


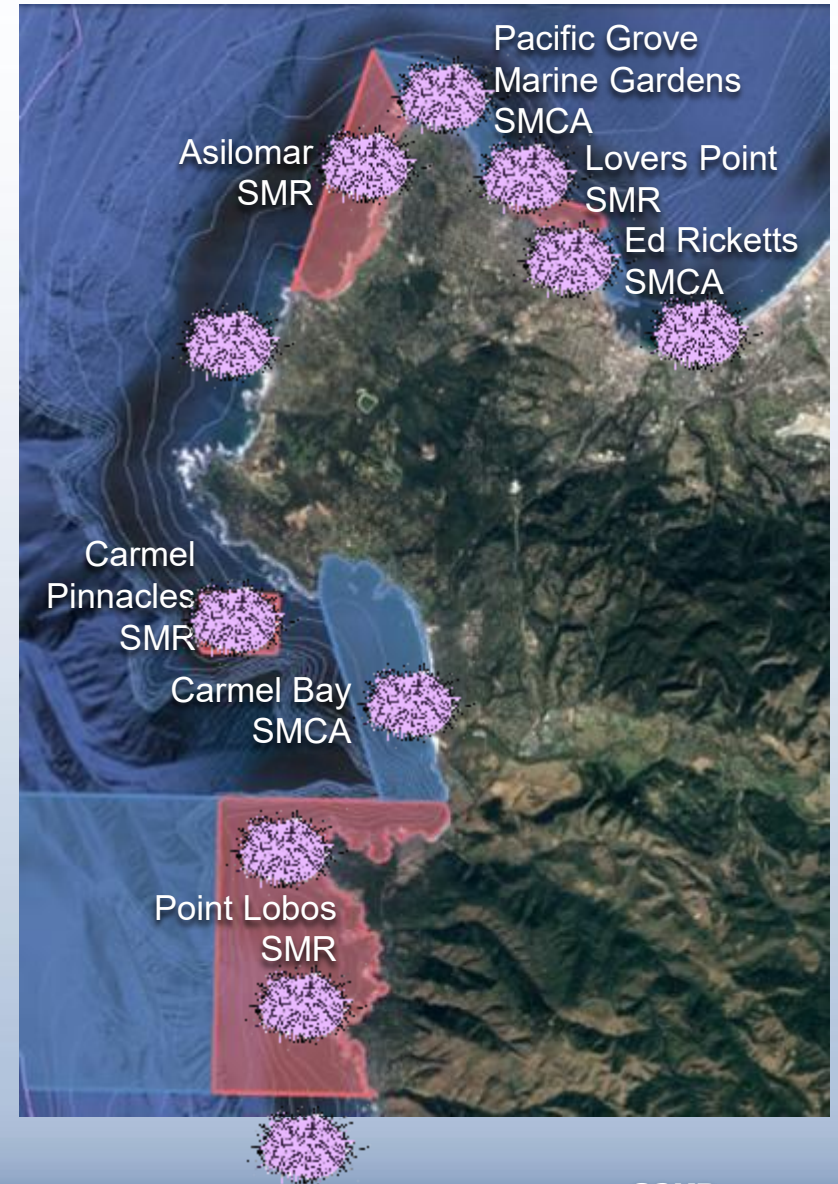
Giant Giant Kelp Restoration



Petition 2023-23MPA_AM2
California Fish and Game Commission

April 21, 2026

Kelp Loss and Urchin Infestation



Petitions

To the California Fish and Game Commission.

First submitted in 2017 by Bruce Watkins and Keith Rootsart. **Denied for Monterey. Only North Coast.**

Revised and re-submitted in 2019. **Denied.**

2020 Urchin culling at Tanker's Reef **became legal** on April 1, 2021 for 3 years. **Canceled 2024.**

Expansion proposed November 2021. **Denied.**

Kelp Restoration Management Permit, 2022. **Denied.**

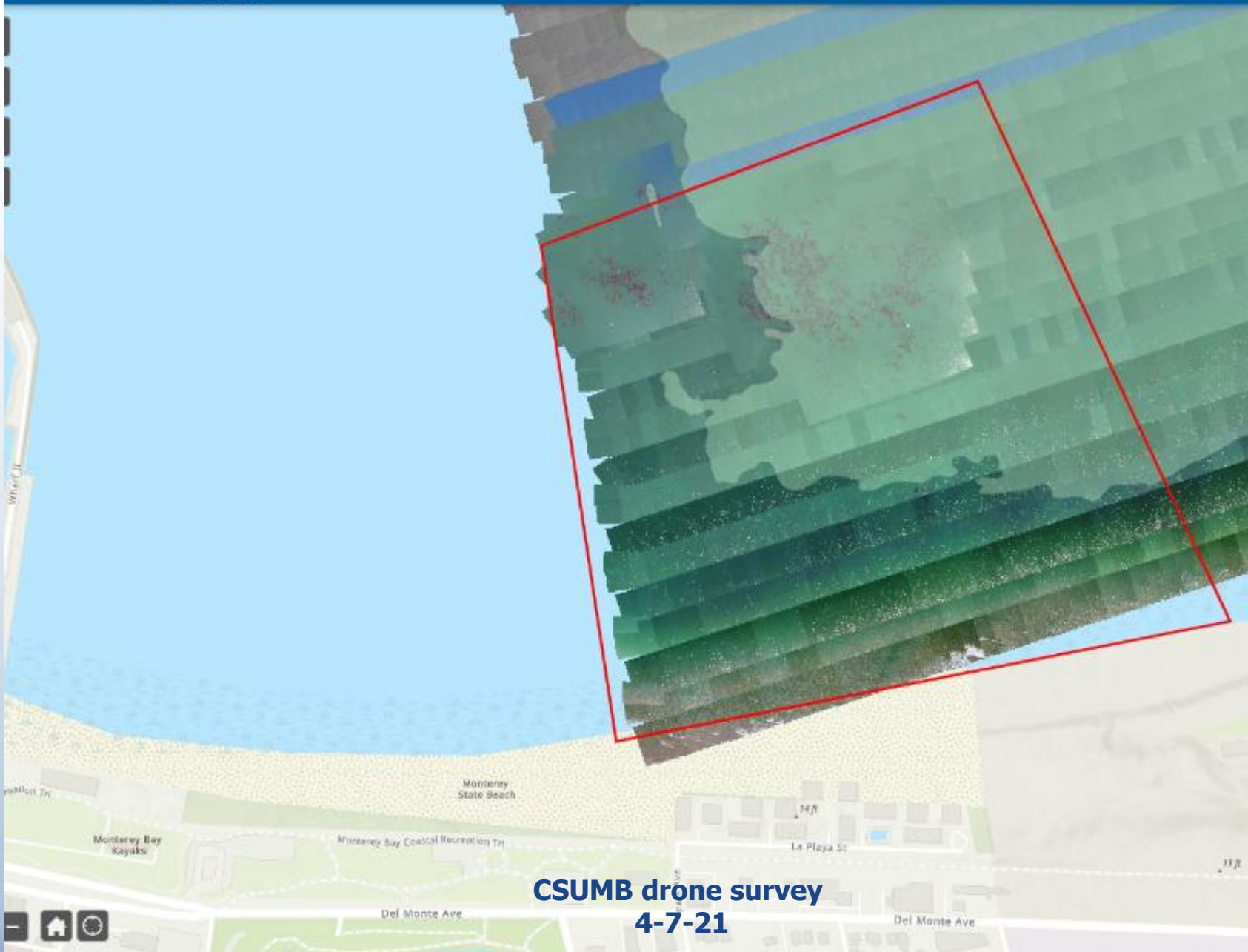
Scientific Collection Permit, 2022. **Denied.**

