

COMMITTEE STAFF SUMMARY FOR NOVEMBER 16, 2023 MRC

3. RED ABALONE RECOVERY PLAN (NORTH COAST)**Today's Item****Information** ☐**Action** ☒

Receive Department update on process to support development of a recovery plan for red abalone on the north coast and consider potential MRC recommendation.

Summary of Previous/Future Actions

- Commission supported development of recreational red abalone fishery management plan (FMP) October 8, 2014
- FMP development, peer review, progress updates, administrative team formation and recommendations 2018 – 2020, 2022; various meetings
- Commission approved MRC recommendation to redirect focus from FMP to recovery plan December 14-15, 2022
- **Today receive Department update on progress of a recovery plan and consider potential MRC recommendation November 16, 2023; MRC recommendation**

Background

Between 2014 and 2022, the Department worked to develop an FMP for the north coast recreational red abalone (*Haliotis rufescens*) fishery, providing regular progress updates to MRC. Concurrently, the Department documented precipitous declines in the red abalone population associated with the loss of bull kelp beds, an overabundance of urchin, and the resulting abalone starvation. The Department made significant advances with partners and stakeholders on exploring core FMP concepts, including evaluating harvest control rule options and a potential *de minimis* fishery during recovery; however, at the November 2022 MRC meeting the Department reported that abalone populations were still declining. See Exhibit 1 for background information regarding FMP development, including detailed summary of previous/future actions.

In December 2022, the Commission approved an MRC recommendation to pause FMP development – except for memorializing the harvest control rule and *de minimis* options – and redirect focus toward abalone recovery planning.

In July 2023, the Department provided MRC a written update on recovery planning. The Department plans to create a climate-ready red abalone recovery plan (RARP), to be developed with tribal engagement, technical and stakeholder advisory teams, and agency engagement (Exhibit 2). Note that the Department proposes to develop a statewide plan, rather than for the north coast only. Due to limited time available in July for stakeholders to discuss the Department's proposed approach, MRC supported scheduling a discussion for today's meeting.

Update

Today, the Department presentation will build on materials provided in July. The Department has recently conducted field surveys to assess abalone trends and plans to present the outcomes of the field surveys along with the proposed RARP process and timeline (Exhibit 3).

COMMITTEE STAFF SUMMARY FOR NOVEMBER 16, 2023 MRC

Significant Public Comments (N/A)**Recommendation**

Commission staff: Support the Department's proposed engagement process and timeline for developing a statewide RARP, as reflected in exhibits 2 and 3.

Exhibits

1. [Staff summary from November 17, 2022 MRC meeting, Agenda Item 4 \(for background purposes only\)](#)
2. [Department written update provided for July 20, 2023 MRC meeting, Agenda Item 6](#)
3. [Department presentation](#)

Committee Direction/Recommendation

Support the Department's proposed process and timeline to develop a statewide red abalone recovery plan, including tribal engagement, technical and stakeholder advisory teams, and agency engagement.

COMMITTEE STAFF SUMMARY FOR NOVEMBER 17, 2022 MRC*For background purposes only***4. RED ABALONE FISHERY MANAGEMENT PLAN****Today's Item****Information** ☐**Action** ☒

Receive Department update on 2022 abalone survey results, harvest control rule development, and *de minimis* fishery concepts, and develop potential committee recommendation.

Summary of Previous/Future Actions

- | | |
|--|---|
| • FGC supported development of recreational red abalone fishery management plan (FMP) | Oct 8, 2014; Mt. Shasta |
| • FGC received peer review results for draft FMP and re-referred to MRC | Oct 17, 2018; Fresno |
| • FGC supported revised process per MRC recommendation | Dec 12-13, 2018; Oceanside |
| • MRC received administrative team report recommendations | Mar 17 and Apr 29, 2020; MRC, Webinar/Teleconference |
| • MRC recommended FGC support DFW to develop a draft FMP with administrative team report options | Jul 29, 2020; MRC, Webinar/Teleconference |
| • FGC approved MRC recommendation | Aug 19-20, 2020; Webinar/Teleconference |
| • MRC received DFW updates on FMP progress | Jul 16, Nov 21, and Nov 17, 2020; MRC, Webinar/Teleconference |
| • MRC received draft management chapter for FMP | Mar 24, 2022; MRC, Webinar/Teleconference |
| • MRC discussed draft management strategy and provided input to DFW | Jul 14, 2022; MRC, Santa Rosa |
| • Today receive DFW update and potential MRC recommendation | Nov 17, 2022; MRC, San Diego |

Background

An FMP for the north coast recreational red abalone fishery has been under development by DFW since 2014; DFW has provided regular progress updates to MRC.

