27. MARINE PROTECTED AREAS MANAGEMENT PROGRAM

Today's Item

Information 🛛

Action 🗆

Receive annual update from DFW on the State's Marine Protected Areas Management Program activities.

Summary of Previous/Future Actions

- Final MPA master plan adopted
- Most recent annual update on management activities

 Today receive annual update on management activities Dec 9-10, 2020; Webinar/Teleconference

Aug 24-25, 2016; Sacramento

Dec 15-16, 2021; Webinar/Teleconference

Background

In 2016, FGC adopted the master plan for MPAs, which formally established DFW's MPA management program. As the primary managing agency for the state's MPAs, DFW manages California's MPAs as a statewide network within a collaborative, partnership-based approach.

DFW's MPA management program has four components: (1) outreach and education, (2) research and monitoring, (3) enforcement and compliance, and (4) policy and permitting. DFW's overall approach is essential to inform adaptive management of the MPA network and to help meet the goals of the Marine Life Protection Act. When it adopted the master plan for MPAs in 2016, FGC requested that DFW provide an annual report of program activities.

For 2021, DFW has provided a memo detailing actions in the past year for each of the four components (Exhibit 1). The management program made significant advances in 2021, including planning for the network's first decadal management review, coordinating with partner agencies on planning to develop policy guidance for what qualifies as restoration within MPAs, and adding more than 7000 citations to a database that tracks over time the MPA violation hot spots and types of violations. At today's meeting, DFW will highlight 2021 management activities and significant events (Exhibit 2).

Significant Public Comments (N/A)

Recommendation (N/A)

Exhibits

- 1. DFW memo, received Dec 7, 2021
- 2. DFW presentation

Motion (N/A)

Memorandum

Date: December 2, 2021

Original on file, Received December 7, 2021

- To: Melissa Miller-Henson Executive Director Fish and Game Commission
- From: Charlton H. Bonham Director

Subject: Marine Protected Areas Management Program Updates for 2021

Overview

In 2016, the California Fish and Game Commission (Commission) requested the California Department of Fish and Wildlife (Department) to prepare annual updates about the management of California's marine protected area (MPA) Network. The Department, along with core partners, developed an MPA Management Program (Management Program) to manage the MPA Network through a collaborative partnership-based approach. The Management Program is supported by four pillars: 1) outreach and education, 2) research and monitoring, 3) enforcement and compliance, and 4) policy and permitting. This approach is designed to inform adaptive management of the MPA Network and to help meet the goals of the Marine Life Protection Act (MLPA). This memo provides an overview of the 2021 Management Program activities, including evaluation of the progress of the MPA Network towards meeting the goals of the MLPA. As a result of the COVID-19 pandemic, the Management Program made operational changes to continue working towards meeting the goals of the MLPA. This includes masking and socially distancing while in the field and relying on remote meetings to communicate with partners and stakeholders.

Outreach and Education

Efforts continue to focus on increasing public awareness of the MPA Network to improve compliance with MPA regulations. The Department and partners have emphasized the development of online resources such as blogs, articles, and videos while distribution of printed materials like brochures and posters has become less of a priority.

