

**THIS AGREEMENT IS NOT TO BE RECORDED IN ANY COUNTY RECORDER'S  
OFFICE OF THIS STATE**

**CONSERVATION LAND USE AGREEMENT**

**BETWEEN THE**

**CITY OF LOS ANGELES**

**AND THE**

**UNITED STATES ARMY CORPS OF ENGINEERS, LOS ANGELES DISTRICT**

This CONSERVATION LAND USE AGREEMENT ("**Agreement**") is dated for reference purposes as of this \_\_\_\_\_ day of \_\_\_\_\_, 2025, by the City of Los Angeles, a municipal corporation ("**City**"), acting by and through its Los Angeles Board of Harbor Commissioners ("**Board**"), and the Los Angeles District of the United States Army Corps of Engineers ("**ACOE**"), collectively, referred to herein as the "**Parties**."

**RECITALS**

A. The City, acting by and through its Board, possesses, manages, supervises, and controls approximately 4,300 acres of surface land and 3,200 acres of submerged lands and water located in San Pedro Bay, City and County of Los Angeles, State of California ("**Port of Los Angeles**," "**POLA**," or "**Port**"). The Port is generally shown on **Exhibit A** and legally described in the City of Los Angeles Charter, Article VI, Section 651 and the California Tidelands Trust Act, Chapter 656, Statutes 1911, as amended. The City intends to conserve and protect an approximately 4.65-acre portion of the Port (the "**Conserved Land**" or "**Advance Permittee-Responsible Mitigation Site**"). The Conserved Land is legally described and depicted on **Exhibit B** attached hereto and incorporated by reference.

B. The Conserved Land possesses fish and habitat values of great importance to the Parties, and the people of the state of California and United States (see **Exhibit C**, a biological survey of the Conserved Land titled *2022 Eelgrass Monitoring Report in Support of the Inner Cabrillo Beach Eelgrass Mitigation Project*). The Conserved Land provides eelgrass, a species of submerged aquatic vegetation that performs valuable biological, physical, and chemical ecosystem functions, that supports numerous fish species. Individually and collectively, these fish and habitat values comprise the "**Conservation Values**" of the Conserved Land.

C. The Conserved Land provides advance permittee-responsible mitigation to offset unavoidable adverse impacts to eelgrass associated with City capital improvement and maintenance projects within the Port. The advance permittee-responsible mitigation measures, including maintenance, management, monitoring, surveying, and reporting activities, are described in this "Cabrillo Beach Eelgrass Mitigation Project Advance Permittee-Responsible Mitigation Plan," dated May 2025 prepared by Anchor QEA ("**APRM plan**").

D. Upon execution of this Agreement, 3.673 eelgrass establishment Credits that have been generated on the Advanced-Permittee Responsible Mitigation Site will be available for use by the City. "**Credits**" are units of measure in increments of an acre representing the accrual,

attainment, or protection of aquatic functions on the Advanced-Permittee Responsible Mitigation Site.

NOW THEREFORE, the Parties agree as follows:

## **AGREEMENT**

### **1. Authority**

(a) The City enters into this Agreement pursuant to the Tidelands Trust (Los Angeles City Charter, Article VI, Section 601; California Tidelands Trust Act, Chapter 656, Statutes 1911, as amended) and the California Coastal Act (Public Resources Code Division 20 Section 30700 et seq.).

(b) The ACOE enters into this Agreement for the use of waters of the United States, navigable waters of the United States, and the land beneath it, pursuant to section 404 of the Clean Water Act, as amended (33 U.S.C. § 1344), section 10 of the Rivers and Harbors Act of 1899, as amended (33 U.S.C. § 403), and its implementing regulations, including but not limited to 33 C.F.R. § 332.7.

### **2. Purpose**

(a) The purposes of this Agreement are to ensure the Conserved Land will be managed and preserved in a natural condition (defined below) and to prevent any use of the Conserved Land that will impair or interfere with the Conservation Values of the Conserved Land. The Parties intend that this Agreement will confine the use of the Conserved Land to such activities that are consistent with such purposes, including, without limitation, those involving the preservation, restoration, and enhancement of native species and their habitats.

i. For purposes of this Agreement, the term “natural condition” means the condition of the Conserved Land as described in Exhibit C, as well as changes to the Conserved Land that occur directly as a result of long-term maintenance obligations that are to be performed to maintain the ecological functions of the Conserved Land set forth in Section 7, below, activities described in Sections 3 and 6, below, and natural changes to the Conserved Land over time, and changes occurring due to acts beyond the City’s control described in Section 6(f), below.

(b) If a controversy arises with respect to the Conservation Values of the Conserved Land, none of the Parties shall be foreclosed from utilizing any and all other relevant documents, surveys, photographs or other evidence or information to assist in the resolution of the controversy.

### **3. City’s Duties**

City shall:

(a) Cooperate with ACOE in the protection of the Conserved Values of the Conserved Land;

(b) Perform long-term maintenance of the Conserved Land set forth in Section 7, below; and

(c) Obtain any applicable governmental permits and approvals for any activity or use permitted by this Agreement, before undertaking such activity, and any activity or use shall be undertaken in accordance with all applicable federal, state, local and administrative agency statutes, ordinances, rules, regulations, orders or requirements.

#### **4. Prohibited Uses**

Any activity on or use of the Conserved Land that is inconsistent with the purposes of this Agreement is prohibited. Without limiting the generality of the foregoing, the following uses and activities by the City, City's respective employees, contractors, representatives, agents, assignees, invitees, and third parties are expressly prohibited:

(a) Commercial, institutional, or industrial structures or uses;

(b) Construction, reconstruction, expansion, location, relocation, installation, or placement of any structure or improvement of any kind;

(c) Intentional deposition or accumulation of soil, trash, ashes, refuse, waste, bio-solids or any other material, excluding natural movement of sediments and biological matter in the water column;

(d) Intentional introduction or dispersal of non-native or exotic plant or animal species;

(e) Filling, dumping, excavating, draining, dredging, mining, drilling, removing or exploring for or extraction of minerals, loam, gravel, soil, rock, sand or other material on or below the surface of the Conserved Land, or granting or authorizing any of these purposes;

(f) Altering the general bathymetry of the Conserved Land;

(g) Manipulating, impounding or altering any natural watercourse, body of water or water circulation on the Conserved Land, and activities or uses detrimental to water quality, including but not limited to degradation or pollution of any surface or sub-surface waters unless the manipulation of such a water body returns the system to a natural functioning condition;

(h) Transferring, encumbering, selling, leasing, or otherwise separating the mineral or air rights for the Conserved Land;

(i) Engaging in any use or activity that may violate, or may fail to comply with, relevant federal, state, or local laws, regulations, or policies applicable to the City, the Conserved Land, or the use or activity in question; and

(j) Any and all other activities and uses which ACOE determines may adversely affect any purpose of this Agreement.

5. **Reserved Rights**

The City reserves all rights accruing from its control of the Conserved Land, including the right to engage in or to permit or invite others to engage in all uses of the Conserved Land that are not prohibited or limited by, and are consistent with, the purposes of this Agreement.