Decadal Management Review Petition in 2023. **In consideration today. Maybe Fall 2027**

Recreational Airlift tool in 2024. **Denied.**

Recreational urchin culling in 10 coastal counties in 2024. **Denied.**



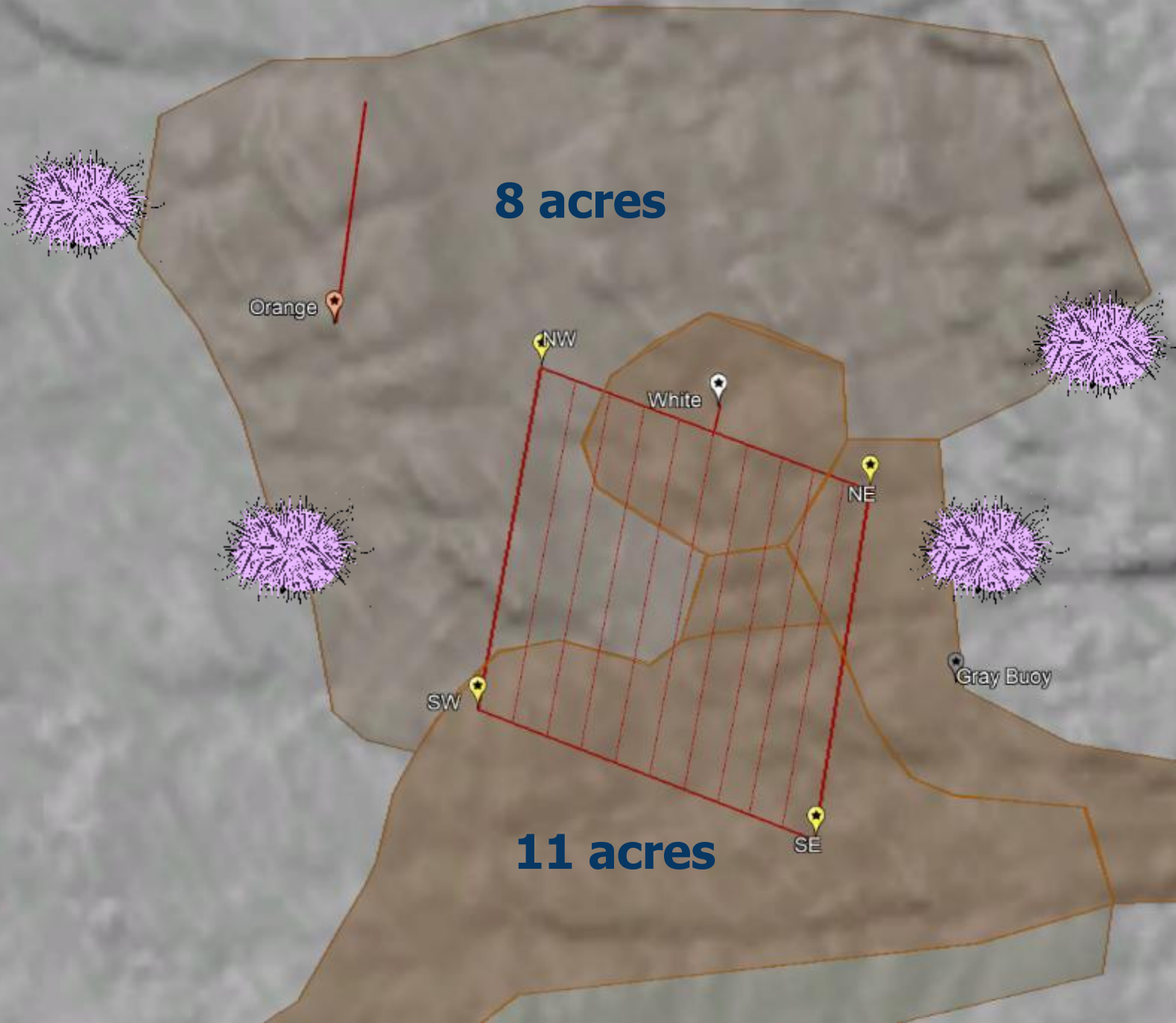


Kelp survived to adulthood



**Kelp spores spread
Southeast**

**2024
Plan**

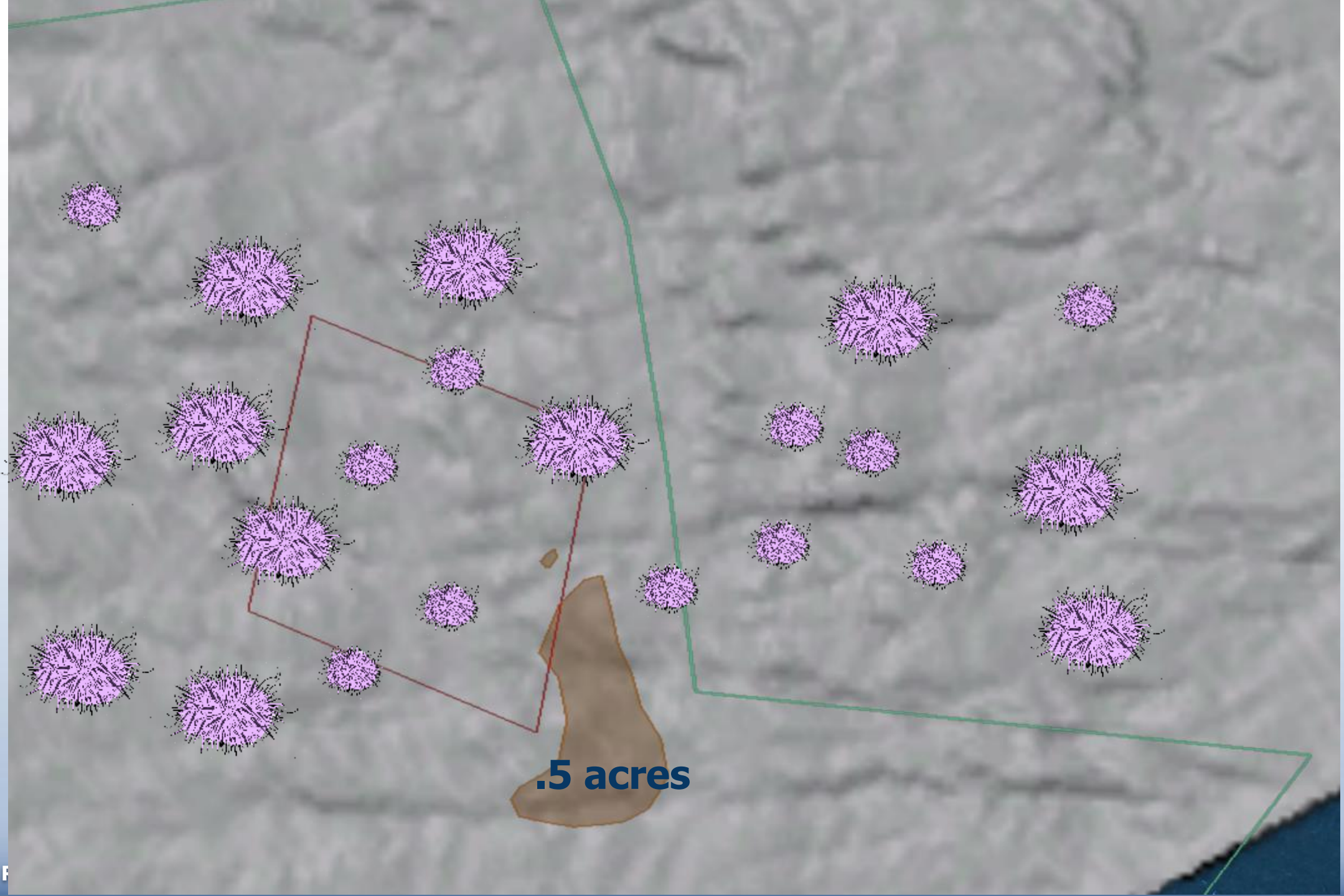


**April
2024**

Sunset

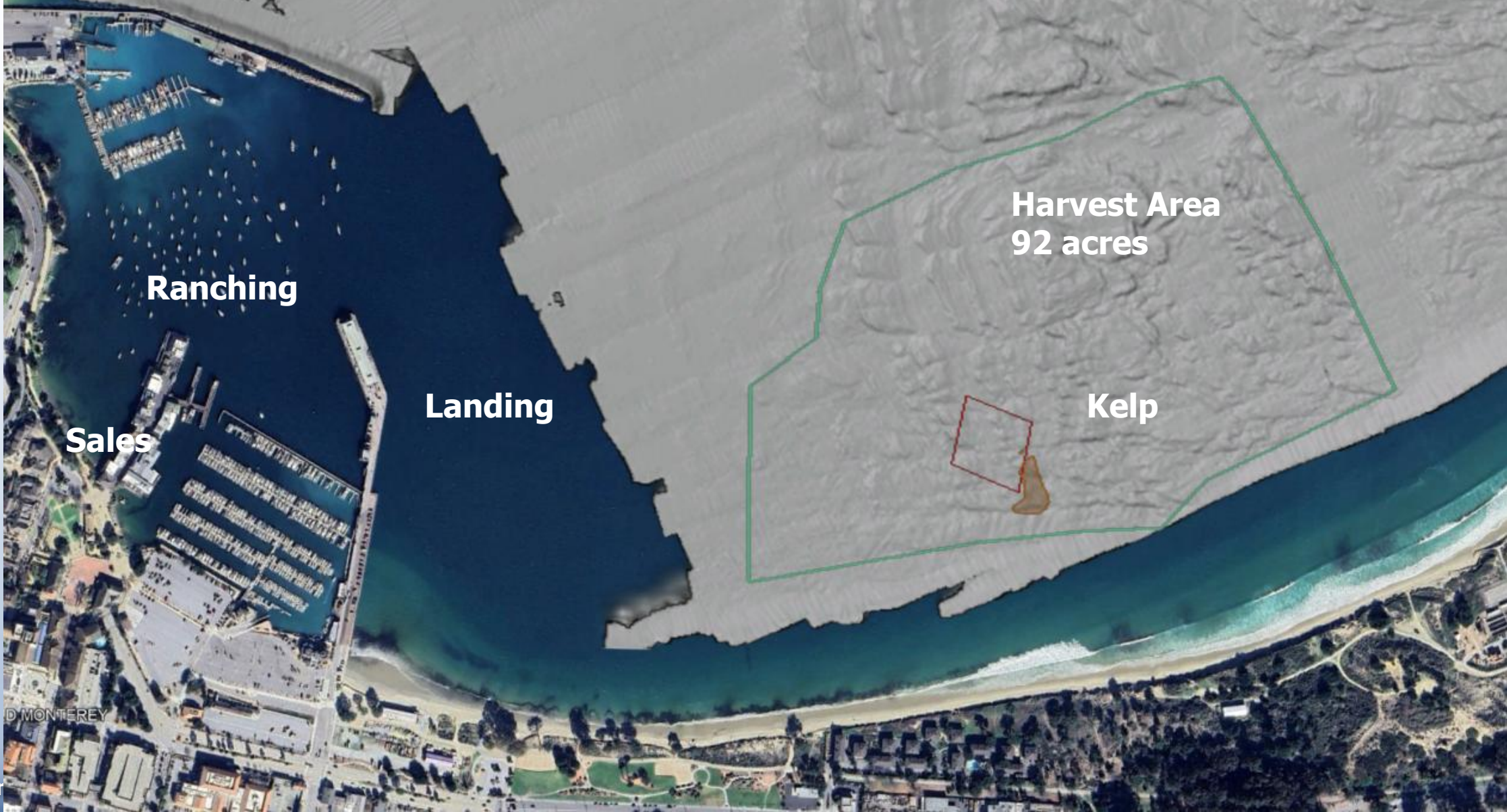


**April
2026**



Giant Kelp P

New Regenerative Fishery



Ranching

Sales

Landing

**Harvest Area
92 acres**

Kelp

© MONTEREY

Urchin Removal Workrates

Hand

375/hour

Culling

662/hour

Air lift

18,500/hour



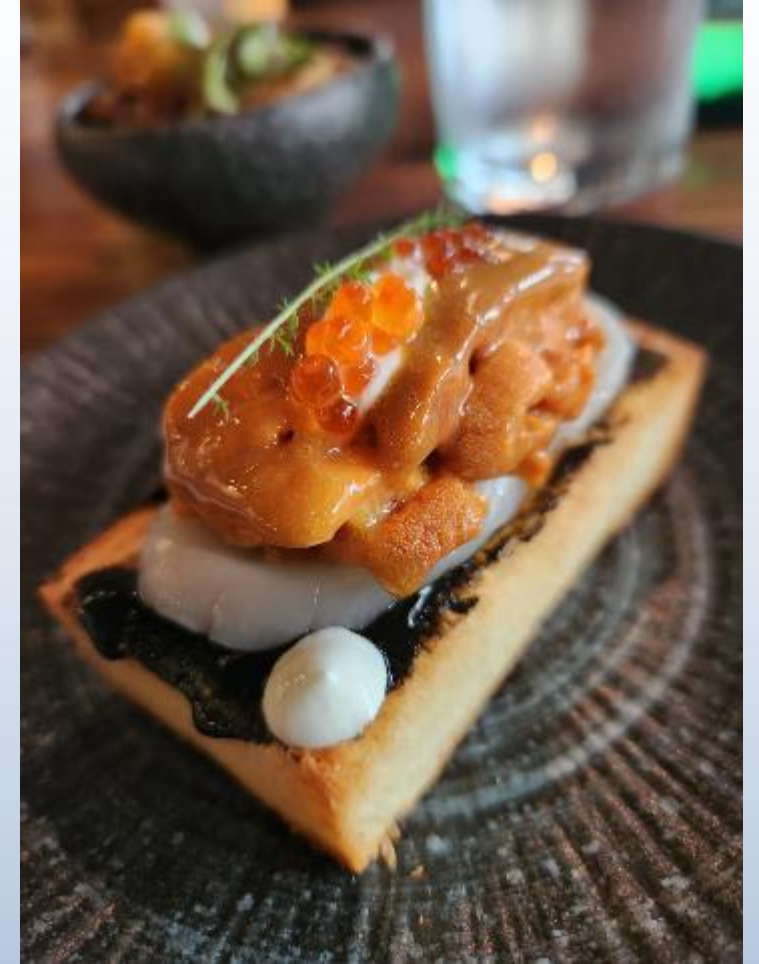
Urchin Culinary Products



Chilled in the shell



Urchin Tostada



Uni Scallop Toast



Giant Giant Kelp
Restoration Project

Policy Changes



OBJECTIVE 3.3:

Restore vulnerable coastal and marine ecosystems.

OPC 2026-2030

Strategic Action Plan

- ❑ **KRMP by 2027**
- ❑ **Restore 2,000 acres of Kelp by 2030**

Targets:

- 3.3.1 By 2027, develop statewide science and policy guidance to accelerate climate-resilient coastal and marine restoration.
- 3.3.2 By 2027, in partnership with the California Department of Fish and Wildlife, complete the statewide Kelp Restoration and Management Plan and restore at least 2,000 acres of kelp forest by 2030.



