

**STAFF REPORT**

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**AMENDMENT OF LEASE AND REVISION OF RENT**

**LESSEE:**

Marine BioEnergy, Inc.

**AREA, LAND TYPE, AND LOCATION:**

Sovereign land in the Pacific Ocean, offshore of Howland's Landing and Parsons Landing, Santa Catalina Island, Los Angeles County.

**AUTHORIZED USE:**

Placement and monitoring of up to four kelp elevators, and data collection in two phases, as follows: Phase 1: two elevators at Site 1, shallow-water site; and Phase 2: either one elevator at Site 2, Deep Site A, or two elevators at Sites 3 and 4, Deep Site B; removal of all improvements upon completion of research project, prior to lease expiration.

**LEASE TERM:**

3 years, beginning April 20, 2017.

**CONSIDERATION:**

Rent in the amount of \$125 per year.

**PROPOSED AMENDMENT:**

- Increase the lease term from 3 to 8 years.
- Authorize use of sites 1, 2, 3, and 4, for the placement of up to five kelp elevators total.
- All kelp elevators must be removed before April 19, 2025, unless otherwise extended.
- Revision of rent from \$125 to \$140 per year, to reflect new minimum rent, effective April 20, 2020.

All other terms and conditions of the lease shall remain in effect without amendment.

## STAFF REPORT NO. 50 (CONT'D)

### **STAFF ANALYSIS AND RECOMMENDATION:**

#### **Authority:**

Public Resources Code sections 6005, 6216, 6301, 6501.1, and 6503;  
California Code of Regulations, title 2, sections 2000 and 2003.

#### **Public Trust and State's Best Interests Analysis:**

On April 20, 2017, the Commission authorized the issuance of Lease No. PRC 9400.1, a 3-year General Lease - Other, to Marine BioEnergy, Inc., for the installation and monitoring of up to four kelp elevators; and data collection in the Pacific Ocean offshore of Santa Catalina Island (Catalina), beginning April 20, 2017 ([Item C70, April 20, 2017](#)). That Lease will expire on April 20, 2020. The Lessee is now requesting an amendment of the lease, to extend the joint research project with the University of Southern California's (USC) Wrigley Institute for Environmental Studies for an additional 5 years and to authorize the placement of one kelp elevator at Site 3 and Site 4. The total number of kelp elevators would be 5. The extended term and additional kelp elevator would allow more extensive testing of the depth cycling (see explanation below) impacts on locally acquired kelp species in the open ocean.

Kelp species collected from Catalina waters are transplanted and attached to the elevator's support structure (sliding boom) that moves the kelp between different ocean depths to optimize nutrient absorption. This is depth cycling. Growth rates and other health indicators of the transplanted kelp are monitored over multiple cycles in the ocean environment—each cycle lasting about 1 month.

Each elevator is comprised of a marker buoy, a winch and winch cable used to raise and lower a sliding boom, an anchor line and anchor, and a 3D Doppler profiler to measure water current velocity. The existing lease authorizes the placement of up to four elevators for monitoring and data collection in the Pacific Ocean, off the northeast coast of Catalina.

The authorized project consisted of two phases. Phase 1 included installation of two elevators at Site 1, a shallow-water site approximately 0.6 mile offshore from Howland's Landing that was intended to serve as the control site. The conditions at Howland's Landing proved unsuitable for a control site, but are still viable as a nursery site.

Phase 2 included installation of either one elevator at Site 2, located approximately 1 mile offshore of Howland's Landing (Deep Site A); or two elevators (one per site) at Sites 3 and 4, located approximately 2 miles

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offshore of Parsons Landing (Deep Site B). The Lessee chose Deep Site A for use in Phase 2, and an elevator was deployed in February 2019.

Due to delays in deployment and other logistical problems, to complete the goals of the project, the Lessee requests authorization to place kelp elevators at both Deep Sites A and B. The Lessee will provide notice to staff 15 days prior to the placement of any improvements at any of the sites, and within 30 days of placement, the Lessee will provide staff with the exact placement coordinates of the kelp elevator.