(a) Notable outreach and education accomplishments from 2021

- Since the completion of the Network in 2012, the State has made significant investments in MPA signage. This investment has led to the creation and installation of more than 400 educational and regulatory signs along the coast.
 - In 2021, <u>OPC awarded \$500,000</u> to the <u>California Marine Sanctuary</u> <u>Foundation</u> (CMSF) and <u>MPA Collaborative Network</u> to identify additional signage needs along the coast, provide an assessment of existing sign content to evaluate effectiveness, develop an interactive map of sign locations statewide, engage with stakeholders to develop locally-relevant content, and to create and install between 75-100 new signs (84 no-take regulatory signs distributed this year).
- In-person outreach in tidepool habitats has continued through 2021 to address the increase in visitation and take of tidepool resources that began in 2020. The Department's Natural Resource Volunteer Program has assisted with distributing outreach information at south coast tidepools areas. In addition, tidepool flyers have been distributed coastwide, and new tidepool specific signage developed by the Department was installed at hot spots, including Pillar Point (Marin County), Palos Verdes Peninsula (Los Angeles County), and South Carlsbad State Beach (San Diego County).
- CMSF, with funding from OPC, released a report, <u>Evaluating the Effectiveness</u> of <u>MPA Education and Outreach Tools</u> detailing an evaluation of the efficacy of existing outreach tools (i.e. MPA brochures, presentations, and social media) for increasing awareness among primary coastal user groups. The report also details recommendations for future investments to achieve greatest impact.
- California's MPA Network has caught the eye of the film industry. Three companies requested to film marine wildlife within the MPA Network. Two of these companies were international, one from Singapore working in San Diego County and the other from England working in Monterey County; the other company was based out of Colorado. These requests have enhanced coordination between the California Film Commission and the Department.

Research and Monitoring

The <u>MPA Monitoring Program</u> guides research and monitoring activities across California's MPA Network. The Monitoring Program employs a two-phase, ecosystembased approach to monitoring and combines multiple sources of information to guide the State's adaptive management process.

(a) Phase 1: Regional Baseline Monitoring, 2007 to 2018

Baseline monitoring established a comprehensive benchmark of ecological and socioeconomic conditions at or near the time of regional MPA implementation and serves as an important set of data against which future conditions can be measured. Products are available on the <u>Department's MPA Monitoring page</u>.

(b) Phase 2: Statewide Long-term Monitoring, 2018 to present

Following the guidance outlined in the 2018 <u>MPA Monitoring Action Plan</u>, seven long-term monitoring projects have collected two-years (2019 and 2020) of ecological and human use data. Each project submitted a technical report that incorporates an analysis of baseline and long-term monitoring data to aid in the evaluation of the MPA Network in meeting the goals of the MLPA. Results from these projects will be a major focus of the first Decadal Management Review (the Review; see Section VIII Looking Forward: Decadal Management Review). These reports are currently under review and will be publicly available in January 2022.

In addition to these seven long-term monitoring projects, three additional projects were funded by OPC between 2019-2020 in preparation for the Review. One project is to improve an existing coastwide <u>connectivity population model</u>, the second project is for <u>estuarine habitat monitoring</u> of California's more than 500,000 acres of estuarine habitat, and the third project supports the development of a <u>Tribal Marine Stewards Network Pilot Program</u>.

In 2020, during the beginning of the COVID-19 pandemic, many of the field-based monitoring projects were delayed due to shelter in place policies. After implementing safety protocols and gaining institutional approval, all field-based projects resumed monitoring with minimal gaps in data collection through 2021.

(c) Recently funded long-term MPA monitoring projects

OPC <u>awarded approximately \$5.8 million</u> in February to support continued data collection through 2022 in four key habitats: sandy beach/surf zone, rocky intertidal, kelp forest/shallow rocky reef, and deep rocky reef. This funding helps ensure continued data collection through the Review period and minimizes gaps in the long-term time series for MPA monitoring data.

Enforcement and Compliance

The Department's Law Enforcement Division (LED) continues to monitor California's MPAs to enforce regulations and encourage compliance.

(a) Historical MPA Citation and Violation Data Entry

Department MPA Management Program staff, coordinated with the Department's Natural Resource Volunteer Program and LED's Marine Enforcement District, have been meticulously entering all hard copy citation information for marine resource violations from 2015-2021. Since April more than 7000 individual citations and their associated violations have been entered into a database to track MPA violation hot spots and types of violations over time. This data entry adds to citation entries previously done in preparation for regional State of the Region reports (2007-2014).

(b) Records Management System

Since the implementation of the Records Management System (RMS) in 2019, enforcement staff has been able to use RMS as a tool to query MPA citation data for review and presentation purposes. The citation data collected in RMS for 2020 related to violations of the California Code of Regulations (CCR), Title 14, section 632 was used in a presentation to the Marine Resources Committee meeting in July of 2021. The preparation for this presentation allowed LED staff to recognize areas of improvement in how RMS stores MPA related citations. As a result, those recognized improvements have been implemented and are now incorporated into the system. These changes to RMS will provide a more complete citation related picture for not only violations of CCR section 632, but any citation associated with a contact made in an MPA by Wildlife Officers.