6. **Enforcement**

(a) If ACOE determines that a violation of the terms of this Agreement has occurred or is threatened, ACOE shall give written notice to the City of such violation and demand in writing the cure of such violation (“*Notice of Violation*”).

(b) If City fails to cure the violation within forty-five (45) days after receipt of the Notice of Violation, or if the cure reasonably requires more than forty-five (45) days to complete and City fails to begin the cure within the forty-five (45)-day period or fails to continue diligently to complete the cure, ACOE may bring an action at law or in equity in a court of competent jurisdiction for any or all of the following: to recover any damages to which ACOE may be entitled for violation of the terms of this Agreement or for any injury to the Conservation Values of the Conserved Land; to enjoin the violation, *ex parte* as necessary, by temporary or permanent injunction without the necessity of proving either actual damages or the inadequacy of otherwise available legal remedies; to pursue any other legal or equitable relief, including, but not limited to, the restoration of the Conserved Land to the condition in which they existed prior to any such violation or injury; or to otherwise enforce this Agreement. The City may interpose any and all defenses at law or equity that it deems appropriate in response to any such action. Without limiting the liability of City, ACOE shall apply any damages recovered to the cost of undertaking any corrective action on the Conserved Land.

(c) If ACOE, in its sole discretion, determines that circumstances require immediate action to prevent or mitigate injury to the Conservation Values of the Conserved Land, ACOE may pursue its remedies under this Agreement without prior notice to City or without waiting for the period provided for cure to expire. ACOE’s rights under this section apply equally to actual or threatened violations of the terms of this Agreement. The City may assert any and all defenses at law or equity that it deems appropriate in response to any such action. The remedies described in this Section shall be cumulative and shall be in addition to all relief now or hereafter existing at law or in equity.

(d) Enforcement of the terms of this Agreement or the right to terminate the Agreement in the event of uncured violation shall be at the discretion of ACOE.

(e) Any forbearance by ACOE to exercise its rights in the event of any breach of any term of this Agreement shall not be deemed or construed to be a waiver by ACOE of such term or of any other term of this Agreement. Nor shall such forbearance be deemed or construed to be a waiver of any rights of ACOE to enforce the terms of this Agreement in the case of any subsequent breach of the same or any other term of this Agreement. No delay or omission by ACOE in the exercise of any right or remedy shall impair such right or remedy or be construed as a waiver.

(f) Nothing contained in this Agreement shall be construed to entitle ACOE to bring any action against City for any injury to or change in the Conserved Land resulting from: (i) any natural cause beyond City's control, including, without limitation, fire not caused by City, flood, storm, or earth movement, or any prudent action taken by City under emergency conditions to prevent, abate, or mitigate significant injury to the Conserved Land resulting from such causes, provided that once the emergency has abated, City promptly takes all reasonable and necessary actions to restore the Conserved Land to the condition they were in immediately prior to the emergency; or (ii) acts by third parties beyond the control of the City. Notwithstanding the foregoing, City must obtain any applicable governmental permits and approvals for any emergency activity or use permitted by this Agreement, and undertake any such activity or use in accordance with all applicable federal, state, local, and administrative statutes, ordinances, rules, regulations, orders, and requirements.

7. **Long-term Management of Conserved Land**

(a) Upon execution of this Agreement, the City shall be responsible for ongoing, long-term maintenance of the Conserved Land as described in Section 6 of the APRM plan including but not limited to:

i. The City shall prepare an annual survey and maintenance report documenting activities performed under this Section 7(a), and shall submit reports to the ACOE; and

ii. The City shall be responsible for restoration of the Conserved Land damaged by any activities prohibited by Section 5. Such restoration shall be conducted in compliance with a restoration plan prepared by a qualified Biological Monitor and approved in writing by ACOE ("**Restoration Plan**"). Upon completion of restoration as specified in the approved Restoration Plan, City shall have a Biological Monitor prepare a detailed monitoring report, and City shall make the report available to ACOE within thirty (30) days of completion of repair or restoration activities. City and the Biological Monitor shall sign the monitoring report. The monitoring report shall document the Biological Monitor's name and affiliation, dates Biological Monitor was present on site, activities observed and their location, Biological Monitor's observations regarding the adequacy of repair or restoration performance in accordance with the approved Restoration Plan, and corrections recommended and implemented. As used herein, the term "**Biological Monitor**" shall mean an independent third-party consultant with knowledge of aquatic resources in the Port and expertise in the field of marine biology.

(b) If the City finds that other events not prohibited by Section 5 have reduced the amount of eelgrass at the Conserved Land, the City shall notify the ACOE and determine what next steps, if any, are appropriate to restore the eelgrass. Potential options, include, but are not limited to, development and implementation of a restoration plan, changes in long-term management activities, or a reduction in credits available at the Advanced Permittee Responsible Mitigation Site.

8. **Interagency Communications**

To provide for consistent and effective communication between the City and the ACOE, each party will appoint a Principal Representative to serve as its central point of contact on matters relating to this Agreement. Additional representatives may also be appointed to serve as points of contact on specific permit actions. Each party will issue a letter to the other designating the Principal Representative for each party within fifteen (15) days of execution of this Agreement. The Principal Representative for each party may be changed upon written notification to the other party.

9. **Costs and Liabilities**

(a) City retains all responsibilities and shall bear all costs and liabilities of any kind related to the possession, supervision, operation, upkeep, management, cures, and maintenance of the Conserved Land. City agrees ACOE shall not have any duty or responsibility for the operation, upkeep, management, cures, or maintenance of the Conserved Land, the monitoring of hazardous conditions thereon, or the protection of the City, the public, or any third parties from risks relating to conditions on the Conserved Land. The City remains solely responsible for obtaining any applicable governmental permits and approvals for any activity or use permitted by this Agreement, and any activity or use shall be undertaken only in accordance with all applicable federal, state, local and administrative agency statutes, codes, ordinances, rules, regulations, orders, and requirements.

(b) Notwithstanding the above, this Agreement does not confer any liability upon the City for claims payable by ACOE under the Federal Torts Claims Act, provided further that nothing in this Agreement is intended or will be construed to create any rights or remedies for any third party and no third party is intended to be a beneficiary of this Agreement.

(c) ACOE shall be responsible for coordinating with the Department of Justice as appropriate involving litigation which may result in potential liability of any kind on the United States. ACOE shall notify the City of any such litigation and afford the City an opportunity to review and comment on the litigation proceedings and any resulting settlement negotiations.

#### **10. Transfer of Conserved Land**

(a) City shall give written notice to the ACOE of the City's intent to transfer any interest in the Conserved Land at least sixty (60) days prior to the date of such transfer, subject to the right of the State of California to rescind, cancel, or terminate the Tidelands Grant, as amended.

(b) Transfer of the Conserved Land shall provide for the future conservation protection of the Conserved Land pursuant to the intent of this Agreement. Although ACOE is not authorized under section 10 of the Rivers and Harbors Act or section 404 of the Clean Water Act to hold an interest in mitigation land either in fee or as a holder of an easement, it does have authority pursuant to section 404 of the Clean Water Act to enforce the protection of the waters of the United States on the Conserved Land. Therefore, if the Conserved Land is transferred, the ACOE must approve a new means for protection of the Conserved Land prior to transfer.