The sites along the northeast coastline of Catalina were selected based on characteristics such as appropriate depth and soft sandy bottom substrate. Additionally, the sites are close to the USC Wrigley Marine Science Center and avoid areas with sensitive environmental habitats, commercial and recreational fishing areas, and heavy boat traffic. Although the maximum swing radius of the mooring extends to waters deep enough for prawn fishing, the mooring was placed as close as possible to the boundaries of the three Marine Protected Areas (MPAs) near the project sites to minimize or eliminate potential conflicts with commercial prawn fishing operations. The three MPAs are: Bird Rock State Marine Conservation Area (SMCA); Blue Cavern SMCA; and Arrow Point to Lion Head Point SMCA.

The requested extension of time for the research project is necessary to adequately demonstrate that kelp farming in extensive regions of the Pacific Ocean could be commercially viable utilizing this process. As a biofuel, kelp has the potential to provide a green-energy alternative to fossil fuels. Since it grows in the ocean, it does not compete with food production for land, and does not require fresh water, pesticides, or artificial fertilizers. Also, biofuels are considered carbon-neutral because the amount of carbon produced as fuel is offset by the amount of carbon absorbed during growth. Biofuels could help meet California's energy and emissions goals identified in the California Global Warming Solutions Act of 2006 (AB 32) and subsequent law by augmenting or replacing imported and domestic petroleum.

Kelp farming is water-dependent, and the additional kelp elevator and extended term of the research project are not expected to substantially interfere with other Public Trust purposes. The locations of the kelp elevators were selected to minimize any interference with Public Trust resources like sensitive environmental habitat, fishing areas, and areas with heavy boat traffic. Additionally, courts have recognized scientific study, like this research project, as a proper use of trust resources under

## STAFF REPORT NO. 50 (CONT'D)

the common law Public Trust Doctrine. (*Marks v. Whitney* (1971) 6 Cal.3d 251, 259-60).

The proposed lease amendment does not alienate the State's fee simple interest or permanently impair public rights. The lease does not grant the Lessee exclusive rights to the lease premises. Upon termination of the lease, the Lessee will remove all improvements from State lands. The lease requires the Lessee to insure the lease premises and indemnify the State for any liability incurred as a result of the Lessee's activities.

### **Climate Change:**

The research project is offshore of Catalina. The activity would not involve the construction of permanent structures or facilities, and all temporary structures would be located underwater except for the marker buoys. Due to the short-term and temporary nature of the project, and the nature of the activity itself, sea-level rise would not affect the project.

### **Conclusion:**

For all the reasons above, staff believes that approval of the proposed lease amendment is consistent with the common law Public Trust Doctrine; will not substantially interfere with Public Trust needs at this location, at this time, and for the extended lease term; and is in the best interests of the State.

### **OTHER PERTINENT INFORMATION:**

1. Approval or denial of the revision of rent and proposed amendment is a discretionary action by the Commission. Each time the Commission approves or rejects a use of sovereign land, or a revision of rent, it exercises legislatively delegated authority and responsibility as trustee of the State's Public Trust lands as authorized by law. If the Commission denies the amendment to extend the lease term, the Lessee will be required to remove its equipment prior to the lease expiration date. Upon expiration or prior termination of the lease, the Lessee also has no right to a new lease or renewal of any previous lease.
2. This action is consistent with Strategy 1.1 of the Commission's Strategic Plan to deliver the highest levels of public health and safety in the protection, preservation and responsible economic use of the lands and resources under the Commission's jurisdiction. The action is also consistent with Key Action 2.1.2 of the Strategic Plan to market land holdings to promote renewable energy and environmentally responsible resource and energy development projects.