Giant Giant Kelp
Restoration Project

Policy Changes

Kelp Restoration

Management Plan –

- ❑ Restoration permitting framework
- ❑ Implementation slipped to 2028





Giant Giant Kelp
Restoration Project

Policy Changes



MPA Statewide Leadership Team Work Plan 2025-2030

- Case-by case determinations for restoration in MPAs

<p>18 Utilize OPC's Restoration and Mitigation Policy to develop a framework to evaluate and approve appropriate restoration and mitigation actions within MPAs and MMAs</p>	<p>1) Identify circumstances under which restoration would be appropriate to consider in an MPA and the types of MPAs in which restoration may be considered</p>	<p>CDFW, CFGC, OST, OPC, CCC</p>
	<p>2) Develop a structured decision-making approach for case-by-case determinations regarding restoration in MPAs</p>	<p>CDFW, OPC, CFGC, CCC</p>
	<p>3) Determine appropriate permitting pathways, assess capacity challenges, and fund gaps to ensure efficient permitting</p>	<p>CDFW, OPC, CCC</p>



Giant Giant Kelp
Restoration Project

OPC - Artificial Reef Program Plan, 2024

- ❑ **\$550,000 SeaGrant
plan development**

Policy Changes



CALIFORNIA
**OCEAN
PROTECTION
COUNCIL**

Wade Crowfoot | Secretary for Natural Resources | Council Chair
Yana Garcia | Secretary for Environmental Protection
Malia Cohen | State Controller
Ben Allen | State Senator
Dawn Addis | State Assemblymember
Alexis Jackson | Public Member
Megan Rocha | Public Member

Staff Recommendation

September 10, 2024

Item 8

Action Item:

Consideration and Approval of Disbursement of Funds for the Development of a California Artificial Reef Program Plan

Michael Esgro, Senior Biodiversity Program Manager & Tribal Liaison

Recommended Action: Authorization to disburse up to \$550,000 to California Sea Grant to support the development of a California Artificial Reef Program Plan.

Location: Statewide

Strategic Plan Goals and Objectives: Goal 3: Enhance Coastal and Marine Biodiversity;
Objective 3.1: Protect and Restore Coastal and Marine Ecosystems

Equity and Environmental Justice Benefits: Improved habitat and environmental quality; improved access and recreational opportunities; strengthened resilience for coastal communities, including frontline communities, e.g. through sea-level rise adaptation and shoreline stabilization.



Giant Giant Kelp
Restoration Project

Policy Changes



CALIFORNIA
**OCEAN
PROTECTION
COUNCIL**

OPC – 30x30 – By 2030, 30% of coastal water areas that are durably protected and managed to sustain functional ecosystems, both intact and restored, and the diversity of life that they support.