#### **11. Assignment of Agreement**

This Agreement is not assignable by the City, either in whole or in part, without the prior consent of the ACOE in the form of a formal written amendment to this Agreement.

#### **12. Notices**

Any notice, demand, request, consent, approval, or other communication that either party desires or is required to give to the other shall be in writing and be served personally or sent by recognized overnight courier that guarantees next-day delivery or by first class United States mail, postage prepaid, addressed as follows:

To City: Los Angeles Harbor Department  
425 South Palos Verdes Street  
San Pedro, California 90731  
Attn: General Counsel; Director of Environmental Management

To ACOE: U.S. Army Corps of Engineers, Los Angeles District  
Ventura Field Office  
60 South California Street, Suite 201  
Ventura, California 93001  
Attn: Chief, Regulatory Division

or to such other address as City or ACOE shall designate by written notice to the other. Notice shall be deemed effective upon delivery in the case of personal delivery or in the case of delivery by overnight courier or, in the case of delivery by first class mail, five (5) days after deposit into the United States mail.

**13. Amendment and Modification**

This Agreement may be modified or amended only by written, mutual agreement of the Parties. Any such amendment shall be consistent with the purposes of this Agreement and shall not alter or remove this provision.

**14. Termination**

(a) The City may terminate this Agreement any time prior to the use (i.e., debiting) of the first Credit, or a fractional Credit. Upon use of the first Credit, or a fractional Credit, the City's right to terminate shall be extinguished.

(b) This ACOE may terminate this Agreement, without or without cause, upon thirty (30) days' written notice to the City.

(c) In the event of termination, any unused Credits, if any, shall be extinguished and will no longer be available for use.

**15. General Provisions**

(a) Applicable Laws

All applicable statutes, regulations, policies, and procedures of the United States, the State of California, and the Los Angeles City Charter and ordinances, disregarding the conflicts of laws principles of such state, shall govern the interpretation and performance of this Agreement.

(b) Local Courts

The Parties agree that all actions or proceedings arising in connection with this Agreement shall be tried and litigated exclusively in the federal courts located in the County of Los Angeles, State of California, in the judicial district required by court rules.

(c) No forfeiture

Nothing contained herein shall result in a forfeiture or reversion of the City's control of the Conserved Land in any respect.

(d) No waiver of sovereign immunity

This Agreement shall not be construed as a waiver of the sovereign immunity of the United States. The United States reserves all defenses and immunities to suit under applicable federal laws.

(e) Liberal Construction

Any general rule of construction to the contrary notwithstanding, this Agreement shall be liberally construed to accomplish the purposes of this Agreement. If any provision in this Agreement is found to be ambiguous, an interpretation consistent with the purposes of this Agreement that would render the provision valid shall be favored over any interpretation that would render it invalid.

(f) Severability

If a court of competent jurisdiction voids or invalidates on its face any provision of this Agreement, such action shall not affect the remainder of this Agreement. If a court of competent jurisdiction voids or invalidates the application of any provision of this Agreement to a person or circumstance, such action shall not affect the application of the provision to other persons or circumstances.

(g) Captions

The captions in this Agreement have been inserted solely for convenience of reference and are not a part of this Agreement and shall have no effect upon construction or interpretation.

(h) Entire Agreement

This Agreement together with the attached exhibits and any documents referred to herein sets forth the entire agreement of the Parties with respect to the Agreement and supersedes all prior discussions, negotiations, understandings, or agreements of such Parties relating to the Agreement. No alteration or variation of this Agreement shall be valid or binding unless contained in an amendment in accordance with Section 13.

(i) No Hazardous Materials Liability

(1) City represents and warrants to the ACOE that it has no knowledge or notice of Hazardous Materials (defined below) or underwater tanks existing, generated, treated, stored, used, released, disposed of, deposited or abandoned in, on, under, or from the Conserved Land, or transported to or from or affecting the Conserved Land.

(2) City hereby releases and agrees to indemnify, protect and hold harmless the ACOE against any and all liabilities, penalties, costs, losses, damages, expenses, (including, without limitation, reasonable attorneys' fees and experts' fees), causes of action, claims, demands, orders, liens, or judgements (each a "**Claim**" and collectively, "**Claims**") arising from or connected with any Hazardous Materials or underwater tanks present, alleged to be present, released in, from or about, or otherwise associated with the Conserved Land at any time. This release and indemnification includes, without limitation, Claims for (i) injury to or death of any person or physical damage to any property; and (ii) the violation or alleged violation of, or other failure to comply with, any Environmental Laws (defined below).

(3) Despite any contrary provision of this Agreement, the Parties do not intend this Agreement to be, and this Agreement shall not be, construed such that it creates in or gives ACOE any of the following:

(i) The obligations or liabilities of an "owner" or "operator," as those terms are defined and used in Environmental Laws (defined below), including, without limitation, the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended (42 U.S.C. Section 9601 et seq.; hereinafter, "**CERCLA**"); or

(ii) The obligations or liabilities of a person described in 42 U.S.C. Section 9607(a)(3) or (4); or

(iii) The obligations of a responsible person under any applicable Environmental Laws; or

(iv) The right or duty to investigate and remediate any Hazardous Materials associated with the Conserved Land; or

(v) Any control over City's ability to investigate, remove, remediate or otherwise clean up any Hazardous Materials associated with the Conserved Land.

(4) The term "**Hazardous Materials**" includes, without limitation, (i) material that is flammable, explosive or radioactive; (ii) petroleum products, including by-products and fractions thereof; and (iii) hazardous materials, hazardous wastes, hazardous or toxic substances, or related materials defined in CERCLA, the Resource Conservation and Recovery Act (42 U.S.C. Section 6901 et seq.; hereinafter "**RCRA**"); the Hazardous Materials Transportation Act (49 U.S.C. Section 5101 et seq.; hereinafter "**HTA**"); the Hazardous Waste Control Law (California Health & Safety Code Section 25100 et seq.; hereinafter "**HCL**"); the Hazardous Substance Account Act (California Health & Safety Code Section 25300, et seq.; hereinafter "**HSA**"), and in the regulations adopted and publications promulgated pursuant to them, or any other applicable Environmental Laws now in effect or enacted after the date of this Agreement.

(5) The term “*Environmental Laws*” includes, without limitation, CERCLA, RCRA, HTA, HCL, HSA, and any federal, state, local or administrative agency statute, code, ordinance, rule, regulation, order or requirement relating to pollution, protection of human health or safety, the environment or Hazardous Materials. City represents, warrants and covenants to ACOE that all activities upon and use of the Conserved Land by City, its agents, employees, invitees and contractors will comply with all Environmental Laws.

(j) Additional Interests

City shall not grant any easements, rights-of-way, permits, or other interests in the Conserved Land (other than a security interest that is expressly subordinated to this Agreement), without first giving written notice to ACOE. This Section shall not prohibit transfer of a fee interest in the Conserved Land that complies with Section 10 of this Agreement.

(k) Recordation

This Agreement shall be considered a standing agreement of the Board by the City within 30 days from the Effective Date.