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3. Staff recommends that the Commission find that this activity is exempt from the requirements of the California Environmental Quality Act (CEQA) as a categorically exempt project. The project is exempt under Class 6, Information Collection; California Code of Regulations, title 14, section 15306.

Authority: Public Resources Code section 21084 and California Code of Regulations, title 14, section 15300.

**EXHIBITS:**

- A1. Land Description (Site 1)
- A2. Land Description (Site 2)
- A3. Land Description (Sites 3 and 4)
- B1. Site and Location Map (Site 1)
- B2. Site and Location Map (Site 2)
- B3. Site and Location Map (Sites 3 and 4)

**RECOMMENDED ACTION:**

It is recommended that the Commission:

**CEQA FINDING:**

Find that the activity is exempt from the requirements of CEQA pursuant to California Code of Regulations, title 14, section 15061 as a categorically exempt project, Class 6, Information Collection; California Code of Regulations, title 14, section 15306.

**PUBLIC TRUST AND STATE'S BEST INTERESTS:**

Find that that approval of the proposed lease amendment is consistent with the common law Public Trust Doctrine; will not substantially interfere with Public Trust needs and values at this location, at this time, and for the extended lease term; and is in the best interests of the State.

**AUTHORIZATION:**

1. Authorize the amendment of Lease No. PRC 9400.1, a General Lease – Other, to extend the lease term from 3 to 8 years, to authorize placement of one additional kelp elevator, thereby increasing the total number of kelp elevators to five within the lease premises, as described in Exhibit A, and shown on Exhibit B (for reference purposes only), attached and by this reference made a part hereof, effective October 24, 2019.
2. Approve the revision of rent for Lease No. PRC 9400.1 from \$125 per year to \$140 per year, effective April 20, 2020.

**EXHIBIT A-1**  
**(SITE 1)**  
**LAND DESCRIPTION**

**PRC 9400.1**

A parcel of submerged land situate in the bed of Pacific Ocean, Northwest of Catalina Island, Los Angeles County, State of California, more particularly described as follows:

BEGINNING at a point which bears N 49° 31' 35" W 39,522.96 feet from a NGS Horizontal control disk stamped AVX A 1992 (PID DY9310) thence along the following four courses:

1. N 43°15'50" E 1087.04 feet;
2. S 49°44'59" E 2182.36 feet;
3. S 42°43'38" W 1102.32 feet;
4. N 49°20'16" W 2191.93 feet to the point of beginning

**END OF DESCRIPTION**

The basis of bearings of this description is the California Coordinate System of 1983, Zone 6. All distances are grid distances.

Prepared 07/29/2019 by the California State Lands Commission Boundary Unit.



**EXHIBIT A-2**  
**(SITE 2)**  
**LAND DESCRIPTION**

**PRC 9400.1**

A parcel of submerged land situate in the bed of Pacific Ocean, Northwest of Catalina Island, Los Angeles County, State of California, more particularly described as follows:

BEGINNING at a point which bears N 42° 00' 48" W 31,926.97 feet from a NGS Horizontal control disk stamped AVX A 1992 (PID DY9310) thence along the following four courses:

1. N 87° 56' 19" W 2235.80 feet;
2. N 02° 18' 40" E 2208.88 feet;
3. S 87° 18' 14" E 2215.80 feet;
4. S 01° 47' 09" W 2184.34 feet to the point of beginning

**END OF DESCRIPTION**

The basis of bearings of this description is the California Coordinate System of 1983, Zone 6. All distances are grid distances.

Prepared 07/29/2019 by the California State Lands Commission Boundary Unit.



