footprint of approximately 128 square feet. In addition, the installation, recovery and replacement of the structures up to five times per year would also involve the placement of fill in open coastal waters due to the proposed use of a three point mooring system comprised of three anchors and associated anchor chain and cable. The approximately 6,000 square feet (roughly 2,000 square feet per anchor assuming the 4 to 16 square foot anchors and 50 foot lengths of chain resting on the seafloor for each one).

The proposed temporary and permanent placement of materials and equipment in open coastal waters described above is only allowable under the Coastal Act if three separate tests are met, each of which is described in Section 30233(a) of the Coastal Act.

Allowable Uses

The first test for a proposed project involving fill is whether the fill is for one of the seven allowable uses under Section 30233(a). During an initial pre-application discussion between Commission staff and Ocean Fathoms, Commission staff noted that none of these seven allowable uses appeared to apply to the proposed project. This concern was subsequently conveyed on several additional occasions by Commission permitting and enforcement staff to both Ocean Fathoms and its environmental consultant prior to and during the CDP application review process. Despite these concerns raised by Commission staff, Ocean Fathoms decided to continue to pursue a CDP for the proposed project. In a letter provided in support of its CDP application, Ocean Fathoms provided the following statement to address Commission staff's concerns about the project's apparent inconsistency with the allowable use test of 30233(a):

Although the Project is a unique enterprise that may not initially seem to fit into the specified categories provided under Section 30233, we feel the proposed Project is an extension of many other similar Projects that have been allowed under the Coastal Act with respect to a commercial agricultural use (such as aquaculture). We believe that our proposed project is consistent with the State of California desire to promote a blue economy. The project includes a design that has been minimized to include a very small area of seafloor with no significant environmental impacts to the biological resources of the region or impacts on other users of

¹ Coastal Act Section 30108.2 states: "Fill" means earth or any other substance or material, including pilings placed for the purposes of erecting structures thereon, placed in a submerged area.

marine environment. This enhanced wine aging process in a natural extension of existing wine industry in Santa Barbara County which provide valuable jobs to the local agricultural and tourism industries.

Through this statement, Ocean Fathoms appears to be indicating that the proposed project meets the allowable use test because it is "an extension of many similar projects that have been allowed under the Coastal Act" and that it is similar to a "commercial agricultural use (such as aquaculture)." However, as a unique, stand-alone project, the installation and use of wine storage structures is not an extension of another previously approved and permitted project. Additionally, although "aquaculture" is one of the enumerated allowable uses under Section 30233 of the Coastal Act, the storage of wine is not "aquaculture." The Coastal Act, in Section 30100.2 states that aquaculture "means a form of agriculture as defined in Section 17 of the Fish and Game Code." Section 17 of the Fish and Game Code, in turn, defines aquaculture as "that form of agriculture devoted to the propagation, cultivation, maintenance, and harvesting of aquatic plants and animals in marine, brackish, and fresh water." Wine is not an aquatic plant or animal and thus, the proposed project does not fit the definition of aquaculture.

Nor does underwater wine storage appear to be a resource dependent activity that can be considered similar to aquaculture, thus fitting the permitted use in Section 30233(a)(7). The Coastal Act defines "coastal dependent development or use" as "any development or use which requires a site on, or adjacent to, the sea to be able to function at all." Wine storage does not need to be nor is it typically carried out on the seafloor and it does not rely on nor depend on the marine environment. In its CDP application, Ocean Fathoms conveys its belief that the pressure and temperature provided at a certain depth under water may facilitate wine storage, but these physical features can be provided outside of the ocean as well. As such, the evidence does not demonstrate that underwater wine storage is a coastal-dependent (or resource dependent) activity that is similar to aquaculture in that it requires a site in or under the sea to function.

Similarly, the proposed project also is not a "new or expanded port, energy, and coastaldependent industrial facility;" has no connection to "maintaining existing, or restoring previously dredged, depths in existing navigational channels, turning basins, vessel berthing and mooring areas, and boat launching ramps;" and is not part of "new or expanded boating facilities and the placement of structural pilings for public recreational piers that provide public access and recreational opportunities." The proposed project would not be serving "incidental public service purposes, including but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines;" is not part of "mineral extraction," "restoration," "nature study," nor "similar resource dependent activities."

Because the proposed project does not meet the first test of Section 30233, it is inconsistent with this section of the Coastal Act. It is thus not necessary to assess conformity with the second two tests of Section 30233(a). However, if the proposed

project were to be found an allowable use of fill, it would still fail the second test for the reasons described below.