Key milestones relevant to today's discussion are detailed in background materials from the Jul 2022 MRC meeting (Exhibit 1). In brief, recent milestones have culminated in:

- FGC endorsement of MRC recommendation for DFW to develop a draft FMP, using both spawning potential ratio (SPR) and density metrics in a harvest control rule (Aug 2020)
- DFW developing a draft FMP and giving general updates to MRC (late 2020-early 2022)
- DFW presenting a draft FMP management chapter to MRC and the public (Mar 2022). The chapter introduced:

COMMITTEE STAFF SUMMARY FOR NOVEMBER 17, 2022 MRC

For background purposes only

- New “climate-ready” environmental and abalone indicators for fishery opening;
- a new harvest control rule approach called an “egg production-based indicator model” that merges the SPR and density data streams into a single model rather than separate metrics; and
- rationale for developing a hybrid model rather than separate data streams.
- MRC requests and DFW commitments (Mar 2022, Jul 2022):
 - Increase transparency and communication with key partners and the Recreational Abalone Advisory Committee (RAAC);
 - prepare a more in-depth and clear explanation of how DFW staff arrived at the current proposed management strategy;
 - discuss the proposed new management strategy and partner concerns in more depth;
 - seek to find common ground with partners among competing management strategies and find a workable management strategy solution;
 - provide more information about scale of a *de minimis*, or limited, fishery relative to a rebuilding stock size; and
 - perform summer field surveys to assess abalone stock status and provide updated data.

Update

Consistent with its commitments made in Jul 2022, DFW completed the summer abalone field surveys; conducted stakeholder outreach for more thorough discussion of management strategies; and prepared an in-depth report of rationale for its management strategy recommendation. In the report (Exhibit 2), DFW further expounds on its recommendation to use the density and egg production model by detailing:

- Background on the management approaches analyzed (i.e., density, SPR, and egg production);
- the management strategy evaluation it conducted; and
- the assessment of indicators (i.e., SPR and density performance for simulated red abalone data, and egg production performance).

For today’s meeting, DFW will present 2022 survey results, management strategy details, an analysis of abalone stock indicators (i.e., trade-offs of using density, SPR, density and SPR, or egg production), and future fishing opportunity considerations (Exhibit 4). The presentation will support discussion and a potential MRC recommendation related to a potential path forward with harvest control rule development, *de minimis* fishery concepts, surveys, or other next steps.

Significant Public Comments

An abalone historian makes a case for redirecting focus from harvest control rule development to helping abalone recover given the “perilous current condition of red abalone” and provides historic and current context to support the request. The commenter urges FGC and DFW to

COMMITTEE STAFF SUMMARY FOR NOVEMBER 17, 2022 MRC*For background purposes only*

shift focus to red abalone recovery efforts, such as developing new strategies to address the key threats that have emerged since the time of the Abalone Recovery and Management Plan (Exhibit 4).

Recommendation

FGC staff. Provide guidance regarding project focus on abalone surveys, harvest control rule selection or further development, and *de minimis* fishery development as recommended by DFW. (2) Discuss whether DFW should place emphasis on developing a recovering plan (currently in preparation for FMP).

DFW: Provide guidance regarding additional abalone surveys, harvest control rule selection or further development, and *de minimis* fishery development.

Exhibits

1. Background document: Staff summary and exhibits from Jul 14, 2022 MRC meeting
2. DFW report: *Analysis of red abalone stock indicators*, Marine Region, dated Oct 2022
3. DFW presentation
4. Email from Ann Vileisis, dated Nov 4, 2022

Committee Direction/Recommendation

The Marine Resources Committee recommends that the Commission support DFW focusing on the following areas of red abalone fishery management plan development and/or recovery planning: _____ .

Overview of Proposed Process to Develop a Statewide Red Abalone Recovery Plan
California Department of Fish and Wildlife

Marine Resources Committee Meeting
of the California Fish and Game Commission
July 20, 2023

Overview: The California Department of Fish and Wildlife (CDFW) has developed a proposed process to create a statewide recovery plan for red abalone (*Haliotis rufescens*). The Red Abalone Recovery Plan (RARP) will use a science-based approach to support recovery of the population to sustainable harvestable levels. The RARP will facilitate a robust, adaptive, climate-ready approach to improve the red abalone population in the face of changing ocean conditions.

Process: To develop the RARP, CDFW staff proposes a process which includes engaging with tribal interests, establishing technical and stakeholder teams, and collaborating with agency partners (e.g., Fish and Game Commission, National Marine Fisheries Service, Ocean Protection Council, etc.) to solicit input on technical and policy guidance throughout recovery plan development.. CDFW will lead the engagement process by:

- A) Work with California Native American Tribes to develop pathways and opportunities to **promote Tribal engagement** throughout the RARP development process. Pathways and opportunities will be explored and identified initially through solicitation for feedback by reaching out to California Tribes and Tribal Communities. Tribal engagement may include early consultation, listening sessions, opportunities to provide input on draft documents. Regular updates on the development process will be provided at the Fish and Game Commission's Tribal Committee meetings.
- B) Assembling a **Technical Team** consisting of abalone restoration experts from a broad array of disciplines and geographic areas, tasked with providing scientific and technical guidance on all aspects of the RARP.
- C) Assembling a **Stakeholder Team** to solicit stakeholder perspectives on the development of the RARP. The Stakeholder Team will include recreational and commercial fishing representatives, conservation interests, and other interested individuals with expertise in abalone recovery. Members of the Stakeholder Team will be selected through a solicitation process.