**EXHIBIT A-3**  
**(SITE 3 & 4)**  
**LAND DESCRIPTION**

**PRC 9400.1**

Two (2) parcels of submerged land situate in the bed of Pacific Ocean, Northwest of Catalina Island, Los Angeles County, State of California, more particularly described as follows:

**SITE 3**

BEGINNING at a point which bears N 37° 27' 51" W 45,666.85 feet from a NGS Horizontal control disk stamped AVX A 1992 (PID DY9310) thence along the following four courses:

1. N 65°25'18" W 5,300.67 feet;
2. N 26°12'01" E 5,148.18 feet;
3. S 65°42'17" E 5,147.13 feet;
4. S 24°29'27" W 5,171.57 feet to the point of beginning

**SITE 4**

BEGINNING at a point which bears N 41° 34' 28" W 52,402.96 feet from a NGS Horizontal control disk stamped AVX A 1992 (PID DY9310) thence along the following four courses:

1. N 78°12'32" W 4584.27 feet;
2. N 10°48'56" E 4458.65 feet;
3. S 78°25'51" E 4568.34 feet;
4. S 10°36'55" W 4476.64 feet to the point of beginning

**END OF DESCRIPTION**

The basis of bearings of this description is the California Coordinate System of 1983, Zone 6. All distances are grid distances.

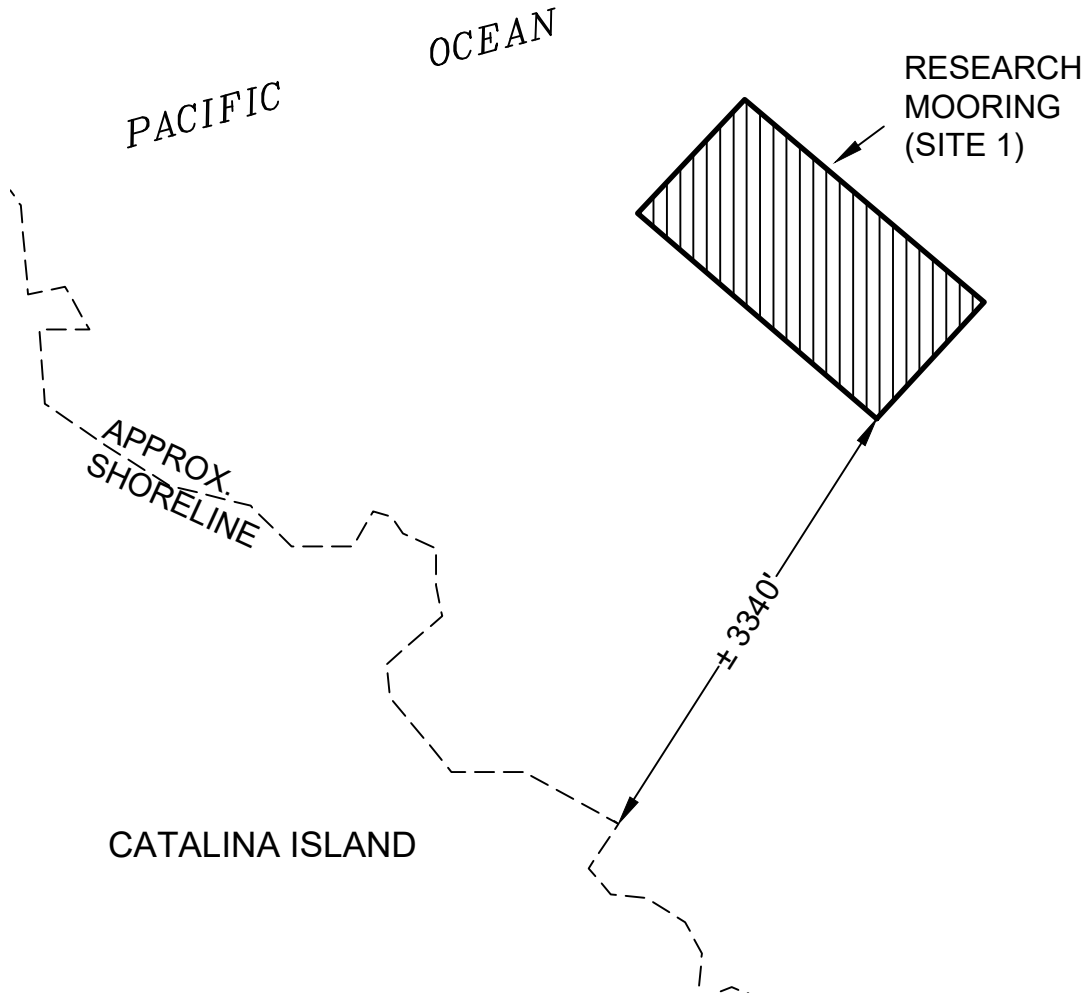
Prepared 07/29/2019 by the California State Lands Commission Boundary Unit.