Alternatives

The second test for a proposed project involving fill is that "there is no feasible less environmentally damaging alternative." Ocean Fathoms provided no information in its CDP application regarding the alternative designs, configurations, and locations it considered for the proposed wine storage structures. However, Commission staff identified several alternatives that have the potential to be less environmentally damaging. For example, the proposed recovery and re-installation of the storage structures up to five times per year and the associated installation of a three point mooring system each time would result in frequent disturbance to marine habitats and loss and injury to their associated marine life. Such adverse impacts would occur across the project site and periphery but could be avoided through the placement of the proposed structures on existing artificial substrates or structures that do not support marine life. Impacts associated with the mooring system could also be reduced through the use of a dynamic positioning system on the support vessel proposed to be used for the installation and recovery of the wine storage structures. Dynamic positioning systems rely on the thrust from a vessel's propulsion system to keep the vessel in place and do not result in the seafloor disturbance that occurs through the placement and recovery of anchoring or mooring systems.

To further reduce environmental impacts, the wine storage structure could be redesigned and reconfigured such that it (1) has a reduced seafloor footprint and (2) would not pose a risk of trapping, injuring and killing marine life. The proposed cage design includes metal screening, bars and a mazelike interior latticework of wine bottles that a variety of marine organisms could enter and become trapped in, unable to leave.

In addition, the underwater wine storage structures could be placed within a freshwater reservoir or lake, thus eliminating adverse impacts to marine and coastal resources. Several large bodies of fresh water of sufficient depth exist within 30 miles of the project area that may be available for use, including Lake Cachuma and Lake Casitas

Finally, another less environmentally damaging project alternative would be a system or configuration that remains in place while allowing the bottles to be replaced/recovered. The proposed storage structures would be recovered and replaced with new, clean structures on an annual basis, thus resulting in the loss of all the marine life that may have colonized or grown on them over that year. By removing these structures and that accumulated marine life on a regular basis, the proposed project would be acting as a marine life "sink," resulting in a continual loss of marine life. A system that allowed for the stored product to be recovered while maintaining the storage vessel, and its accumulated marine life, intact and in place would be less environmentally damaging. While the feasibility of each of the examples described above has not been fully assessed by Commission staff, it is apparent that the proposed project was not designed to minimize impacts to coastal resources.

Therefore, the proposed project also fails the second test of Coastal Act Section 30233(a) because there are feasible less environmentally damaging alternatives.

Mitigation Measures

The third and final test for a proposed project involving fill is that "feasible mitigation measures have been provided to minimize adverse environmental effects." The proposed project includes several mitigation measures intended to minimize potential and anticipated adverse environmental effects. These measures include the placement of spill cleanup and response equipment on the project support vessel, environmental awareness training for project personnel and the implementation of best management practices to help minimize the risk of collisions between the project vessel and large marine mammals.

In addition to these proposed mitigation measures, the Commission typically requires other feasible measures to minimize the adverse environmental effects of projects that are located in the ocean. For example, for most ocean-based activities, the Commission typically requires: (1) monitoring by marine mammal observers to minimize the risk of entanglement or injury to marine wildlife; (2) a benthic survey to ensure that placement of structures and mooring systems avoid impacts to sensitive marine habitat ; (3) a notice to mariners to be posted in advance of installation and recovery activities to help provide navigational safety and prevent collisions between vessels; (4) updates to nautical charts with the location of the submerged structures to prevent entanglement and loss of fishing gear and other types of interactions that would result in the creation and spread of marine debris; (5) a financial assurance or letter of credit to ensure that the structures are not abandoned in place if they exceed their useful life or the operator becomes insolvent; and (6) periodic assessments of submerged structures to ensure that contingency steps and adaptive management measures are implemented if the structures trap significant types or amounts of marine life. Were it not for the Coastal Act nonconformities noted previously in these Findings, the Commission could adopt special conditions requiring Ocean Fathoms to implement these feasible mitigation measures. However, because those areas of nonconformity do not allow the project to be fully consistent with the relevant Coastal Act provisions, there is no need to identify special conditions in this section of the Findings that would result in the proposed project being only partially consistent with the Coastal Act.

Conclusion

The Commission finds that the project would not be an allowable use of fill in open coastal waters and that less environmentally damaging feasible alternatives to the proposed project exist. Therefore, the proposed project does not meet two of the three tests of Section 30233 of the Coastal Act. The Commission therefore finds the project inconsistent with Coastal Act Section 30233 and denies it.