- ❑ **Conservation inventory is 21.9% of California Coast**
- ❑ **Kelp restoration sites need protection**
- ❑ **Proposed SMR adds .0058% to inventory; permanent experiment.**



Giant Kelp
Restoration Project

Policy Changes



Monterey Bay National Marine Sanctuary – Iconic Kelp Action Plan, 2024

- ❑ **Recommendations from communities and researchers**
- ❑ **Address the regional loss and long-term health of kelp forest ecosystems in the Sanctuary through education, coordination with partners, research, restoration, and community engagement**
- ❑ **Advance kelp restoration beyond the “pilot” scale**

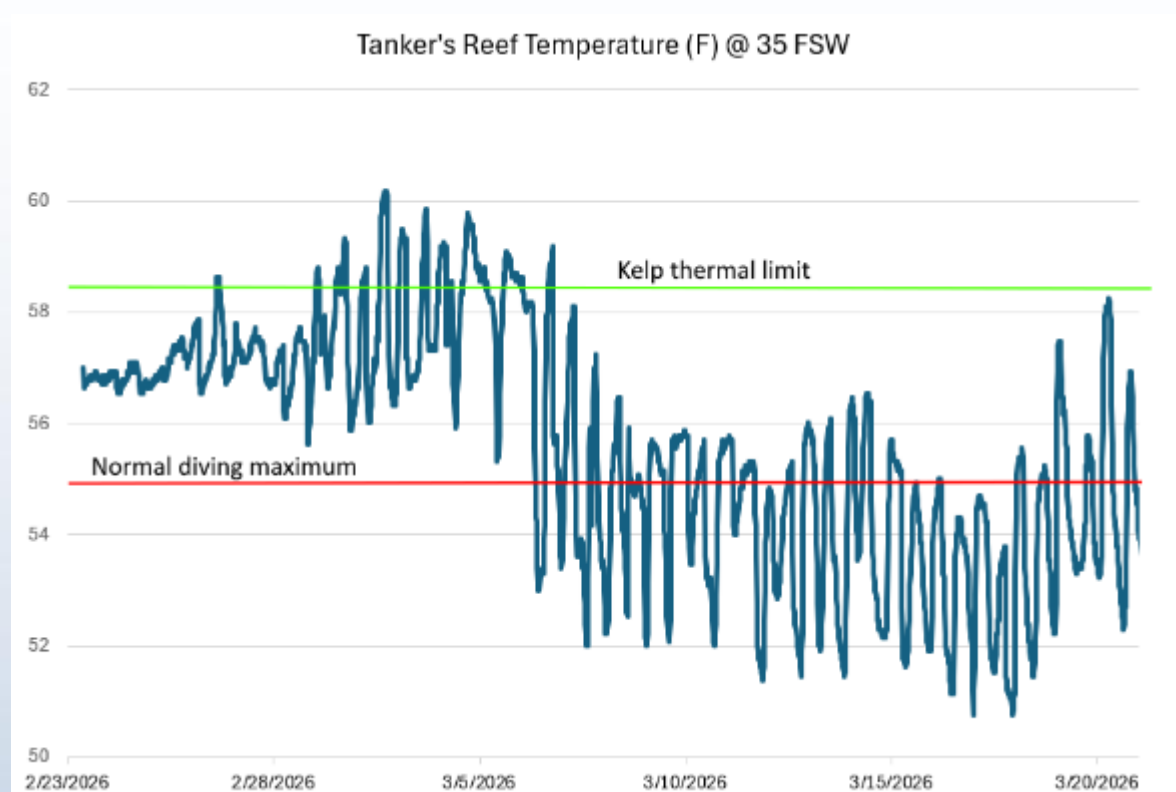


Giant Giant Kelp
Restoration Project

Changing Ocean Conditions



- ❑ **Kelp at 4% of baseline in Monterey Bay**
- ❑ **Kelp at 6.3% of baseline in Carmel Bay**
- ❑ **Kelp transitioning from perennial giant kelp to annual bull kelp species**
- ❑ **Southern sea otter population decline**
- ❑ **Marine Heat Waves are more often and more intense**
- ❑ **Too hot since September 2025**
- ❑ **Agricultural nitrate pollution without kelp uptake**

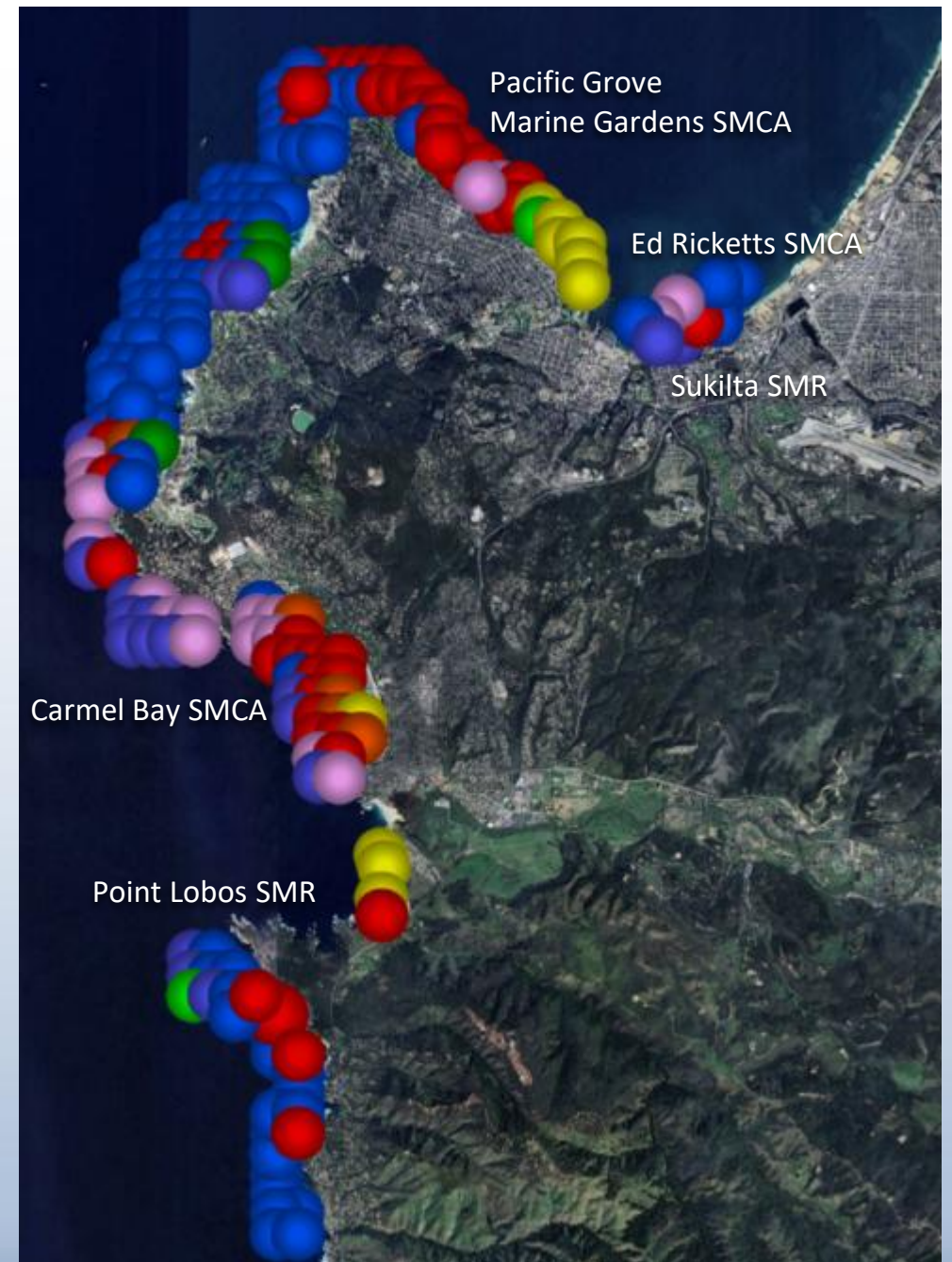


Where, When and How?