**16. Effective Date and Duration**

This Agreement is effective on the date of the last signature and is effective for sixty-six (66) years (“*Expiration Date*”); however, after the first use (i.e., debiting) of any of the 3.673 Credits, the Expiration Date shall renew automatically, without amendment, for additional sixty-six (66)-year terms in perpetuity upon the same terms and conditions contained herein unless terminated by the ACOE pursuant to Section 14(b). It being the intention of the parties that upon use of one or more, or any fraction thereof, of the Credit(s) that duties and obligations contained in this Agreement shall become perpetual.

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IN WITNESS WHEREOF, the City of Los Angeles, acting by and through its Board of Harbor Commissioners, and the U.S. Army Corps of Engineers, Los Angeles District, acting by and through its authorized officer, executes this Agreement. Each of the undersigned certifies that he or she has full authority to bind the party that he or she represents for purposes of entering into this Agreement.

CITY OF LOS ANGELES, a municipal corporation,  
acting by and through its Los Angeles Board of Harbor Commissioners

\_\_\_\_\_  
By: Eugene D. Seroka  
Executive Director  
Harbor Department

\_\_\_\_\_  
Date

Attest: \_\_\_\_\_  
Amber M. Klesges  
Secretary

APPROVED AS TO FORM AND LEGALITY

June 3, 2025  
Hydee Feldstein Soto, City Attorney  
Steven Y. Otera, General Counsel

By JM Crose  
Joy M. Crose, Assistant General Counsel

U.S. ARMY CORPS OF ENGINEERS, LOS ANGELES DISTRICT

Aaron Allen 2025.05.21  
08:14:05 -07'00'  
\_\_\_\_\_  
By: Aaron Allen, PhD  
Chief, Regulatory Division

\_\_\_\_\_  
Date

**Exhibit A**

Port of Los Angeles Boundary

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Aerial Imagery: Los Angeles Harbor Department, 2013



**Exhibit A**  
Port of Los Angeles Boundary

**Exhibit B**

Description and Depiction of the Conserved Land

**Conserved Land (Advance Permittee-Responsible Mitigation Site)**

**Legal Description**

**Inner Cabrillo Beach Eelgrass Mitigation Site**

Those portions of the tide and submerged land in the City of Los Angeles, County of Los Angeles, State of California within the Rancho Los Palos Verdes, Inner Bay of San Pedro and Pacific Ocean as shown on the Map recorded in Book 2, pages 543 through 545, of Patents, together with those portions within the Rancho San Pedro as shown on the Map recorded in Book 1, pages 119 through 121, of Patents, both in the office of the County Recorder of said County, bounded and described as follows:

Commencing at U.S. Pierhead Point 101 as shown on Los Angeles Harbor Department Drawing No. 1-1241-2A on file in the office of the Chief Harbor Engineer of the City of Los Angeles Harbor Department; thence South 84°58'54" East, a distance of 94.80 feet to the most Southerly corner of said land, also known as the POINT OF BEGINNING.


Thence, proceeding the following forty-seven (47) courses:

1. North 57°08'39" West, a distance of 37.87 feet;
2. North 86°07'17" West, a distance of 20.96 feet;
3. North 38°07'48" West, a distance of 41.91 feet;
4. North 51°05'45" West, a distance of 25.97 feet;
5. North 46°34'36" West, a distance of 54.67 feet;
6. North 58°03'48" West, a distance of 125.32 feet;
7. North 55°48'28" West, a distance of 129.00 feet;
8. North 56°44'44" West, a distance of 77.58 feet;
9. North 57°01'50" West, a distance of 15.63 feet;
10. North 61°18'18" West, a distance of 76.78 feet;
11. North 75°04'07" West, a distance of 55.03 feet;
12. North 69°10'34" West, a distance of 44.37 feet;
13. South 74°37'25" West, a distance of 29.41 feet;
14. North 55°52'02" West, a distance of 84.60 feet;
15. North 37°56'12" East, a distance of 47.54 feet;
16. North 03°38'58" West, a distance of 139.70 feet;
17. North 03°38'58" West, a distance of 3.29 feet;
18. North 27°31'20" West, a distance of 18.10 feet;
19. North 57°16'59" East, a distance of 2.08 feet;
20. North 51°44'35" East, a distance of 17.90 feet;
21. North 40°12'41" East, a distance of 17.22 feet;
22. North 03°10'42" West, a distance of 37.84 feet;
23. North 04°01'10" West, a distance of 19.60 feet;
24. North 35°59'04" West, a distance of 72.58 feet;
25. North 64°00'39" East, a distance of 50.83 feet;
26. South 55°48'16" East, a distance of 57.75 feet;
27. South 24°51'49" East, a distance of 27.67 feet;
28. North 66°48'05" East, a distance of 101.91 feet;

29. South 22°51'52" East, a distance of 1.35 feet;
30. North 82°53'17" East, a distance of 0.08 feet;
31. South 11°38'01" West, a distance of 0.51 feet;
32. South 30°20'36" East, a distance of 38.79 feet;
33. South 26°17'06" East, a distance of 74.68 feet;
34. South 36°07'10" East, a distance of 74.80 feet;
35. South 41°06'15" East, a distance of 40.37 feet;
36. South 45°00'00" East, a distance of 43.88 feet;
37. South 44°10'11" East, a distance of 39.84 feet;
38. South 45°00'00" East, a distance of 54.28 feet;
39. South 45°28'22" East, a distance of 44.88 feet;
40. South 24°02'31" East, a distance of 65.46 feet;
41. South 50°15'45" East, a distance of 137.42 feet;
42. South 50°11'40" East, a distance of 46.41 feet;
43. South 64°42'16" East, a distance of 68.53 feet;
44. South 57°08'01" East, a distance of 47.77 feet;
45. South 51°45'37" East, a distance of 97.14 feet;
46. South 29°25'40" West, a distance of 115.40 feet;
47. South 53°58'53" West, a distance of 54.44 feet to the POINT OF BEGINNING.

Having an area of 4.65 acres, more or less.

This description was prepared by me or under my direct supervision.