D. Marine Biological Resources and Water Quality

Section 30230 of the Coastal Act states:

Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for longterm commercial, recreational, scientific, and educational purposes.

Section 30231 of the Coastal Act states:

The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats and minimizing alteration of natural streams.

Proposed project activities have the potential to result in adverse impacts to marine biological resources and water quality. These adverse impacts would include (1) damage and disturbance to marine habitats and wildlife due to the presence and frequent removal and reinstallation of the wine storage structures and vessel moorings; (2) the risk of fuel, oil and hydraulic fluid spills from the project vessel; (3) the risk of collision between the project vessel and large marine mammals; (4) entanglement or injury to marine mammals during installation and recovery of the storage structures and vessel moorings; and (5) injury and loss of marine life that may become trapped in the storage structures.

Disturbance to Benthic Habitat

While the total benthic footprint of the proposed wine storage structures is estimated by Ocean Fathoms to be relatively small (128 square feet for all six structures, including a slight gap between individual structures), the recovery and re-installation of each structure up to five times per year and the challenge associated with precise placement in 70 feet of water using a surface vessel operating in dynamic ocean conditions means that the seafloor area subjected to disturbance from the storage structure would likely be substantially larger. Further, the individual structures may shift or move over time due to ocean conditions, dragging across the seafloor. Commission permitting and enforcement staff are aware of previous unpermitted development near the proposed project site that involved attempted artificial reef structures of similar mass and size that were temporarily lost and later recovered hundreds of feet away due to unanticipated movement and larger than expected current action on the seafloor. Despite requests from Commission staff. Ocean Fathoms has not provided information and analysis documenting average and maximum current speeds at the proposed project site and showing that the proposed structures would remain in place during typical and worstcase ocean conditions.

Considering the expanded benthic footprint associated with the repeated installation, recovery and re-installation of the structures and the potential for them to move unexpectedly, the proposed project is likely to result in damage and disturbance to seafloor habitats at and around the proposed site. Additional damage and disturbance would also occur during the installation and deployment of the project support vessel's three point anchoring system, also proposed to be used up to five times per year. Each individual anchor would have a worst-case disturbance footprint of up to 2,000 square feet, due to the anchor itself and associated connection chain that would move across the seafloor. Because these anchors would be unlikely to be installed in precisely the same location during each of the five recovery/re-installation operations, the total project disturbance area would likely extend from the proposed storage structure site outwards several hundred feet. Conservatively assuming that the disturbance area would have a radius of 200 feet², it would encompass roughly three acres of seafloor.

Within this area, marine habitats and the organisms they support would be subjected to repeated burial, crushing, turbidity plumes, and abrasion from the anchors, anchor chains and wine storage structures. While many marine species that specialize in living in soft substrates can tolerate and thrive in areas subjected to periodic disturbance, frequent chronic disturbance can shift community structures and result in reduced numbers and diversity of species. Thus, over time, the proposed project could result in changes and reductions in marine life within an approximately 3 acre area of seafloor and would similarly alter the marine habitat within that area, both due to the presence of the proposed structures and the repeated disturbance associated with their use.

The proposed project site was not surveyed or investigated prior to its unpermitted use by Ocean Fathoms for its first three wine storage structures. Ocean Fathoms included statements in its CDP application that subsequent diver surveys documented that the site is comprised of gently sloping soft substrates but no survey report or discussion of methodology, survey locations or survey personnel was provided. Although evaluation of existing data sources (including the California Department of Fish and Wildlife's MarineBIOS spatial data viewer and the United States Geological Survey's California Seafloor Mapping Project) by Commission staff indicates that the project site and surrounding area is dominated by soft substrate benthic habitat, not all such habitats are homogenous and uniform in the species and benthic communities they support. Some areas of soft substrate are known to support extremely high densities of invertebrate organisms such as star fish, tube worms, sea pens or sand dollars while nearby areas that appear physically similar do not. Those areas of more highly productive soft substrate habitats may play a particularly important role in the wider marine ecosystem than has been traditionally recognized. Ocean Fathoms' unpermitted placement of wine storage structures at the project site for two years and the informal nature and lack of detail provided from its subsequent diver surveys make it difficult to know what may have been present at the project site prior to its use and if it once supported higher densities or diversities of marine life than it does today.

² Based on prior anchoring plans used for the same support vessel in similar marine equipment installation and removal projects.