Timeline: CDFW proposes the following RARP development timeline:

- 2023: Solicit nominations for tribal, technical and stakeholder groups
- 2024-26: Conduct tribal, scientific and stakeholder engagement
- 2024: Begin drafting RARP
- 2026: Finalize RARP, public review, submission to Fish and Game Commission
- 2027: Recovery plan implementation



Agenda Item 3: Red Abalone Recovery Plan Update

16 November 2023

Presented to:

Marine Resources Committee
CA Fish and Game Commission

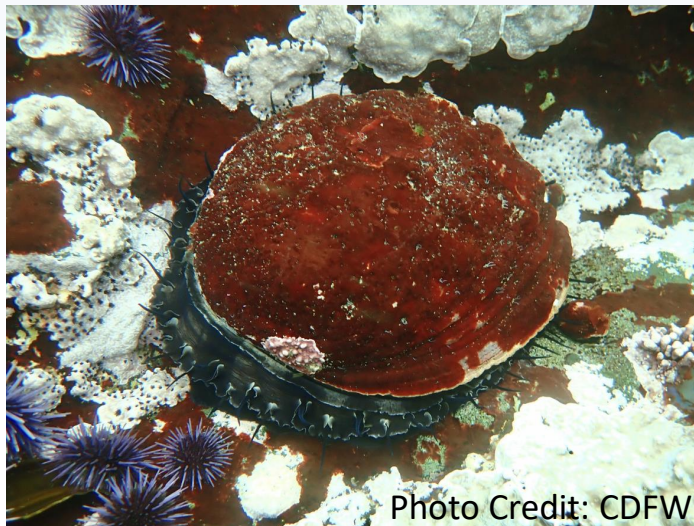
Presented by:

Joanna Grebel
Invertebrate Program Manager
Marine Region



Overview

- 2023 Field Work
- Red Abalone Recovery Plan
- Red Abalone Monitoring Strategy
- Next Steps