Bobby Z. Rivera/PLS 9206

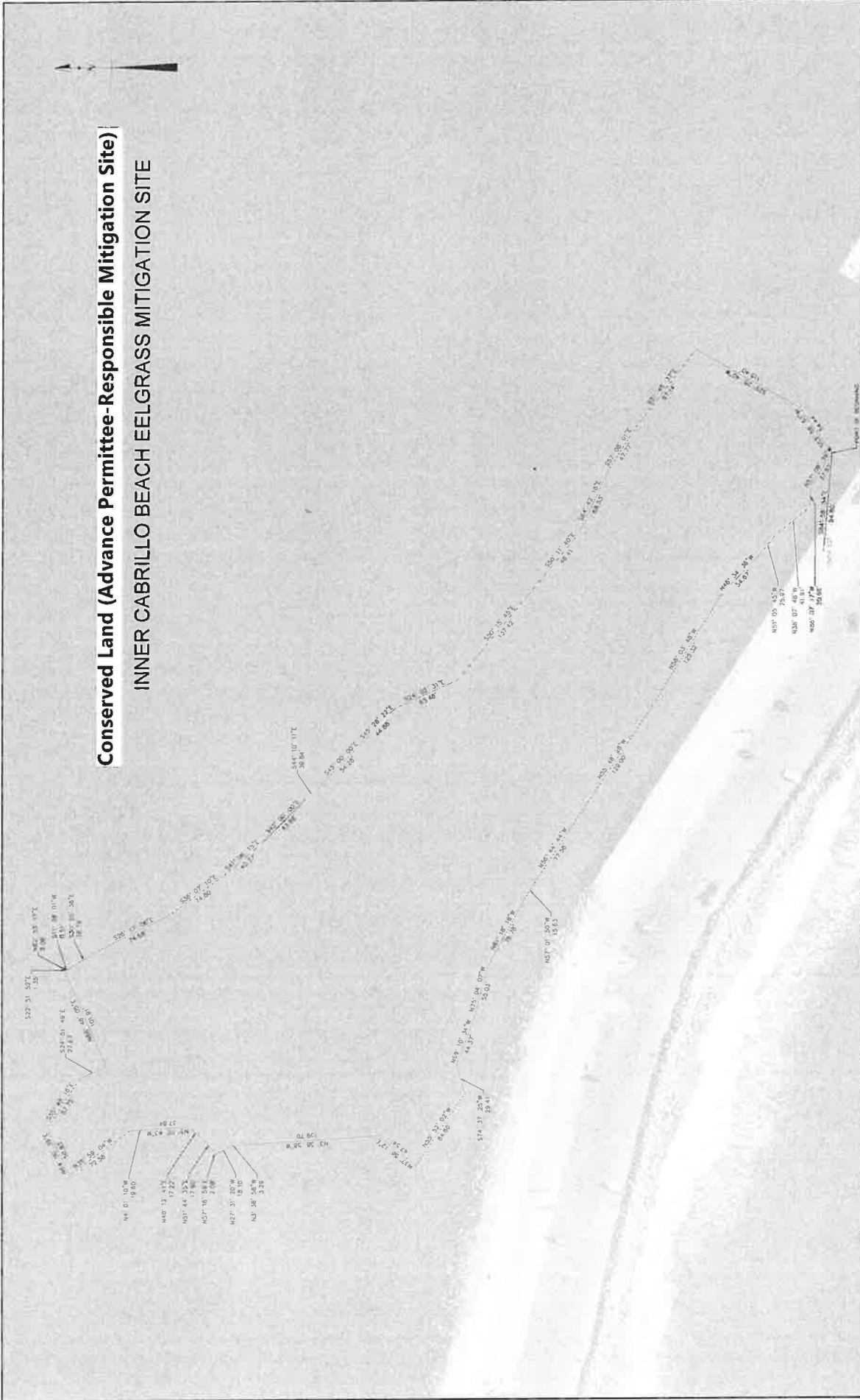
4/12/2022

Date



# Conserved Land (Advance Permittee-Responsible Mitigation Site)

## INNER CABRILLO BEACH EELGRASS MITIGATION SITE



CONTRACT NO. 68-0000000000000000 PROJECT NAME: 68-0000000000000000 SHEET NO. 11	DATE: 04/19/22	DRAWING FILE: 68-0000000000000000	SHEET NO. 11
CONTRACT NO. 68-0000000000000000 PROJECT NAME: 68-0000000000000000 SHEET NO. 11	DATE: 04/19/22	DRAWING FILE: 68-0000000000000000	SHEET NO. 11
CONTRACT NO. 68-0000000000000000 PROJECT NAME: 68-0000000000000000 SHEET NO. 11	DATE: 04/19/22	DRAWING FILE: 68-0000000000000000	SHEET NO. 11
CONTRACT NO. 68-0000000000000000 PROJECT NAME: 68-0000000000000000 SHEET NO. 11	DATE: 04/19/22	DRAWING FILE: 68-0000000000000000	SHEET NO. 11

**Exhibit C**

Biological Resources Survey

**2022 EELGRASS MONITORING REPORT  
IN SUPPORT OF THE INNER CABRILLO BEACH EELGRASS MITIGATION PROJECT**

*Prepared for:*

**Port of Los Angeles  
Environmental Management Division**  
425 S. Palos Verdes Street  
San Pedro, CA 90731  
Phone: (310) 732-3951  
*Attention: Ms. Katherine Prickett*

*Prepared by:*

**Merkel & Associates, Inc.**  
5434 Ruffin Road  
San Diego, California 92123  
Ph: (858) 560-5465

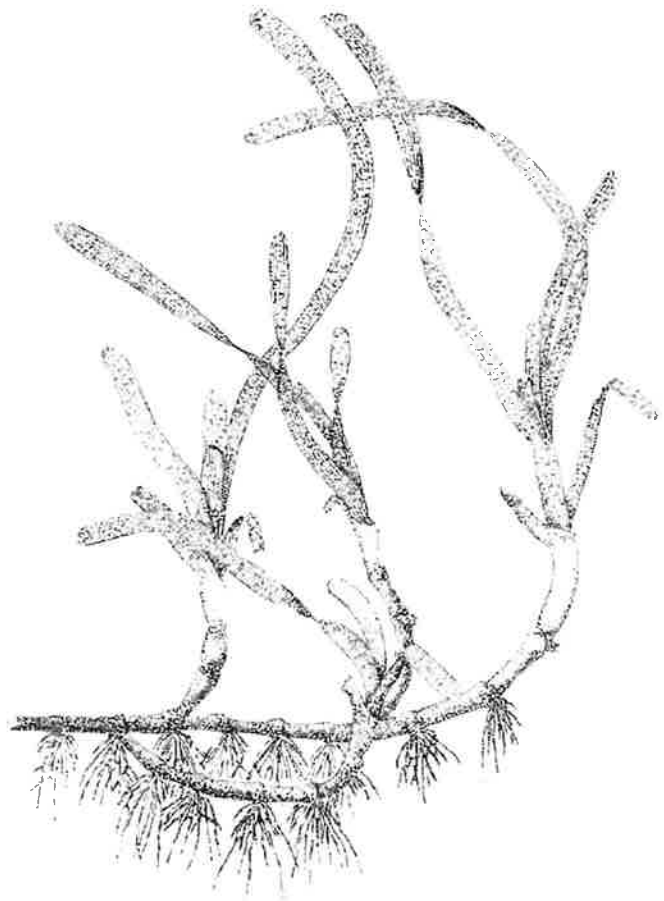
*Work performed under:*

Agreement No. 22-9861, PD #6  
APP: 211109-543W

*M&A Project Number:*

21-064-06

October 2022



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**2022 EELGRASS MONITORING REPORT FOR THE  
INNER CABRILLO BEACH EELGRASS MITIGATION PROJECT**

***Merkel & Associates, Inc.***

*October 2022*

## **INTRODUCTION**

M&A was contracted by the Port of Los Angeles (Port) to prepare and implement a mitigation plan to offset impacts to eelgrass associated with the maintenance dredging of the Berth 24 Boat Ramp Basin, as well as to offset outstanding eelgrass mitigation obligations associated with the Cabrillo Way Marina Phase II Dredging Project. The Berth 24 Boat Ramp Basin project resulted in impacts to 22 m<sup>2</sup> of eelgrass (M&A 2015), and the Cabrillo Way Marina Phase II (CWMPII) Dredging Project resulted in impacts to 1,084 m<sup>2</sup> (0.27 acre) of eelgrass (M&A 2009). Combined, these two projects resulted in impacts to 1,106 m<sup>2</sup> (0.27 acre) of eelgrass. The California Eelgrass Mitigation Policy (CEMP) (NMFS 2014) required the successful establishment of eelgrass at a 1.2:1 mitigation ratio of restored eelgrass to lost eelgrass, resulting in a minimum mitigation need of 1,327 m<sup>2</sup> (0.33 acre) of eelgrass for the two projects.