To better understand the site's existing condition and investigate whether continued use of the site would be appropriate, given the expected level of disturbance it would be subjected to were the project to proceed, a special condition could be developed to require an appropriate benthic survey plan to be developed and implemented prior to issuance of the CDP. In addition, special conditions could also be included to ensure that best management practices were implemented to minimize seafloor disturbance associated with vessel mooring, such as restrictions on anchor dragging during deployment and recovery and requirements for the use of a support vessel or "flying" technique to place anchors. To further minimize benthic disturbance, a special conditions and currents at the project site along with an engineering analysis showing that the proposed storage structures would remain in place during worst-case storm conditions. However, given the project's nonconformity with other Coastal Act policies, there is no need to identify special conditions in this section of the Findings that would result in the project being only partially consistent with the Coastal Act.

Spill Risk

The proposed use of a 77-foot long, hoist-equipped support vessel for installation and recovery of the wine storage cages up to five times per year brings with it a risk of uncontrolled spill of contaminated liquids and materials into coastal waters. This risk is associated with damage to the vessel, sinking or failure of its fuel tanks or engines, as well as leaks or damage to its hydraulic hoist system. While Ocean Fathoms has proposed mitigation measures to help reduce and respond to this risk, including the maintenance of spill response equipment on the vessel itself, a special condition could be included to augment this commitment by ensuring that the amount and type of equipment is based on the worst-case spill type and volume. Such a condition could also require that the equipment is accompanied by a Spill Response Plan that includes appropriate emergency contact information and guidance about spill response procedures and equipment use.

However, given the project's nonconformity with other Coastal Act policies, there is no need to identify special conditions in this section of the Findings that would result in the project being only partially consistent with the Coastal Act.

Ship Strikes

Another potential adverse impact to marine biological resources associated with the proposed use of the project support vessel is the risk that it will strike and severely injure or kill a large marine mammal. Ship strikes involving large vessels moving at high rates are known to be the leading cause of mortality for several of the whale species that inhabit California's marine waters. While the proposed project vessel is relatively large at 77 feet, it is a specialized vessel used predominantly for marine construction and is not designed to move at high speeds. Ocean Fathoms' CDP application notes that the vessel has an approximate maximum speed of ten knots. At this speed and below, both the likelihood and consequences of a ship strike are significantly lower. Additionally, the project site is less than one mile from shore and, while gray whales are known to migrate in such areas, the overall density of whales so close to shore is much more limited than further offshore in the Santa Barbara Channel. Further, the project vessel would be transiting a limited

distance between the project site and Santa Barbara Harbor, a one-way distance of less than four miles. In its CDP application materials, Ocean Fathoms states that

For both cage installation and recovery, the Project vessel will transit from Santa Barbara Harbor to the Project site. While there is the potential to encounter whales and dolphins near shore, the smaller vessels can easily change course or reduce speed if marine wildlife if observed in the path of the vessel. With the exception of vessel transit for mobilization and demobilization, cage installation and recovery operations will be stationary, so it is unlikely marine wildlife will be present within the Project area. Therefore, the potential for vessel collision impacts are not expected to adversely affect sensitive marine wildlife.

In addition, the application materials also note that in addition to the limited speed of the project vessel, a variety of standard guidelines would be implemented to minimize collision risk. These include maintaining separation distances between the vessel and observed whales, not crossing projected travel paths of observed whales, not separating female whales from calves and reducing speed if evasive or defensive behavior is observed.

Given the limited proposed travel distance, low vessel speeds, nearshore site and travel route and adherence to standard guidelines, the proposed project would pose a limited risk of ship strikes to whales.

Marine Mammal Entanglement

The proposed installation and recovery of wine storage cages and moorings from the seafloor up to five times per year would be associated with the placement and use of small diameter ropes, cables, and lines through the water column. Such lines present a known entanglement risk to marine mammals, particularly larger species such as sea lions, dolphins and whales.

To minimize this entanglement risk and prevent injury or mortality to marine wildlife, a special condition could be developed to require Ocean Fathoms to have a marine wildlife observer (MWO) on its support vessel and to establish a 500-foot radius stopwork zone monitored by the MWO during underwater operations.

Such measures are commonly included with projects involving marine construction or operations in the water column in areas like the project site that are known to support marine mammals. However, given the project's nonconformity with other Coastal Act policies, there is no need to identify special conditions in this section of the Findings that would result in the project being only partially consistent with the Coastal Act.