2023 Field Work



2023 Survey Statistics



**11 CDFW
SCIENTISTS**

5 VOLUNTEERS

**3 CDFW
WARDENS**

3,960

**METERS SQUARED
SURVEYED**

397

**RED ABALONE
SURVEYED**

7

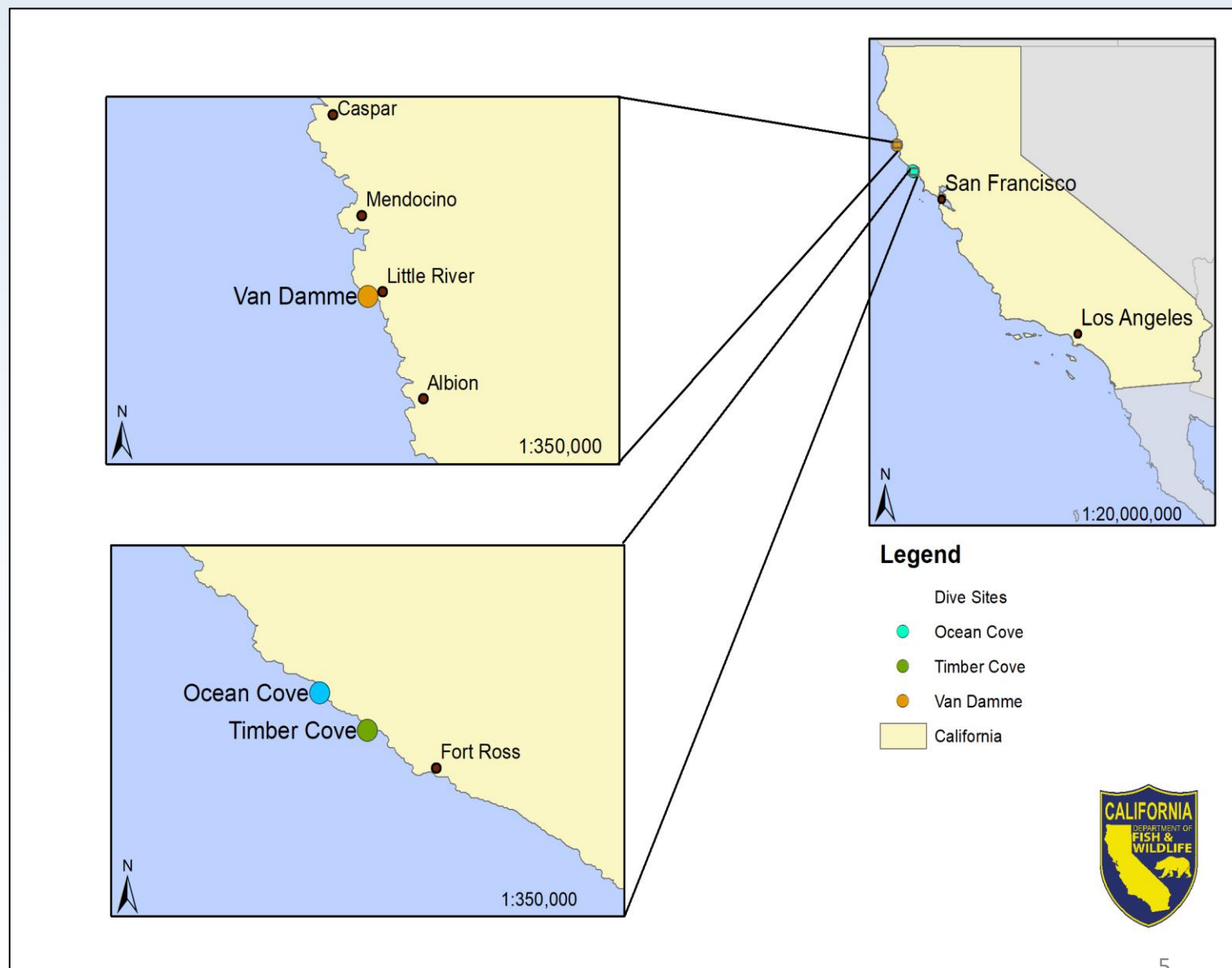
OF CDFW VESSELS

116,037

**PURPLE URCHINS
COUNTED**

Survey Sites

- Mendocino County
 - Van Damme
- Sonoma County
 - Ocean Cove
 - Timber Cove





2023 Survey Data

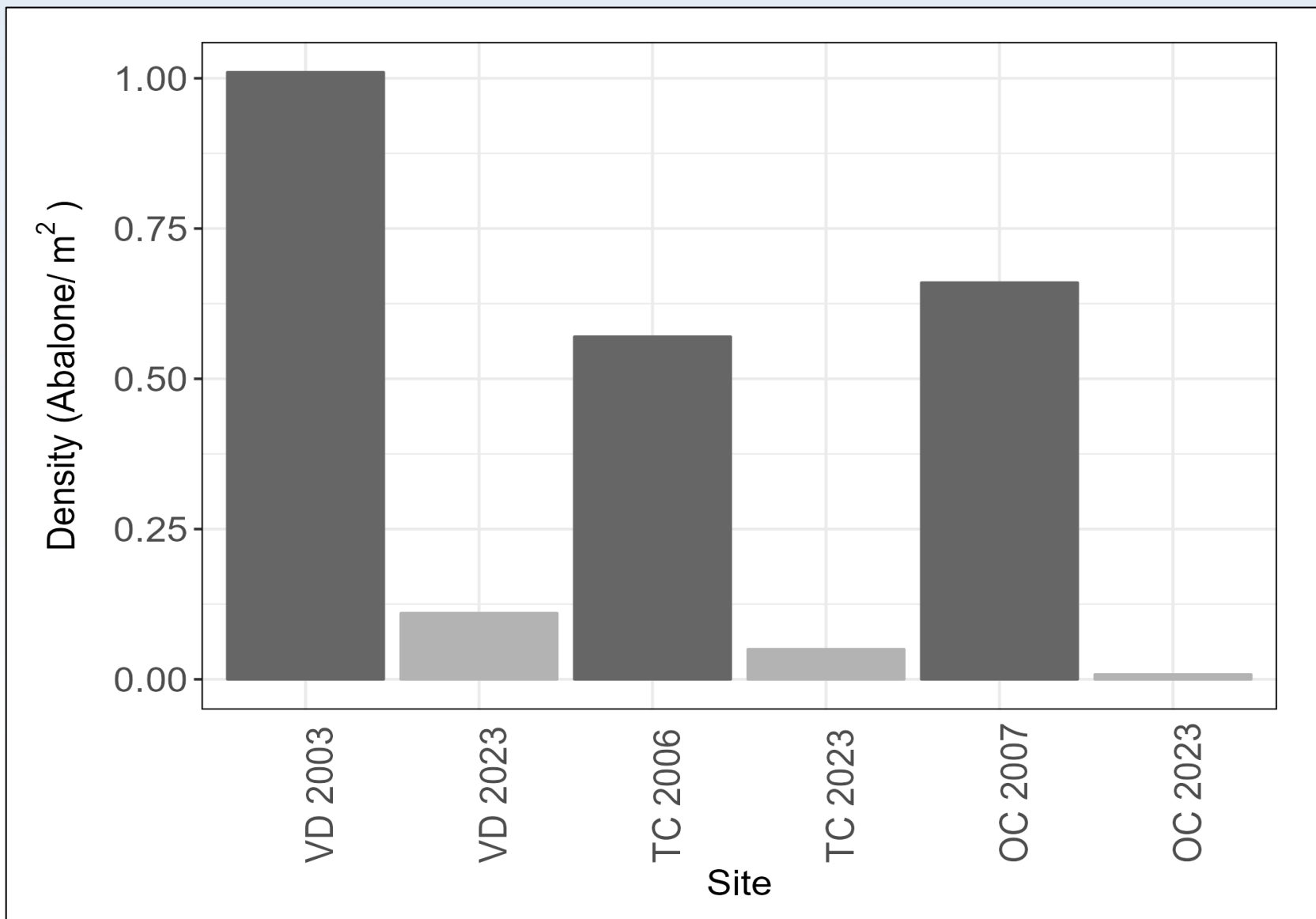
Site	Transects	Area Surveyed (m ²)	Red Abalone Observed	Density (ab/m ²)	2018 Density
Ocean Cove (Sonoma)	16	360	12	0.01	0.08
Timber Cove (Sonoma)	12	720	29	0.05	0.09
Van Damme (Mendocino)	48	2,880	356	0.11	0.16