(c) Allied Agencies and Partnerships

The MPA Collaborative Network continued to host enforcement trainings for allied agency officers (i.e., State Parks officials, lifeguards, county enforcement) through 2021. These trainings are designed to help allied agency officers to know the history, locations, and regulations of their local MPAs to facilitate the Department's capacity to communicate and enforce MPA regulations. These trainings were informed by the Department's LED and MPA staff to educate allied agencies on the importance of enforcing MPA regulations.

Policy and Permitting

(a) Scientific Collecting Permits (SCPs)

From January to October 20, 2021, a total of 140 SCPs were issued for research within 96 unique MPAs, including 37 state marine reserves (SMRs), 51 state marine conservation areas (SMCAs), 6 no-take state marine conservation areas, and 2 state marine recreational management areas.

Since implementation of the MPA Network in 2012, a total of 857 SCPs have been issued for research and education activities within MPAs. Regionally, the most requested activities occurred in these MPAs: Crystal Cove SMCA –159 projects (south), Carmel Bay SMCA – 121 projects (central), Bodega Head SMR – 80 projects (north).

(b) MPA Statewide Leadership Team (Leadership Team)

The <u>Leadership Team</u> completed their tri-annual workplan detailing tasks, objectives, and goals for fiscal years 21/22-24/25. The Leadership Team is an advisory body to the Secretary for Natural Resources and is made up of representatives from state and federal agencies, California Native American Tribes, and nongovernmental partners.

(c) Regulatory packages

 When the Commission incrementally adopted California's MPA Network, 2007-2012, certain artificial structures such as piers, docks, cables, intake and outflow pipes, and seawalls, existed where some of the newly designated MPAs are located. Some of these structures had been in place more than 40 years prior to MPA establishment. While normal operation of most of these structures may not result in take of marine species, maintenance, repair, or replacement could result in incidental take. The Department in consultation with a working group of the Leadership Team, developed draft regulations to address maintenance and repair for those pre-existing structures.

Due to the COVID-19 pandemic and staff reassignment to contact tracing in 2020, this regulatory package was deferred. Work is now underway to begin the necessary CEQA and regulation planning process to resolve this issue.

(d) Legislative Amendment – Restoration and Monitoring

Assembly Bill 63 added "restoration" and "monitoring" to the SMCA definition in Public Resources Code Section 36710 for consistency. The bill was proposed to align the SMCA definition with the original intent of the Marine Managed Areas Improvement Act. Although restoration is now allowed with SMCAs pursuant to this legislative change, approval and permitting is still required for any restoration activity within an MPA. In addition, OPC in coordination with the Department is planning to develop policy guidance for what qualifies for restoration within MPAs.

The Department, Commission, and OPC are concerned that manipulation of the natural environment through restoration or through invasive experimentation could bias the monitoring data. Once the DMR is completed, discussions will begin regarding development of a policy to guide restoration activities in MPAs.