Trapping and Removal of Marine Life

The proposed project includes the installation and periodic recovery of six, 64 cubic foot cage structures from the seafloor and thus has the potential to adversely affect marine life through unintentional trapping and removal. Many species of marine fish and mobile invertebrates (including crabs and lobster) are known to investigate novel structures and are routinely fished through the use of cages and traps made from metal and wire mesh.

While the proposed cages would include one-inch diameter mesh panels above and around the periphery of the wine bottle storage racks and would thus prevent movement of larger fish and invertebrates into the cages, smaller species and individuals could pass within. Once inside, these animals may become lost or trapped and unable to leave or could be removed during periodic recovery of the structures to the surface. While the number and type of animals adversely affected in this way would be expected to be limited, there is some uncertainty in this assumption due to the novelty of the proposed structures. To address this uncertainty and help ensure that unforeseen issues of marine life trapping are reported and addressed, a special condition could be developed requiring Ocean Fathoms to monitor the number and type of species found within the cages upon their recovery and report to the Executive Director those results. Such a condition could further establish contingency or adaptive management measures to be taken (such as use of larger or smaller wire mesh panels) if substantial numbers or types of marine life are found within the cages. However, given the project's nonconformity with other Coastal Act policies, there is no need to identify special conditions in this section of the Findings that would result in the project being only partially consistent with the Coastal Act.

Conclusion

With the addition of a variety of special conditions, as noted above, the project could be carried out in a manner in which marine resources and water quality are maintained, species of special biological significance are given special protection, the biological productivity of coastal waters is sustained, and healthy populations of all species of marine organisms will be maintained. The Commission could therefore find the proposed project consistent with the marine resource and water quality sections (Sections 30230 and 30231) of the Coastal Act if appropriate conditions were imposed. However, because those areas of nonconformity noted in the previous section of these Findings do not allow the Project to be fully consistent with the relevant Coastal Act provisions, there is no need to identify special conditions in this section of the Findings that would result in it being only partially consistent with the Coastal Act.

E. Commercial and Recreational Fishing

Section 30234 of the Coastal Act states:

Facilities serving the commercial fishing and recreational boating industries shall be protected and, where feasible, upgraded. Existing commercial fishing and recreational boating harbor space shall not be reduced unless the demand for those facilities no longer exists or adequate substitute space has been provided. Proposed recreational boating facilities shall, where feasible, be designed and located in such a fashion as not to interfere with the needs of the commercial fishing industry.

Section 30234.5 of the Coastal Act states:

The economic, commercial, and recreational importance of fishing activities shall be recognized and protected.

The proposed project is located in California Department of Fish and Wildlife Fish Block 652, which encompasses approximately 40 square nautical miles.³ From 2016 to 2020, the top species harvested within this block were spider crab, California halibut, spiny lobster, sea urchin, sea cucumber, yellow rock crab, Kellet's whelk, yellowtail and white seabass. Fishing methods used for these species include trapping, hook-and-line, diving, and drift and set gillnetting. The total fisheries value of this block has fluctuated between roughly \$100,000 and \$200,000 during recent years.

Ocean Fathoms evaluated the project's potential to adversely affect commercial fishing and provided the following:

Commercial fishing operations occur within the Project region throughout the year; however, the immediate Project site receives minimal fishing due to the shallow water depths (approximately 70 feet) and lack habitat for target catch taxa. Common fishing types in the Project region in purse seining, hook-and-line, trawling in permitted areas, and trap or pot fishing for crab and lobster. Due to restrictions within State waters, all drift gillnetting occurs in Federal waters. Conflicts between fisheries and the Project could include space-use or operational conflicts during installation or maintenance of Project equipment or the potential for fishing gear to be entangled on wine cages. To avoid conflicts with fisheries, the Project site was selected based upon avoidance of permitted trawling grounds. In addition, a representative of the local commercial fishing community provided location recommendations in order to avoid highly trafficked fishing grounds to prevent snagging risks to commercial fishermen. Lastly, following installation, the Project site would be identified within a Local Notice to Mariners to alert commercial and recreational boaters of the Project site location.

As noted above, to minimize conflicts with fishing activities, Ocean Fathoms proposes to post a Local Notice to Mariners about its facility. However, such notices are most typically used for projects and activities of short duration (days or weeks) and unless continually reissued, would not provide adequate warning over the long-term. To address this, a special condition could be developed to require Ocean Fathoms to update the nautical charts for the project area with the specific project location and a notation about the presence of a submerged structure/hazard. Without such a condition, adverse impacts to commercial and recreational fishing would be likely due to interactions between the facility and fishing gear. Such interactions would likely result in both the loss and damage to fishing gear and the resulting release of marine debris (in the form of abandoned fishing gear). To address this issue, another special condition could be developed to require Ocean Fathoms to collect and dispose of at an appropriate onshore facility any fishing gear that becomes entangled on the wine storage facility.