Photo Credit: CDFW



2023 Density Compared to Historical



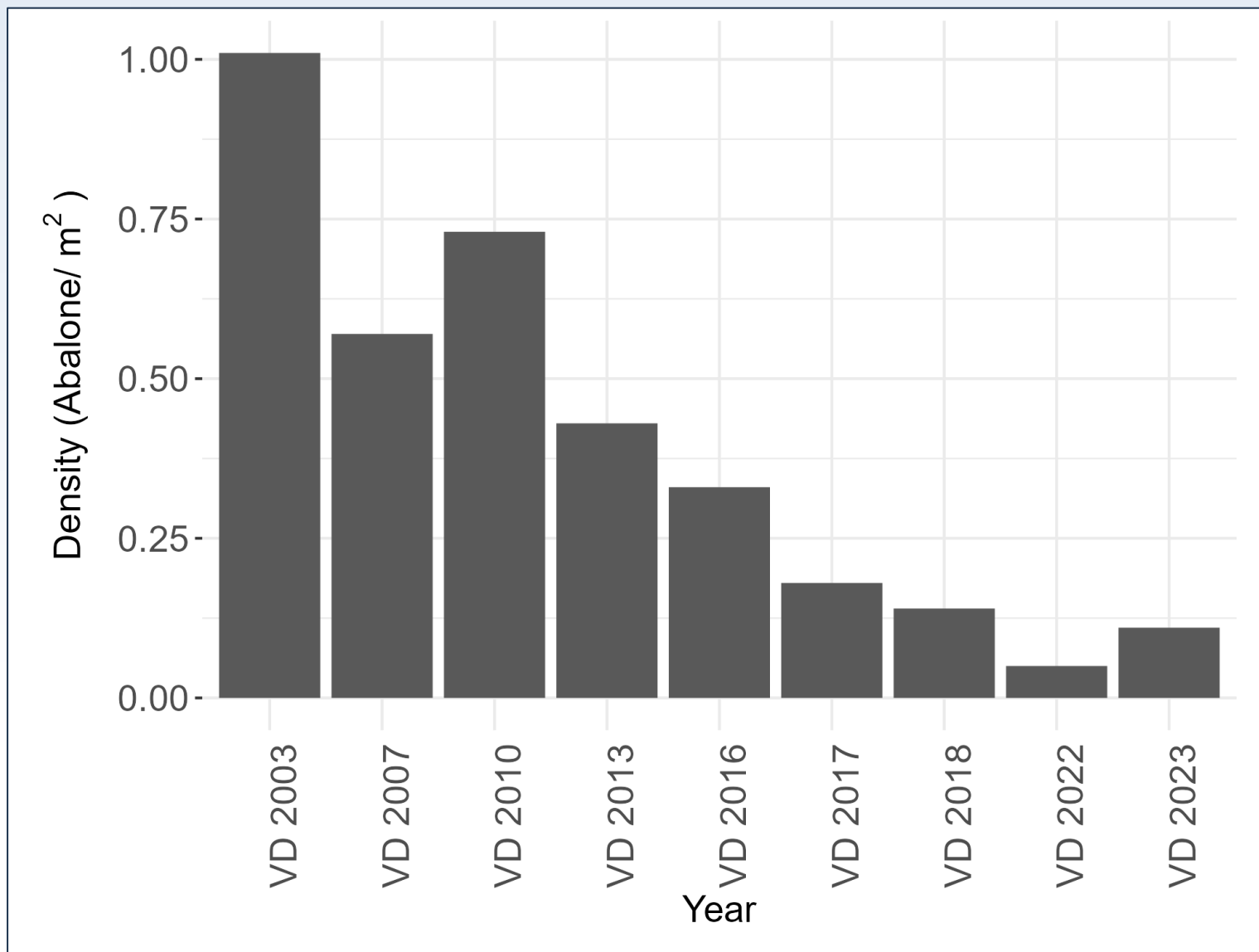
VD= Van Damme

TC= Timber Cove

OC= Ocean Cove



Van Damme Density





Van Damme Recruitment

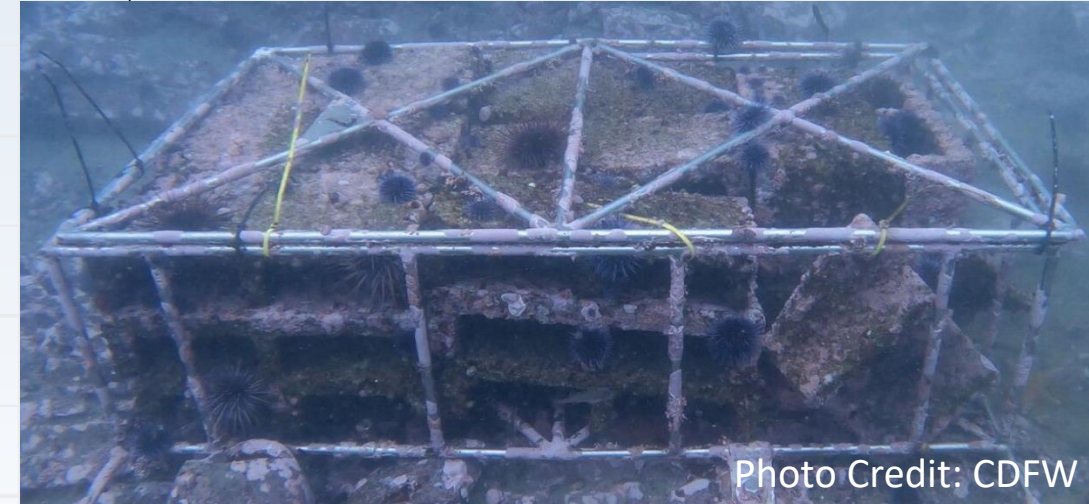
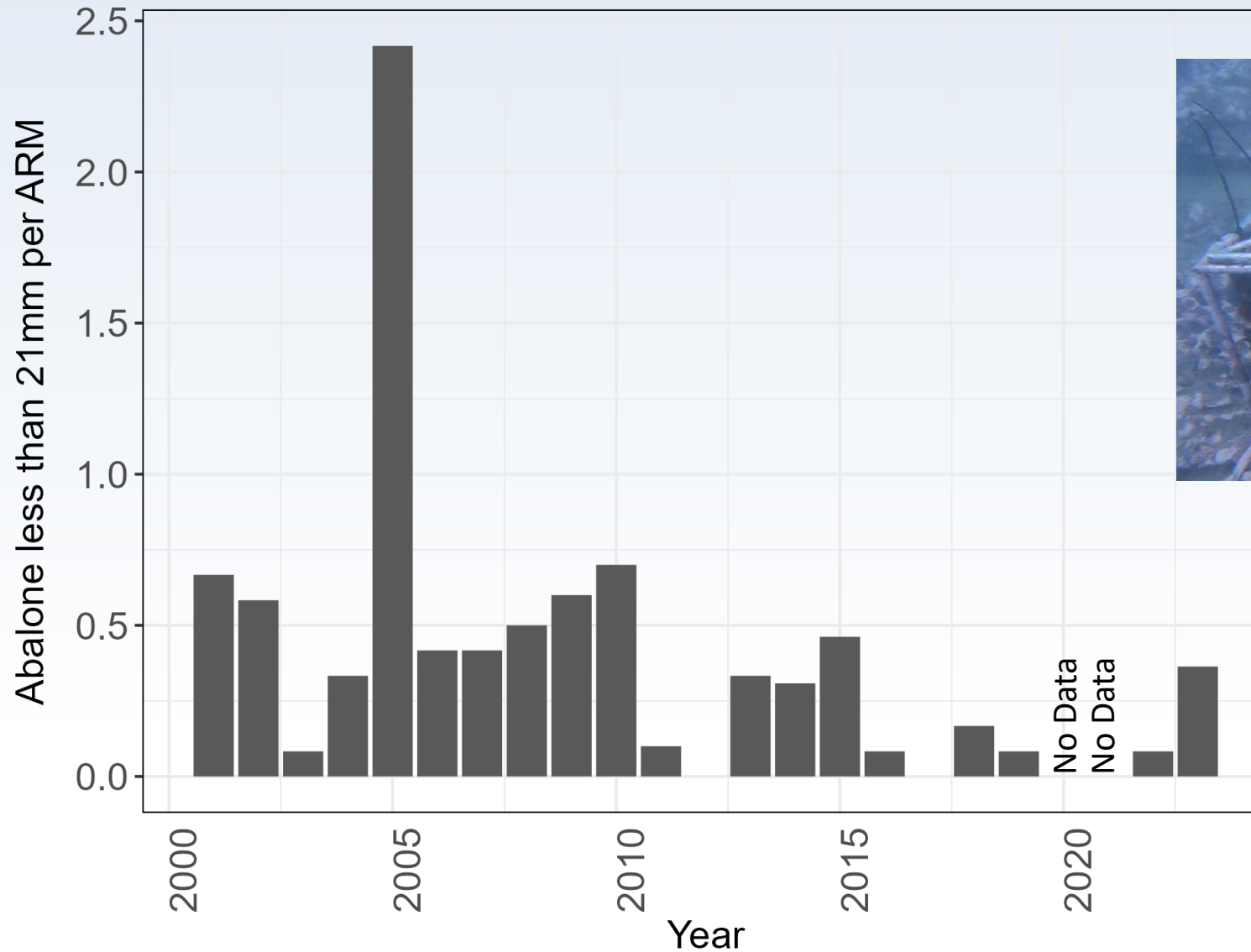


Photo Credit: CDFW



Pycnopodia Sighting





Future Surveys

- Current surveys are time intensive and expensive
 - Duration: 2 years
 - Approximate cost: \$40-50K/yr
- Intensive monitoring not needed until stock status improves
- Need to explore different monitoring methods