A Final Eelgrass Mitigation and Monitoring Plan was developed in support of the Inner Cabrillo Beach Eelgrass Mitigation Project (M&A 2014). The restoration area is located east of Inner Cabrillo Beach, west of the Cabrillo Beach Fishing Pier, and north of the Outer Cabrillo Beach parking lot. It is also located adjacent to existing eelgrass beds at Inner Cabrillo Beach (Figure 1). The purpose-built mitigation site was designed and constructed to provide eelgrass habitat meet the mitigation needs of the identified projects as well as to provide a surplus of eelgrass to be used for future mitigation needs of the Port. Upon approval of the plan and receipt of a Letter of Authorization (LOA) from the California Department of Fish and Wildlife (CDFW 2016), the eelgrass transplant was completed in general accordance with the transplant plan during April and May 2016.

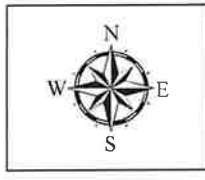
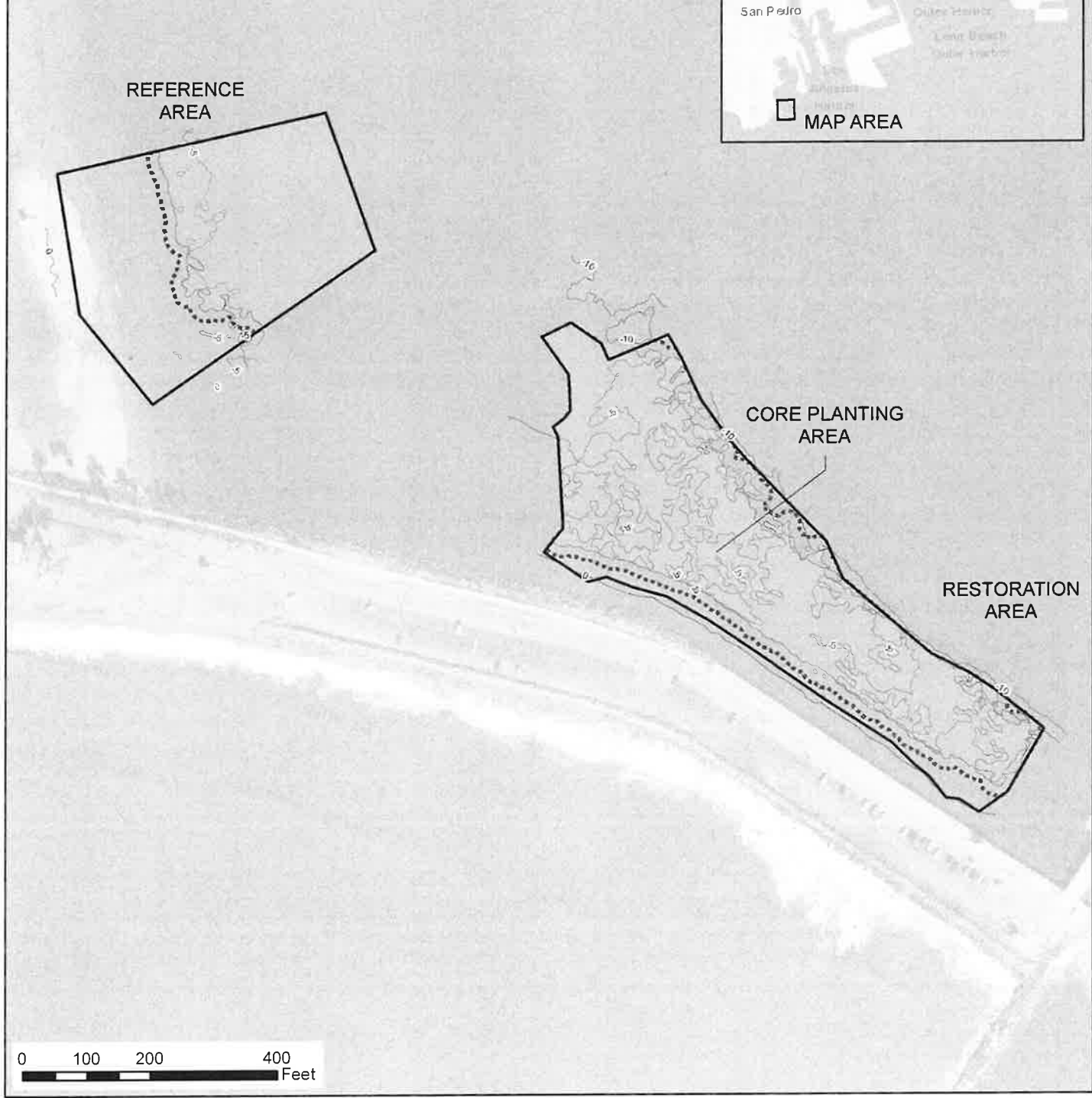
A total of 3.05 acres of eelgrass was transplanted to a core area of the unvegetated 4.65-acre restoration area at 1-meter on center spacing. Outside of the core planting area, eelgrass spacing was widened to 2 to 5-meter on center spacing to cover the fringes of the site that were anticipated to be more marginal in suitability, without substantially increasing required planting units over those initially intended for a 3-acre planting site. Since planting, the site has performed exceptionally well and met all success requirements, with a surplus of eelgrass being developed by the completion of the monitoring period.

As outlined in the CEMP, upon completion of the planting effort, a monitoring program was initiated and continued for a 60-month (5-year) period. Areal extent and density of the transplanted eelgrass and natural reference areas were monitored at 6, 12, 24, 36, 48, and 60-months post-transplant. At the time of the 60-month monitoring period, the mapped beds supported 1,108 percent of the mitigation need (Figure 1), and the transplant site mean density was 104 percent of that in the reference area (Merkel & Associates 2021).

Since satisfaction of the 5-year establishment monitoring period required for the Berth 24 Boat Ramp Basin maintenance dredging and the Cabrillo Way Marina Phase II (CWMPII) Dredging Project mitigation, the Port has initiated additional monitoring in order to track conditions of the eelgrass within the mitigation site for purposes of banking the surplus mitigation value of the site.