NO SCALE

## SHALLOW SITE



PACIFIC OCEAN OFF THE NORTHWEST COAST OF SANTA CATALINA ISLAND

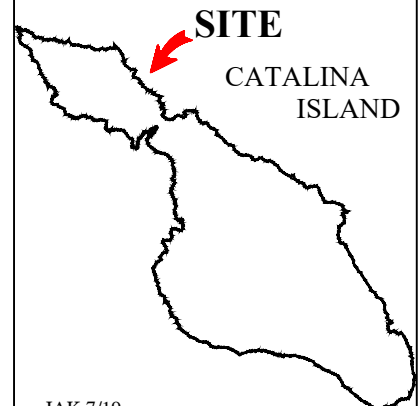
NO SCALE

## LOCATION



## **Exhibit B-1**

PRC 9400.1  
MARINE BIOENERGY, INC  
GENERAL LEASE -  
OTHER  
LOS ANGELES COUNTY

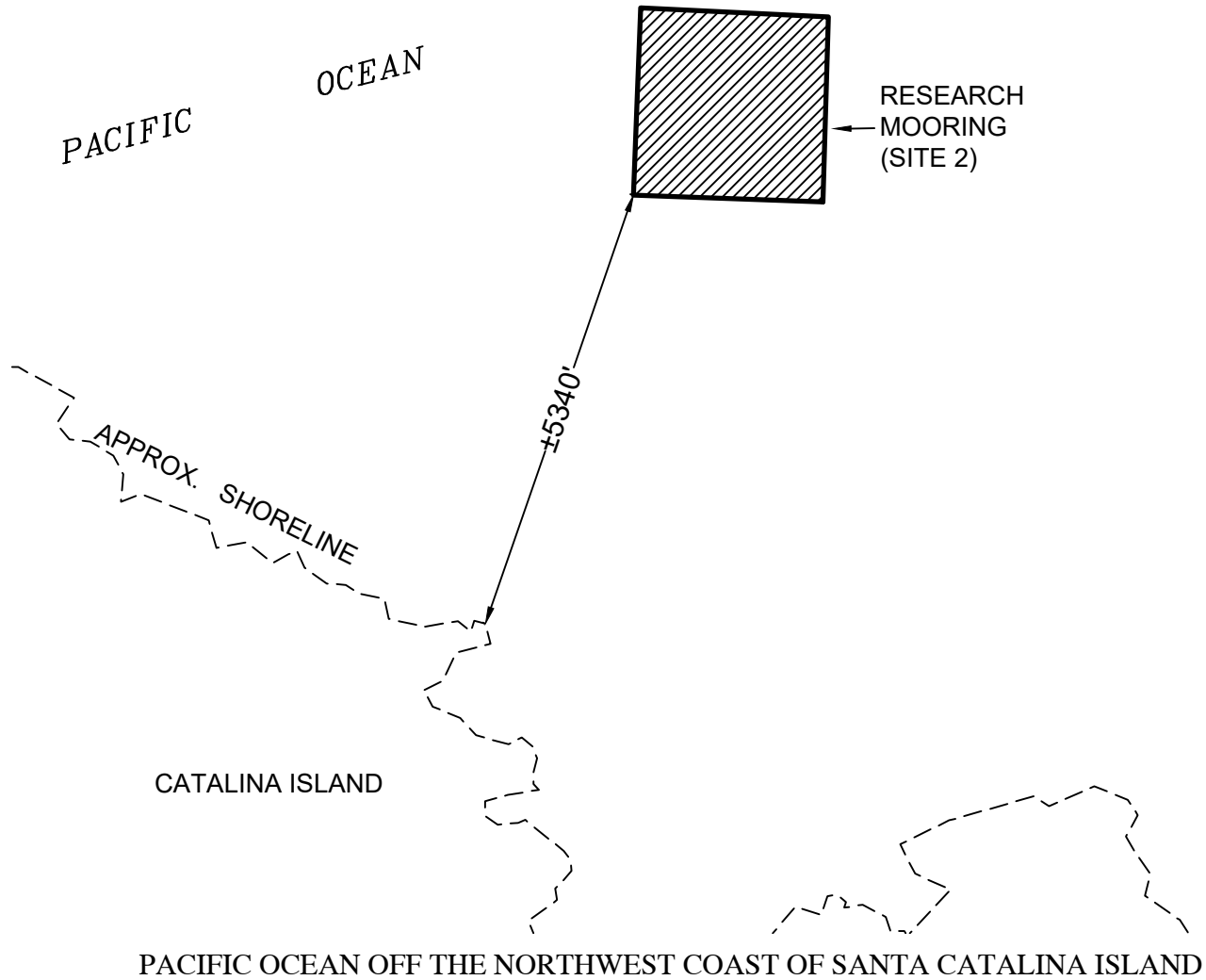


JAK 7/19

This Exhibit is solely for purposes of generally defining the lease premises, is based on unverified information provided by the Lessee or other parties and is not intended to be, nor shall it be construed as, a waiver or limitation of any State interest in the subject or any other property.