(e) Utilization of MPA Monitoring Data

- In 2020, the Dolan wildfire occurred in Big Sur in Monterey County and left a • burn scar along the coastal terrain. When heavy rain hit the area in January 2021, significant sediment flows buried endangered black abalone and their critical habitat in the rocky intertidal. A rescue response to relocate the impacted black abalone was initiated through an amendment to UC Santa Cruz's Multi-Agency Rocky Intertidal Network team's SCP. The response effort was coordinated through multiple partners including National Marine Sanctuaries, UC Santa Cruz's Multi-Agency Rocky Intertidal Network team, National Marine Fisheries Service, and the Department's Office of Spill Prevention and Response (OSPR) who were able to recover almost 200 animals. The animals were taken to the OSPR's Marine Wildlife Veterinary Care and Research Center where they were retained through the rainy season to minimize further landslide impacts. Approximately 150 black abalone survived captivity and were safely released back to coastal waters in Monterey County this summer.
- Baseline and long-term MPA monitoring data collected in rocky reefs beyond safe scuba depths using Remotely Operated Vehicle (ROV) are being used to generate model-based spatially specific biomass estimates for select nearshore species. The model-based biomass estimates are being used to inform stock assessments directed by the Pacific Fishery Management Council (PFMC). This effort is a collaboration by scientists from the Department's groundfish and MPA management projects that began in 2018. The methodology developed by this team went through a rigorous review by the PFMC's Science and Statistical Committee and external reviewers in 2019. The models developed will also be used to examine fishery and MPA interactions such as MPA contribution to overall stock biomass and MPA spillover into fished areas.
- On October 2, 2021, an oil spill was detected in southern California, originating from an underwater pipeline connected to platform Elly located in federal waters, about 4.5 miles offshore near Long Beach, California. Given its location in federal waters, no MPAs were impacted immediately. However, seven MPAs off Orange County were in the impact zone. The Department established a no fishing zone and notified 101 SCP holders that their permits were amended to prevent interference with clean-up efforts. The permits were reactivated on October 22, 2021. All researchers were notified that samples collected in the fisheries closure area prior to the fisheries closure being lifted may be contaminated and their survey work should not conflict with clean up or other oil spill related efforts.

The results of long-term MPA monitoring data are being used to inform responses to environmental disasters such as the Elly oil spill. As part of the response effort, MPA Management Program staff have calculated an acceptable amount of take for the oil spill monitoring effort through a <u>framework for informing permitting decisions</u> on scientific activities in MPAs. Most of the data used in this tool, particularly species-level metrics such as density, has come from long-term MPA monitoring data.

Tribal Engagement

In recent years, progress has been made toward more meaningful Tribal engagement in MPA management. OPC has allocated \$1,000,000 for the Tribal Marine Stewards Network Pilot Program (see Section III Research and Monitoring), four regionally assigned seats on the Leadership Team have been designated for Tribes, and the Department is actively working to involve Tribes in the Review process (see Section VIII Looking Forward: Decadal Management Review).

Emerging Management Issues

California's MPA Management Program continues to respond to new and developing issues affecting coastal waters and how MPAs may play a role in management responses.

(a) Restoration and Mitigation Efforts in MPAs

Since implementation of the MPA Network, the Department has received requests for restoration and mitigation efforts in California's MPAs, such as removal of nonnative species, removal of native urchins to restore kelp, and placement of artificial reefs. The Department intends to coordinate with OPC and Commission to develop a policy and restoration guidance document to detail when restoration and mitigation efforts are warranted within MPAs and how to account for the restoration efforts in the long-term monitoring program.

(b) California's 30 x 30 Initiative

While the State prepares for the Review of the MPA Management Program, Governor Newsom launched a parallel effort to protect California's biodiversity and build climate resilience by establishing a State goal of conserving at least 30 percent of California's land and 30 percent of coastal waters by 2030 (Order N-82-20). The pathway to achieve California's 30 x 30 marine conservation goals is scheduled for completion in Spring 2022. While the MPA Network is a fundamental component to meeting California's 30 x 30 goals, the Executive Order's commitment to reaching 30 percent of coastal marine conservation is also based on advancing measures beyond the MPAs (such as enhancing biodiversity

safeguards in National Marine Sanctuaries, National Estuary Programs, and Areas of Special Biological Significance) and through the collaborative stakeholder process. The State will not consider MPA Network expansion as a component of meeting the State's 30 x 30 marine conservation goals prior to completion of the Decadal Management Review.

Looking Forward: Decadal Management Review

Throughout 2021, the Department and its partners were focused on preparation for the Review of the MPA Management Program planned for 2022. The Review will focus on each of the four pillars the MPA Management Program and progress of the MPA Network towards meeting the goals of the MLPA.

(a) Ocean Protection Council Science Advisory Team Working Groups

The Department and the OPC, in partnership with the Ocean Science Trust, convened two working groups to focus on specific components of the Review.