A guide to help restoration in California using spatio-temporal models of kelp dynamics.

Prioritization class

- High_decreasing
- High_increasing
- Mid_decreasing
- Mid_increase
- Low_decreasing
- Low_increasing
- Very_low_decreasing
- Very_low_increasing



2023-23MPA: Kelp Restoration in Marine Protected Areas (MPAs total 545,000 acres)

Ed Ricketts SMCA, 146 acres

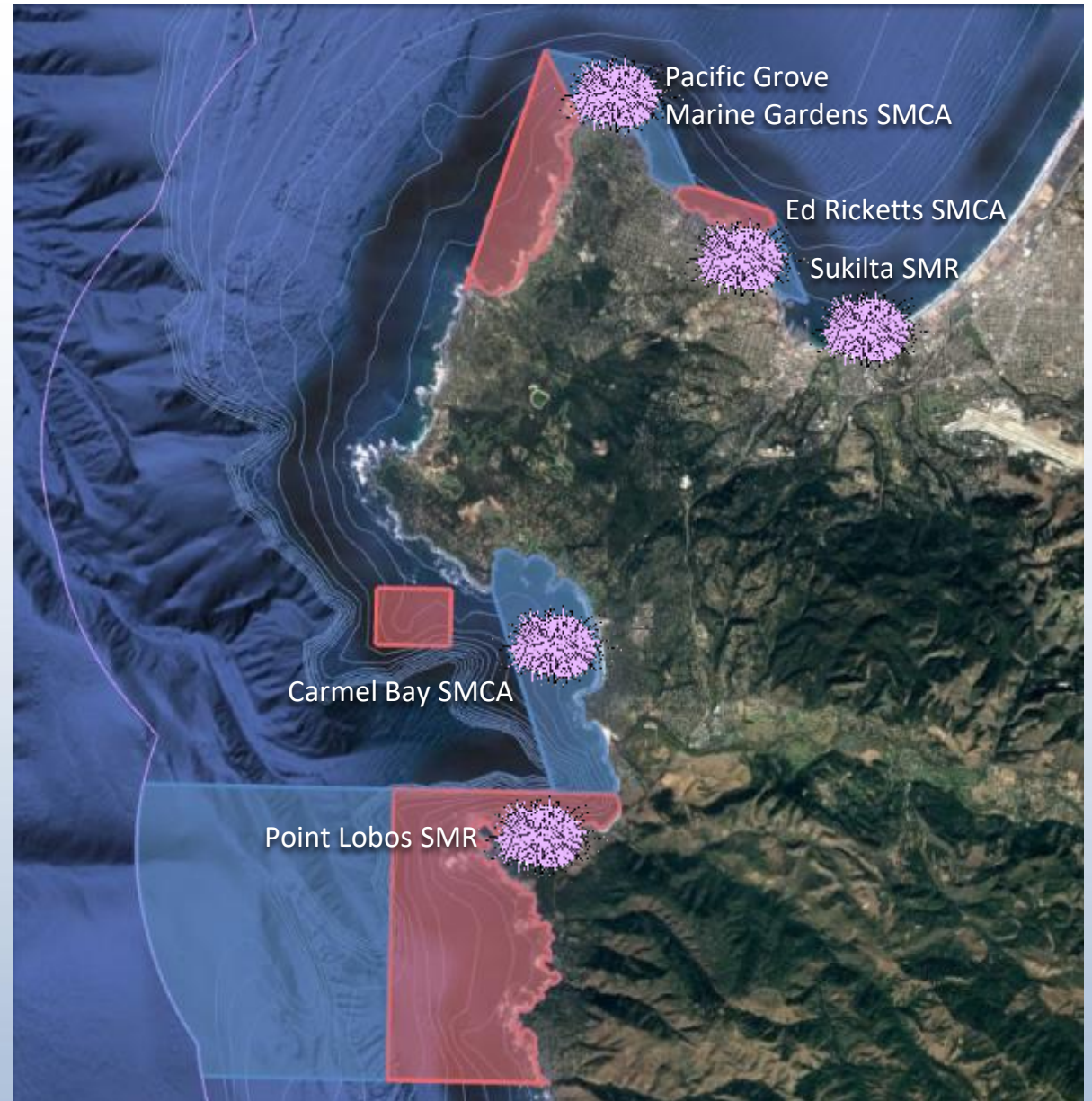
PG Gardens SMCA, 628 acres

Carmel Bay SMCA, 1,408 acres

Point Lobos SMR, 34 acres

Sukilta SMR, 193 acres

Total 2,410 acres, 0.44% of MPAs



2023-23MPA: Kelp Restoration in Marine Protected Areas (MPAs total 545,000 acres)