Legend:

- Eelgrass Vegetated Cover
- Eelgrass Areal Extent (0.5 m beyond vegetated cover)
- Eelgrass Spatial Distribution (5 m beyond vegetated cover)
- 1-ft Contour Interval



**60-Month Post-transplant Eelgrass - May 2021**  
Inner Cabrillo Beach Eelgrass Mitigation Project

**Figure 1**

## SURVEY METHODOLOGY

M&A conducted the 2022 eelgrass survey on October 3, 2022. The survey consisted of eelgrass areal coverage and turion density investigations within the eelgrass restoration and reference areas. Spatial data were collected using interferometric sidescan sonar, which provided an acoustic backscatter image of the seafloor within the project area. Interpretation of the backscatter data allowed for an assessment of the distribution of eelgrass. Sidescan backscatter data were acquired at a frequency of 468 kHz scanning out 31 meters on both the starboard and port channels for a 62-m wide swath. The rigid hull mounted interferometric sidescan system integrates motion sensors to control for heave pitch and roll as well as a dual RTK GPS antenna positioning system and electronic compass to control for vessel position and yaw. This rigid integration of the interferometric sidescan transducers within the positioning sensors provides significantly increased precision and accuracy over conventional towfish sidescan sonar equipment.

The survey was conducted by navigating parallel tracklines, spaced to allow for overlap between adjoining sidescan swaths. Survey swaths were navigated until the entirety of the survey area was captured in the survey report. All data were collected in latitude and longitude using the North American Datum of 1983 (NAD 83), converted to the Universal Transverse Mercator system in meters (UTM), and plotted on a geo-rectified aerial image of the project site. Following completion of the survey, sidescan sonar traces were joined together and geographically registered. Eelgrass was digitized as a theme over an aerial image of the project site to calculate spatial metrics defining the extent and distribution of eelgrass. Metrics determined for eelgrass from the acoustic survey include: vegetated cover, spatial distribution, areal extent, and percent vegetated cover within the areal extent of the beds.

Following the sidescan survey, the restoration and reference areas were examined by SCUBA to assess the eelgrass quality, verify the sidescan data, and measure the density of actively growing leaf shoots by conducting shoot counts within a 1/16-m<sup>2</sup> quadrat. Twenty replicate quadrats each were randomly placed within the eelgrass bed of the restoration and reference areas to obtain a mean shoot density for the eelgrass beds.

The reported metrics for eelgrass are as follows:

- **Vegetated Cover** – Vegetated cover is the tight boundary extent of eelgrass plants on the seafloor, prior to application of CEMP eelgrass bed definitions. The discrete mapping of plant boundaries is the basic building block for determining CEMP spatial metrics.
- **Areal Extent** – The eelgrass habitat areal extent is the quantified extent of the spatial distribution of the beds comprised of the mosaic of unvegetated and vegetated areas of the bed. The *vegetated areal extent* is defined as areas within the spatial distribution that support at least 1 turion per square meter of bottom. This is determined by performing a tight margin mapping of eelgrass plants present within the survey area (vegetated cover) and then buffering outward from the vegetated cover of plants by a distance of 0.5 meter such that any plant within 1 meter of another plant would be captured within the same contiguous vegetated areal extent boundary. The *unvegetated areal extent* is defined as the remainder of the spatial distribution that is not included in the vegetated areal extent.

- **Spatial Distribution** – The spatial distribution of eelgrass habitat is delineated by a contiguous boundary around all areas of vegetated eelgrass cover extending outward from the margins of plants by 5 meters, excluding areas that are unsuited to support eelgrass. This is determined by buffering out from the vegetated cover a distance of 5 meters and then clipping the resultant boundary to remove areas that are determined to be unsuited to supporting eelgrass based on elevation, substrate, slope, or existing overwater structures.
- **Percent Vegetated Cover** - The percent bottom cover within eelgrass habitat is determined by totaling the area of vegetated areal extent and dividing this by the total areal extent of the bed.
- **Turion (Shoot) Density** - Turion density is the mean number of eelgrass leaf shoots per square meter within mapped eelgrass vegetated cover. Turion density should be reported as a mean ± the standard deviation of replicate measurements. The number of replicate measurements (n) is reported along with the mean and deviation. Turion densities are determined only within vegetated areas of eelgrass habitat; and therefore, it is not possible to measure a turion density equal to zero.




In order to ensure consistency in analyses and reporting through time, the quantification of all metrics, inclusive of spatial extent and areal extent of beds that map extend beyond the bounds of the reference and transplant areas, is limited to areas within the initially established monitored sites. This precludes potential for either the reference or transplant areas to extend beyond the initially established boundaries.

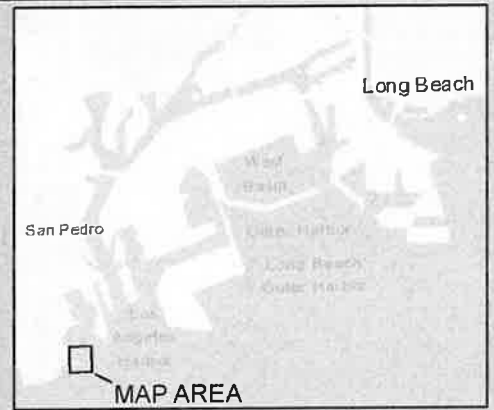
**MONITORING RESULTS**

Bed spatial and density metrics for the eelgrass restoration and reference areas are summarized in Table 1. The total areal extent of eelgrass within the eelgrass restoration area amounted to approximately 15,353 m<sup>2</sup> (3.84 acres) (Figure 2). This is a slight increase (approximately 4 percent) since the time of the 2021 60-month survey (Figure 3). The eelgrass was healthy in its appearance and exhibited no signs of disease. The site supported epiphytic and silt loading of approximately 40 percent. The leaf canopy extended approximately 0.9 meters off the bottom.

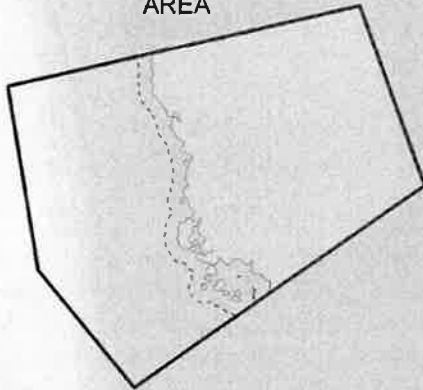
**Table 1. 2022 Eelgrass bed metrics as defined under the CEMP.**

Location	Vegetated Cover	Eelgrass Vegetated Areal Extent	Spatial Distribution	Percent Vegetated Cover (VAE/SD * 100)	Density (turions/m <sup>2</sup> ) (# of replicates)
Restoration Area	15,067 m <sup>2</sup> (3.72 ac)	15,353 m <sup>2</sup> (3.84 ac)	17,818 m <sup>2</sup> (4.40 ac)	86.2%	122.4±32.9 (n=20)
Reference Area	6,758 m <sup>2</sup> (1.67 ac)	6,900 m <sup>2</sup> (1.70 ac)	7,706 m <sup>2</sup> (1.90 ac)	89.6%	119.2±41.0 (n=20)

-  Eelgrass Vegetated Cover
-  Eelgrass Areal Extent (0.5 beyond vegetated cover)
-  Eelgrass Spatial Distribution (5 m beyond vegetated cover)