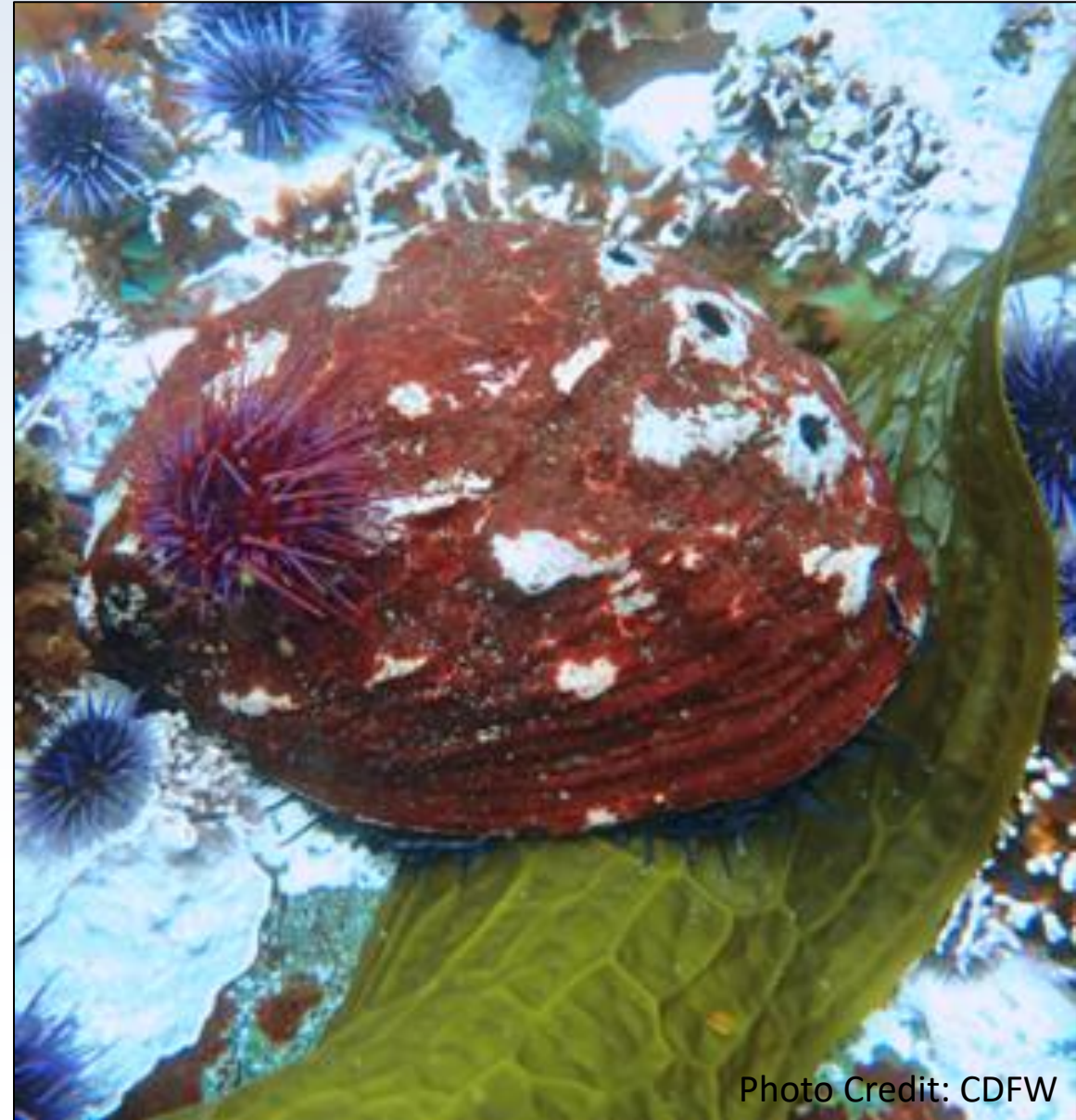


Photo Credit: CDFW



Red Abalone Recovery Plan



Need for a Red Abalone Recovery Plan

- Abalone Recovery and Monitoring Plan (2005) includes a recovery plan framework
- However, the ARMP is:
 - Limited in geographic scope
 - Focused on fishing related impacts
 - Does not address current threats to stock



Plan Development

- Develop a robust, adaptive, climate ready approach to improve the red abalone population in the face of changing ocean conditions
- Opportunity to incorporate new information and ideas
- Develop in partnership with Tribes, community stakeholders, and technical experts