Ed Ricketts SMR, 146 acres

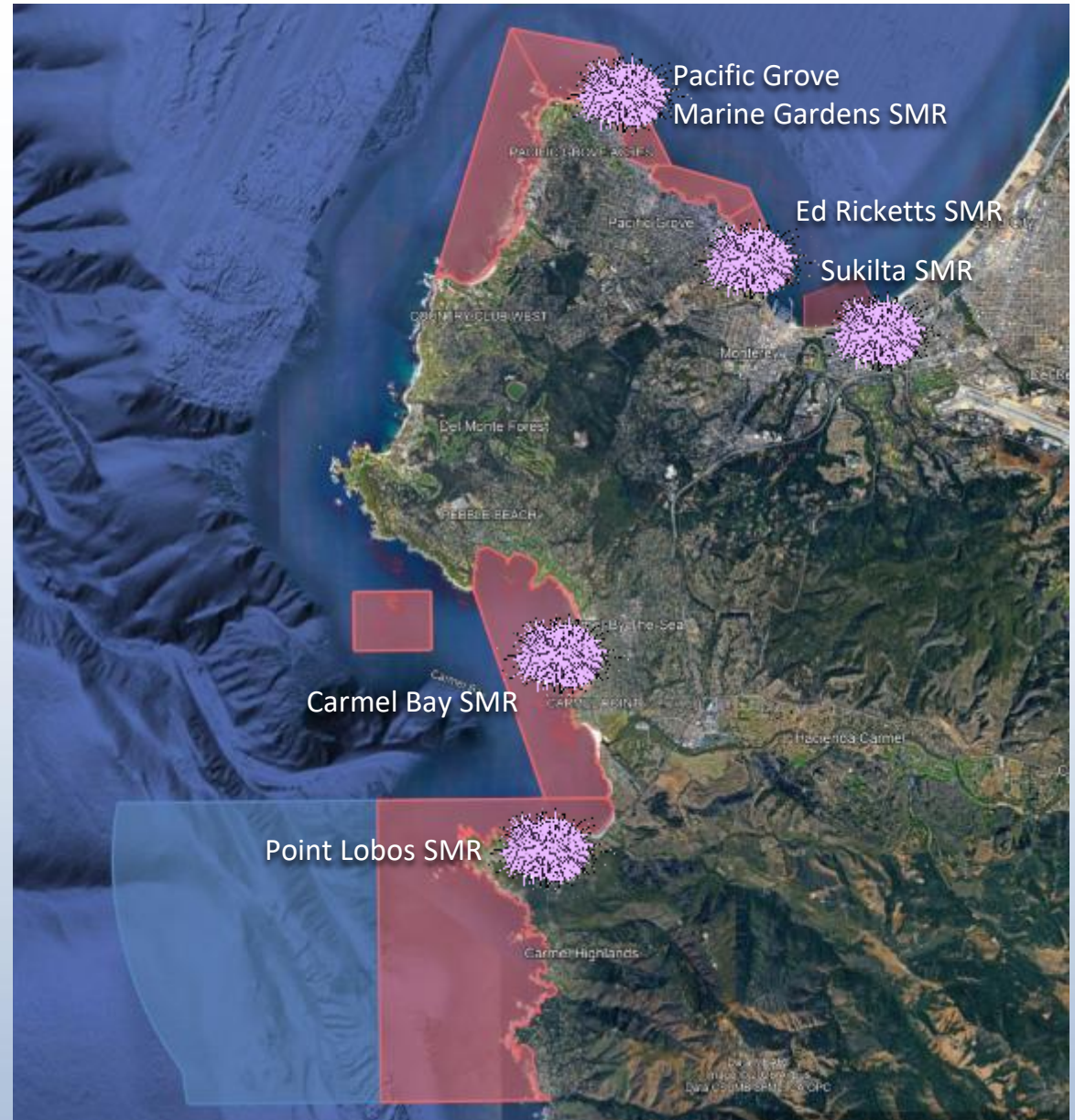
PG Gardens SMR, 628 acres

Carmel Bay SMR, 1,408 acres

Point Lobos SMR, 34 acres

Sukilta SMR, 193 acres

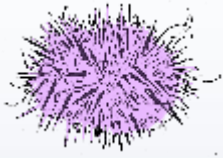
Total 2,410 acres, 0.44% of MPAs





Giant Giant Kelp
Restoration Project

Kelp Restoration Proposal 2023-23MPA



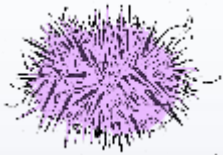
- ❑ **Artificial Reefs**
- ❑ **Buoys for wayfinding**
- ❑ **Adopt a Reef – exclusive long-term stakeholder**



Fish Reef Project



Giant Giant Kelp
Restoration Project



Kelp Restoration Proposal 2023-23MPA

- ❑ **New Kelp Restoration portal with new permitting decision tree**
- ❑ **Ten-year permits**
- ❑ **Similar portal for Tribes and Tribal Community permits.**



~~Scientific Collecting~~ Permit Portal (SCPP)

KR

~~Scientific Collecting~~ Permit Portal (SCPP)
Kelp Restoration

My Dashboards

[My Profiles](#)

[My Permits and Applications](#)

SCP Instructions

SCP Pre-Application Guide	All SCPP Instructions
Profile Instructions	
Individual and Student Profiles	Entity Profiles
Application Instructions	
Start a New SCP Application KRMP Application	

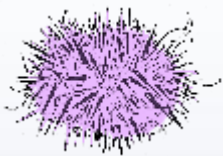
Announcements

Title	Message
Important! Amendment/Renewal Submission	When submitting an Amendment/Renewal. In the Sections to Amend portion, select all the sections of the original permit that need to be either amended (for amendments) or updated (for renewals). Only include the sections that need to be changed. There is no need to include all information from the original permit. PLEASE NOTE: You will need to select Section 4e. Taxonomic Groups and fill that in accordingly so the application is routed to the correct review team.
Updated Pre-App Guide	The SCP Pre-Application Guide has been updated as v.2.0. Please see the link at the left under "SCP Instructions." 2/1/2019



Giant Giant Kelp
Restoration Project

2025 Amendment to 2023-23MPA_AM1

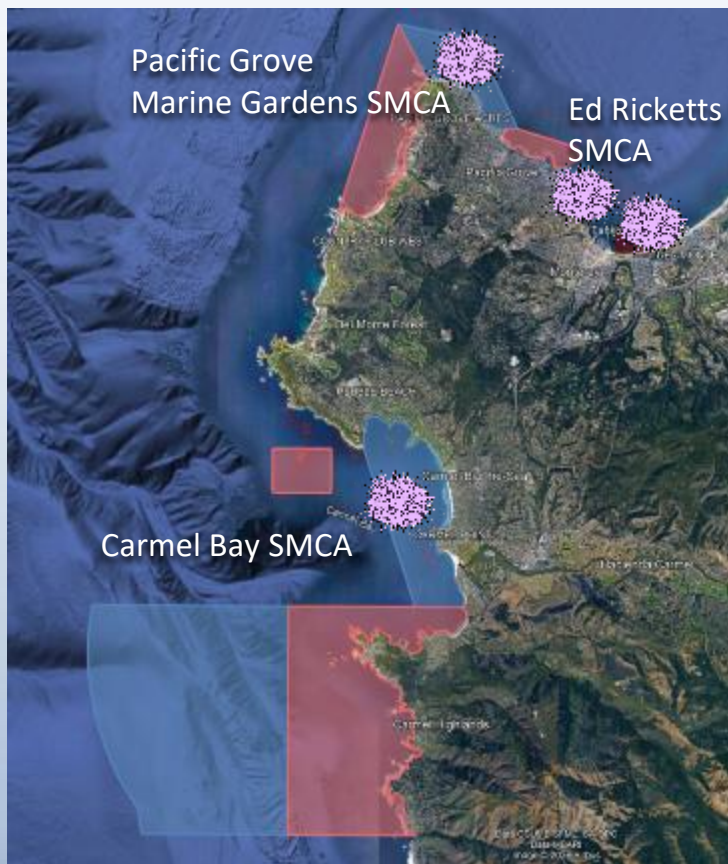


Objections

- ❑ **Monterey Abalone Company: Can't harvest in SMRs**
- ❑ **Recreational fishers: Never get SMRs back**