NO SCALE

## DEEP SITE A



NO SCALE

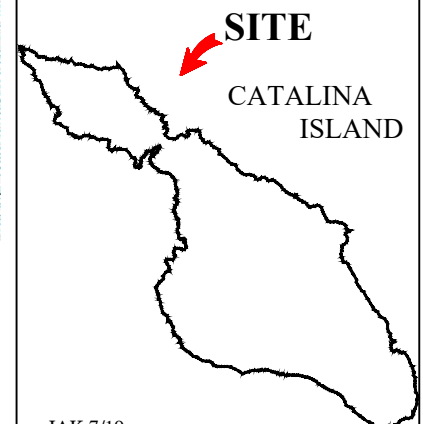
## LOCATION



MAP SOURCE: USGS QUAD

## **Exhibit B-2**

PRC 9400.1  
MARINE BIOENERGY, INC  
GENERAL LEASE -  
OTHER  
LOS ANGELES COUNTY

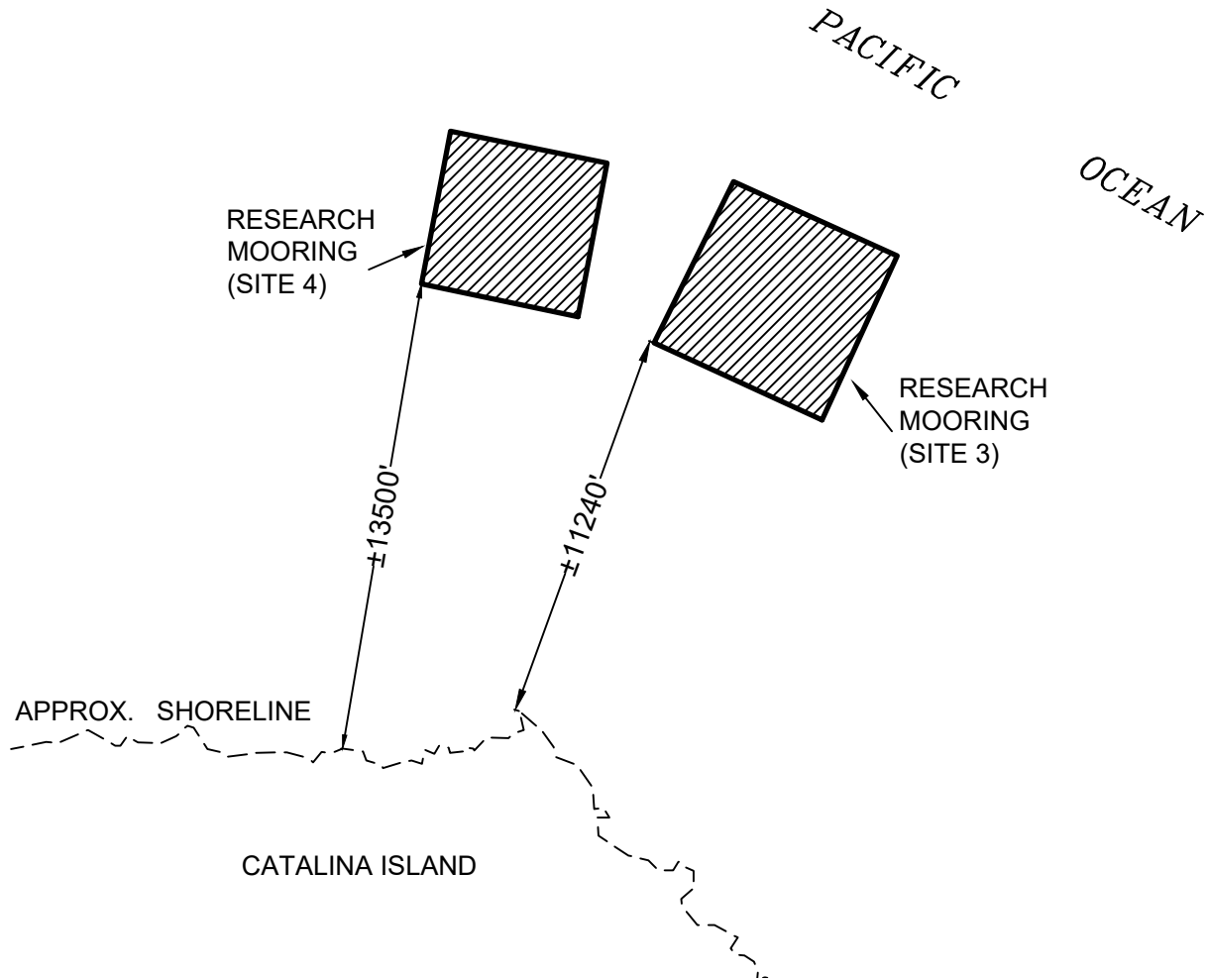


JAK 7/19

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NO SCALE

## DEEP SITE B



PACIFIC OCEAN OFF THE NORTHWEST COAST OF SANTA CATALINA ISLAND

NO SCALE

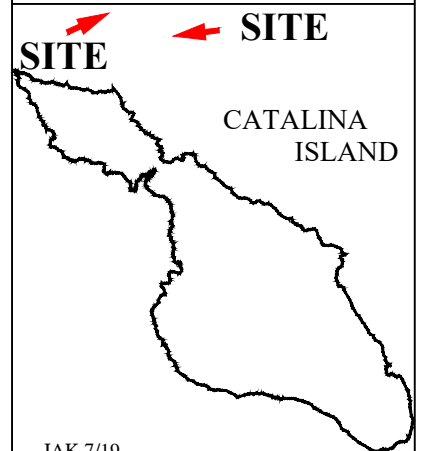
## LOCATION



MAP SOURCE: USGS QUAD

## **Exhibit B-3**

PRC 9400.1  
MARINE BIOENERGY, INC  
GENERAL LEASE -  
OTHER  
LOS ANGELES COUNTY



JAK 7/19

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