Conclusion

³ While offshore Fish Blocks typically cover 100 square nautical miles, those like Fish Block 652 that include shoreline areas are more variable in size.

With the addition of a variety of special conditions, as noted above, the project could be carried out in a manner that recognizes and protects the economic, commercial, and recreational importance of fishing activities. The Commission could therefore find the proposed project consistent with the recreational and commercial fishing sections (Sections 30234 and 30234.5) of the Coastal Act. However, because those areas of nonconformity noted in the previous section of these Findings do not allow the Project to be fully consistent with the relevant Coastal Act provisions, there is no need to identify special conditions in this section of the Findings that would result in it being only partially consistent with the Coastal Act.

F. Violation

As noted above in the Staff Summary, unpermitted development activities were undertaken by the project applicant, including, but not limited to, installation, use, and removal of three 64 cubic foot seafloor wine storage devices. In response to notification by Commission permitting and enforcement staff about these Coastal Act violations, as well as its desire to seek approval for additional proposed development, Ocean Fathoms carried out its planned recovery of the wine storage structures and submitted this CDP application. The applicant seeks after-the fact authorization for development already undertaken and approval of future development of the same nature.

Denial of this application, pursuant to the staff recommendation, would not resolve the matter of the violations and this would be referred to the Commission's enforcement division for appropriate future action to address the violations. Approval of this application, issuance of the CDP, and the applicant's subsequent compliance with all terms and conditions of that CDP would result in resolution of the above described violations, going forward.

Although development has taken place prior to the submission of the CDP application, consideration of this application by the Commission has been based solely upon the Chapter 3 policies of the Coastal Act. Commission review and action on the CDP application does not constitute a waiver of any legal action with regard to the alleged violations, nor does it constitute an implied statement of the Commission's position regarding the legality of development, other than the development addressed herein, undertaken on the subject sites without coastal permits or permit amendments. In fact, approval of this CDP application would only be possible with the addition of a variety of special conditions and failure to comply with those conditions would also constitute a violation of the permit and of the Coastal Act - subject to the enforcement provisions of Chapter 9 of the Coastal Act.

G. California Environmental Quality Act (CEQA)

Public Resources Code (CEQA) Section 21080(b)(5) and Sections 15270(a) and 15042 (CEQA Guidelines) of Title 14 of the California Code of Regulations (14 CCR) state in applicable part:

CEQA Guidelines (14 CCR) Section 15042. Authority to Disapprove Projects. [Relevant Portion.] A public agency may disapprove a project if necessary in order to avoid one or more significant effects on the environment that would occur if the project were approved as proposed.

Public Resources Code (CEQA) Section 21080(b)(5). Division Application and Nonapplication. ...(b) This division does not apply to any of the following activities: ...(5) Projects which a public agency rejects or disapproves.

CEQA Guidelines (14 CCR) Section 15270(a). Projects Which are Disapproved. (a) CEQA does not apply to projects which a public agency rejects or disapproves.

14 CCR Section 13096(a) requires that a specific finding be made in conjunction with CDP applications about the consistency of the application with any applicable requirements of CEQA. This report has discussed the relevant coastal resource issues with the proposed project. All above findings are incorporated herein in their entirety by reference. As detailed in the findings above, the proposed project would have significant adverse effects on the environment as that term is understood in a CEQA context. Pursuant to CEQA Guidelines (14 CCR) Section 15042 "a public agency may disapprove a project if necessary in order to avoid one or more significant effects on the environment that would occur if the project were approved as proposed." Section 21080(b)(5) of CEQA, as implemented by Section 15270 of the CEQA Guidelines, provides that CEQA does not apply to projects which a public agency rejects or disapproves. The Commission finds that denial, for the reasons stated in these findings, is necessary to avoid the significant effects on coastal resources that would occur if the project was approved as proposed. Accordingly, the Commission's denial of the project is appropriate pursuant to CEQA and also represents an action to which CEQA, and all requirements contained therein that might otherwise apply to regulatory actions by the Commission, do not apply.

APPENDIX A – SUBSTANTIVE FILE DOCUMENTS

CDP Application File No. 9-20-0458 and associated materials