Amendment AM1

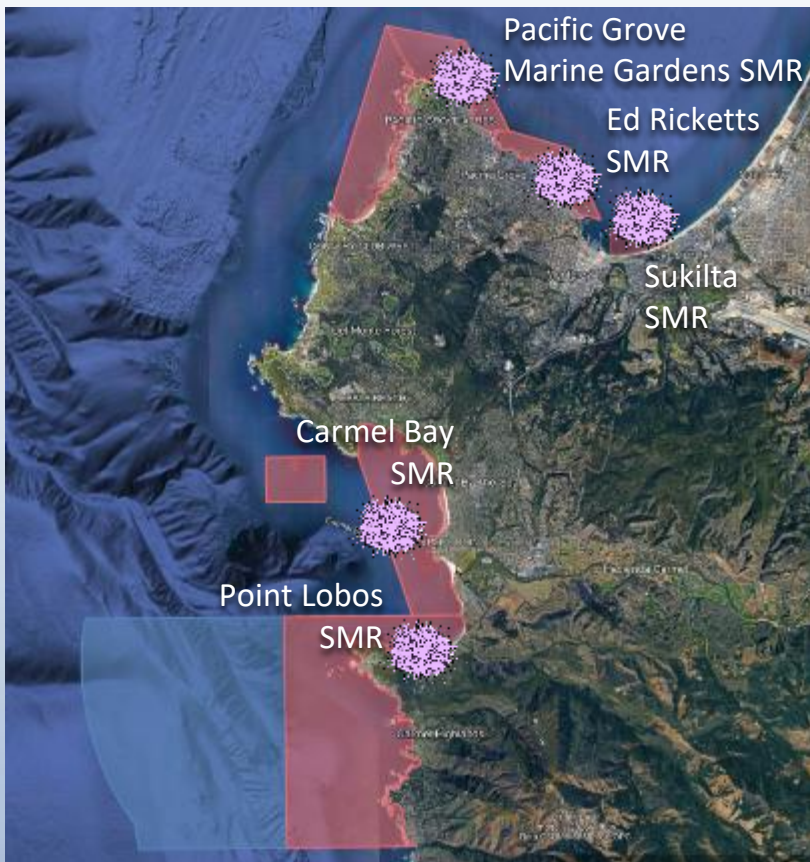
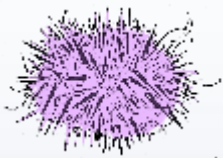
- ❑ **Leave 3 MPAs as SMCAs**
- ❑ **Align KRM *Permit* with KRM *Plan***
- ❑ **Prohibit fishing when KRMP is active**





Giant Giant Kelp
Restoration Project

2026 Amendment to 2023-23MPA_AM2

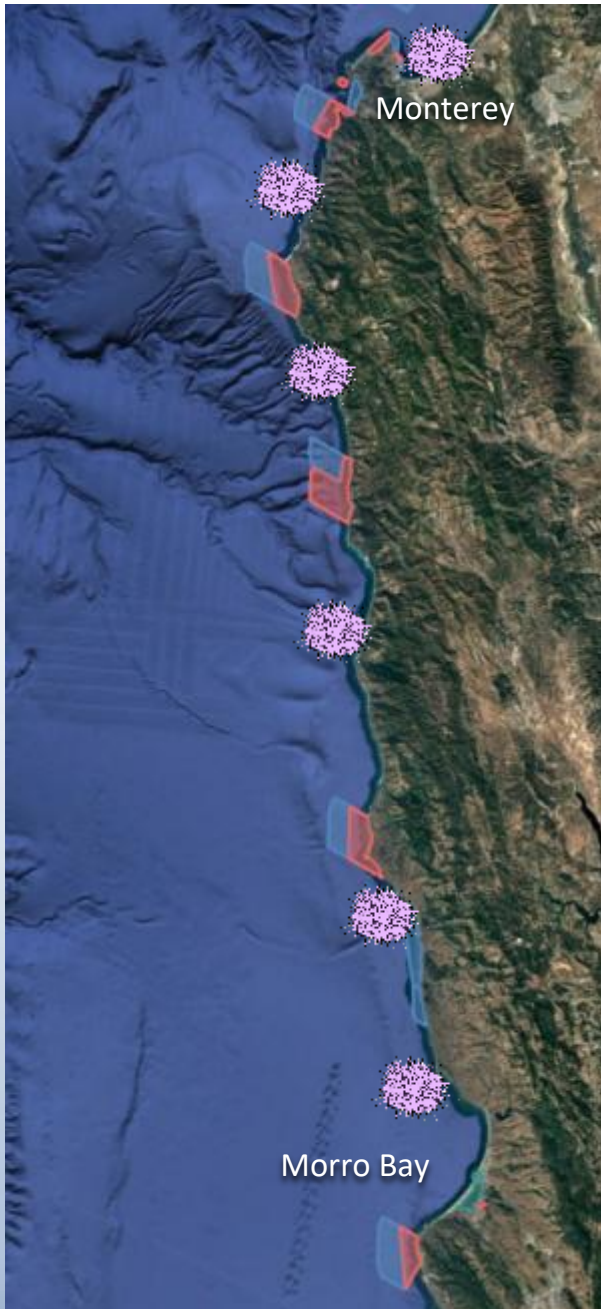


Objections

- ❑ **Monterey Abalone Company: Can't harvest in SMRs**
- ❑ **Recreational fishers: Intermittent is too confusing**

Proposed Amendment AM2

- ❑ **Ed Rickett's SMR**
- ❑ **Pacific Grove Gardens SMR**
- ❑ **Carmel Bay SMR**
- ❑ **Allow pruning giant kelp in SMRs (632,A)**



Pathways to help restoration

Fishing Pathways outside MPAs

- ❑ Commercial take with airlift
- ❑ Recreational take 35 urchins

Restoration Pathways in MPAs

- ❑ **Petition 2023-23_AM2: Regulation change to allow restoration activities in MPAs**
- ❑ **KRMP: Implement in 2028; silent on MPAs**
- ❑ **RMP: Under development; never used in the ocean**
- ❑ **LOA Letter of Authorization; never offered to us**

Thank you!



g2kr.com
Keith@g2kr.com

Photo by Dan Schwartz