Monitoring Strategy

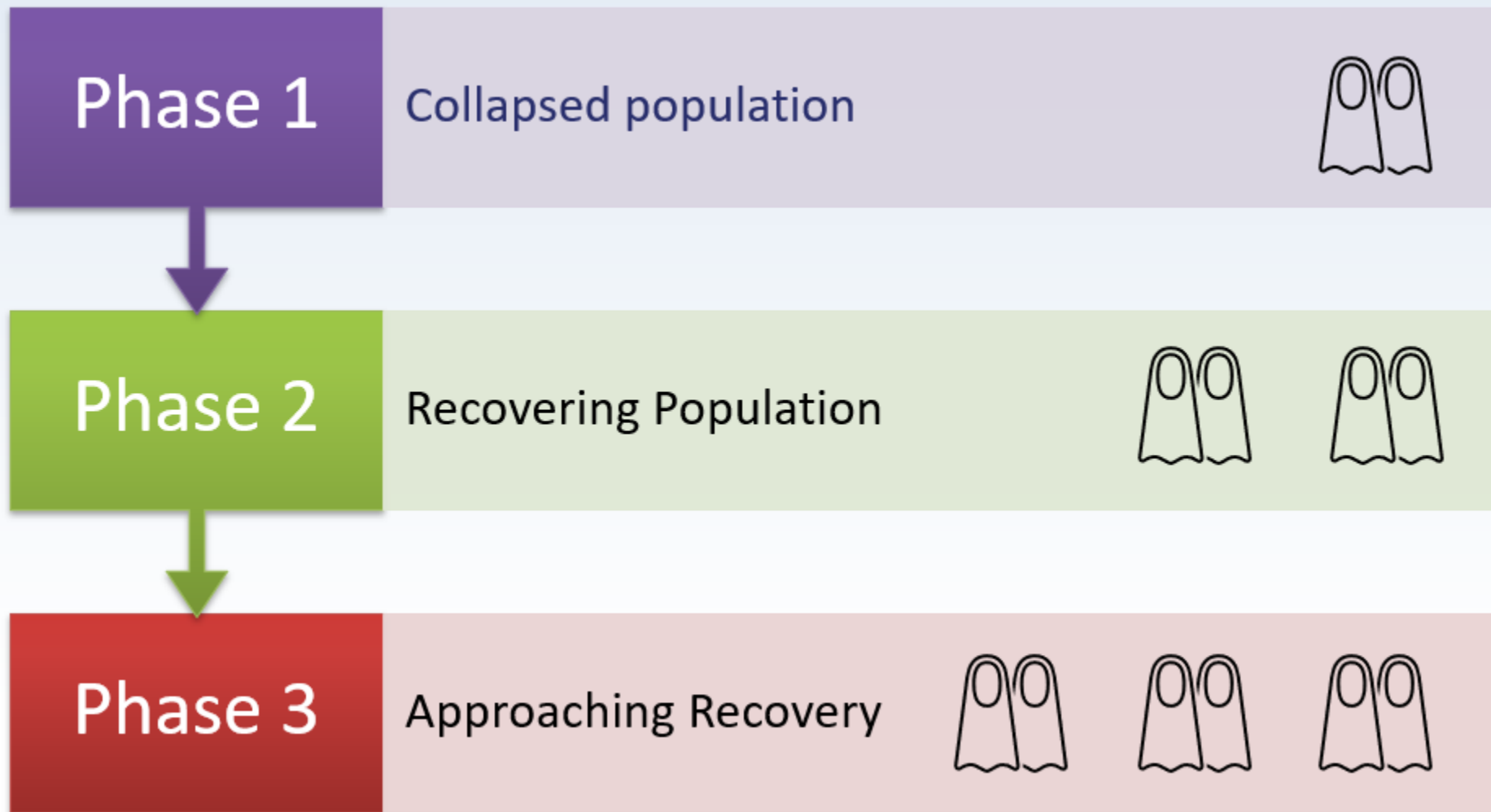
- Develop efficient, collaborative approach:
 - Citizen science
 - Explore new methodologies
- Adaptable to different stock conditions



Photo Credit: CDFW

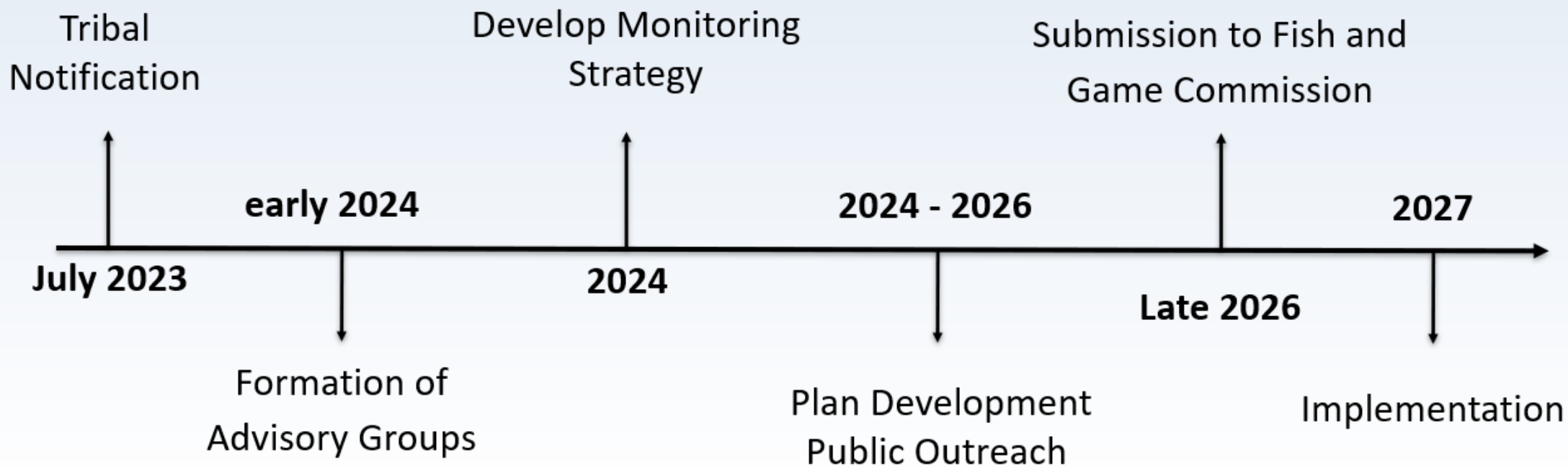


Phases for Monitoring





Proposed Process Timeline





Summary & Next Steps

- Develop nomination process to establish technical and stakeholder teams
- Solicit nominations in early 2024
- Prioritize development of a monitoring plan and monitoring approach
 - Incorporate new survey methodologies and data sources
 - Utilize citizen science and other partnerships

Thank You



Questions: Abalone@wildlife.ca.gov