- The Decadal Evaluation Working Group produced the <u>Science Guidance for</u> <u>Evaluating California's MPA Network</u> report. The report provides a list of science-based performance evaluation questions and metrics. These questions and metrics were informed by the MPA Monitoring Action Plan, the goals of the MLPA, and will be used to detect trends and progress towards those goals in 2022 and beyond.
- The Climate Resilience Working Group produced the <u>Climate Resilience and</u> <u>California's MPA Network</u> report. The report details recommendations on how California's MPA Network could help buffer both ocean and human life from some effects of climate change.

In addition, OPC funded the <u>National Center for Ecological Analysis and</u> <u>Synthesis</u> (NCEAS) to complete an integrative analysis of MPA monitoring data from multiple coastal and estuarian monitoring projects statewide. NCEAS will use these existing data streams to address many of the network level evaluation questions outlined in Appendix B of the MPA Monitoring Action Plan and Decadal Evaluation Working Group report.

(b) Outreach

OPC in coordination with the Department hired two contractors who are working together to: 1) raise awareness of California's MPA Management Program through effective branding, and 2) disseminate information about the first DMR of the MPA Network currently planned for December 2022.

• A series of community engagement meetings were held in October and November to share information about the Review process and receive input

> from stakeholders about what they would like to see in the Review. Information about the anticipated Review process was discussed, and breakout rooms allowed stakeholders to share their perspectives about what they would like to see in the Review report.

 A comprehensive communications plan to raise awareness of and create brand identity for California's MPA Management Program is in development. This branding will create a cohesive image and consistent messaging throughout digital and printed products produced and reviewed by the MPA Management Program.

(c) Tribal Engagement

The Department is actively working to engage Tribes in the Review process. A solicitation letter was sent to all California Native American Tribes in early 2021 informing them of the Review. Additionally, in August the Department presented information about the Review to the North Coast Tribal Chairpersons Association and intends to present to the South Coast Chairpersons Association. In addition, a tribal steering committee comprised of Tribal representatives is helping to inform the State on Tribal specific interests and needs related to the Review.

(d) Partner Engagement

To ensure an inclusive and comprehensive Review, the Department has invited organizational partners to submit a report highlighting their contributions to MPA management for inclusion in the Review report. Partners will have the opportunity to share their program's unique achievements, challenges, and recommendations in support of the MPA Management Program pillars, and how their work relates to the goals of the MLPA.

Partner Recognition

The success of the MPA Management Program would not be possible without the numerous cooperative partnerships at statewide, regional, and local scales. The Department will continue to provide the Commission with annual MPA highlights to facilitate conversations about the adaptive management of the Network.

If you have any questions or need more information, please contact Dr. Craig Shuman, Marine Regional Manager, at (916) 215-9694.

ec: Mark Gold, D. Env., Deputy Secretary for Ocean and Coastal Policy Natural Resources Agency

Valerie Termini, Chief Deputy Director Wildlife and Fisheries Branch

> David Bess, Chief Law Enforcement Division

Craig Shuman, D. Env., Region Manager Marine Region

Mike Stefanak, Assistant Chief Law Enforcement Division

Becky Ota, Program Manager Marine Region

Stephen Wertz, Senior Environmental Scientist Marine Region



Marine Protected Areas Annual Update: 2021

16 December 2021

Presented to:

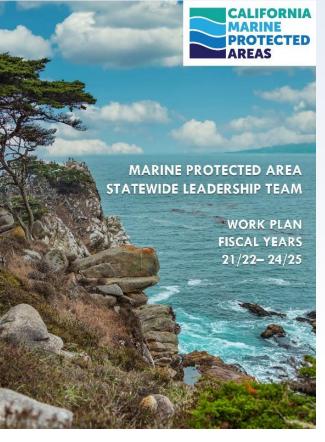
Fish and Game Commission Virtual Webinar Presented by:

Amanda Van Diggelen Environmental Scientist Marine Region



MPA Statewide Leadership Team





Tribal Engagement







\$1,000,000 to the California Indian Environmental Alliance (CIEA) to support the development of a Tribal Marine Stewards Network pilot program.