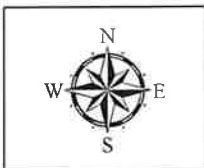
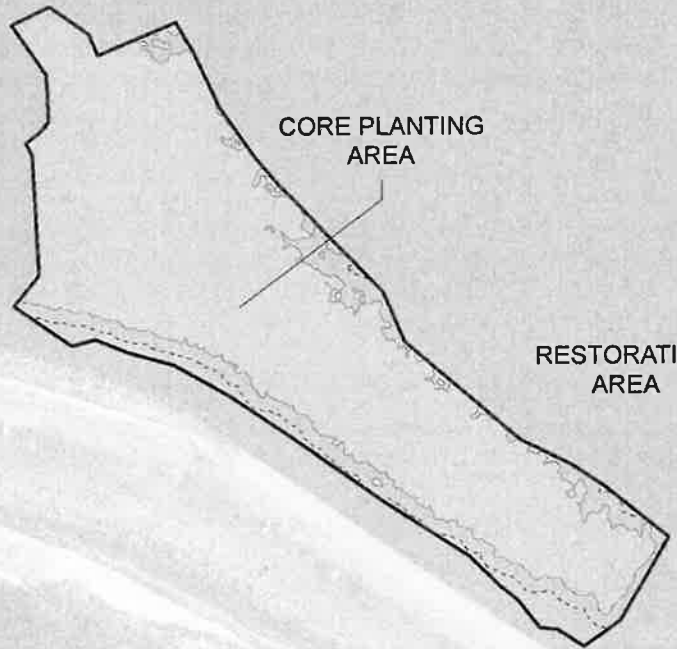


REFERENCE  
AREA



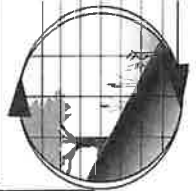
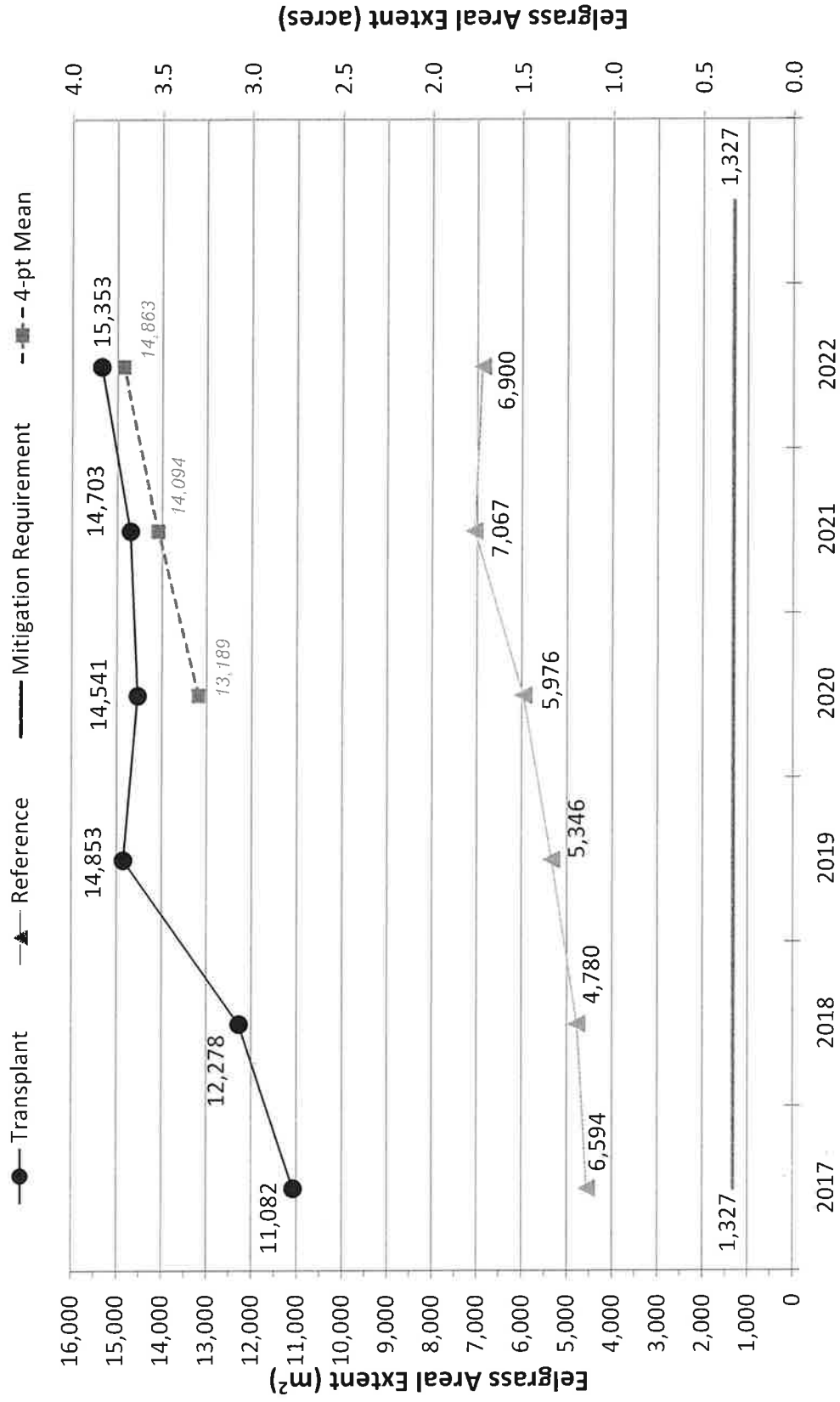
CORE PLANTING  
AREA

RESTORATION  
AREA



**2022 Eelgrass Status - October 2022**  
Inner Cabrillo Beach Eelgrass Mitigation Project

**Figure 2**



**Restoration and Reference Areas Eelgrass Areal Extent Relative to Mitigation Requirements**  
 Inner Cabrillo Beach Eelgrass Mitigation Project  
 San Pedro Bay, CA

**Figure 3**

The total areal extent of eelgrass within the reference area amounted to approximately 6,900 m<sup>2</sup> (1.70 acres) (Figure 2). This is a slight decrease of approximately 2.4 percent since the time of the 2021 60-month survey (Figure 3). The eelgrass was also healthy in its appearance and exhibited no signs of disease. The site supported epiphytic and silt loading of approximately 40 percent. The leaf canopy extended from 0.9 meters off the bottom.

**DISCUSSION**

The eelgrass mitigation site continues to perform well retaining all established eelgrass and showing slight additional expansion in coverage and slight reduction in density. A four-point mean was calculated for eelgrass cover as this mean provides a better overall estimate as to how a site is performing by dampening extreme bed dynamics that can occur due to stressful periods. The four-point mean is applied as a tool to establish available mitigation credits within the Navy's San Diego Bay Eelgrass Mitigation Bank.

**LITERATURE CITED**

- Merkel & Associates. 2014. Revised Eelgrass Transplant and Monitoring Plan in support of the Inner Cabrillo Beach Eelgrass Mitigation Project, Port of Los Angeles, California. Prepared for Port of Los Angeles Environmental Management Division, November 2014.
- Merkel & Associates. 2021. 60-Month Post-Transplant Eelgrass Report for the Inner Cabrillo Beach Eelgrass Mitigation Project, San Pedro, California. Prepared for the Port of Los Angeles Environmental Management Division, June 2021.
- National Marine Fisheries Service (NMFS). 2014. California Eelgrass Mitigation Policy and Implementing Guidelines. October 2014.