LOCATION: Statewide

STRATEGIC PLAN OBJECTIVE(S): 2.1: Enhance Engagement with Tribes; 3.1: Protect and **Restore Coastal and Marine Ecosystems**

EXHIBITS:

Exhibit A: Letters of Support

FINDINGS AND RESOLUTION:

Staff recommends that OPC adopt the following findings:

"Based on the accompanying staff report and attached exhibit(s), OPC hereby finds that:

- 1) The proposed projects are consistent with the purposes of Division 26.5 of the Public Resources Code, the Ocean Protection Act; and
- 2) The proposed projects are not 'legal projects' that trigger the California Environmental Quality Act (CEQA) pursuant to Public Resources Code section, section 15378."

Staff further recommends that OPC adopt the following resolution pursuant to Sections 35500 et seq. of the Public Resources Code:

"OPC hereby approves the disbursement of up to \$1,000,000 to the California Indian Environmental Alliance (CIEA) to support the development of a Tribal Marine Stewards Network pilot program.

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MPA Management Program Pillars

Photo: CDFW, A Van Diggelen



Outreach and Education Photo: MPA Collaborative Network



Research and Monitoring



Enforcement and Compliance

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Policy and Permitting

Outreach and Education







Signage Investment

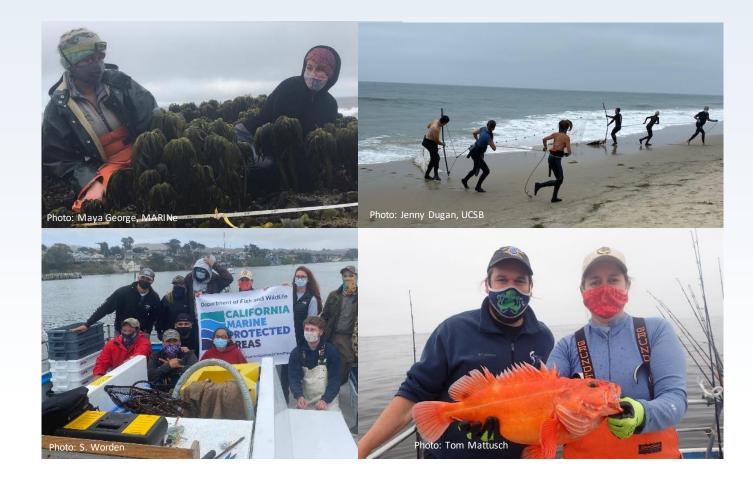
- 400+ educational and regulatory signs installed, 2012-2021
- 84 no-take regulatory signs distributed, 2021



EVALUATING THE EFFECTIVENESS OF MARINE PROTECTED AREA (MPA) EDUCATION & OUTREACH TOOLS

SEPT. 2021 // PREPARED BY THE CALIFORNIA MARINE SANCTUARY FOUNDATION

Research and Monitoring

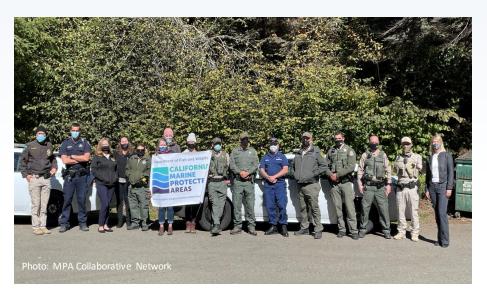


- Habitat Monitoring
 - Sandy Beach
 - Rocky intertidal
 - Kelp forests
 - Offshore reefs
 - Estuaries
- Human Dimensions
- Modeling
 - Network connectivity
 - Ocean conditions

Enforcement and Compliance

- MPA Citation Data Entry, 2015-2021
 - 7000+ citations processed
- Allied Agencies Enforcement Workshops, 2021
 - 8 workshops
 - 145+ attendees
- Records Management System



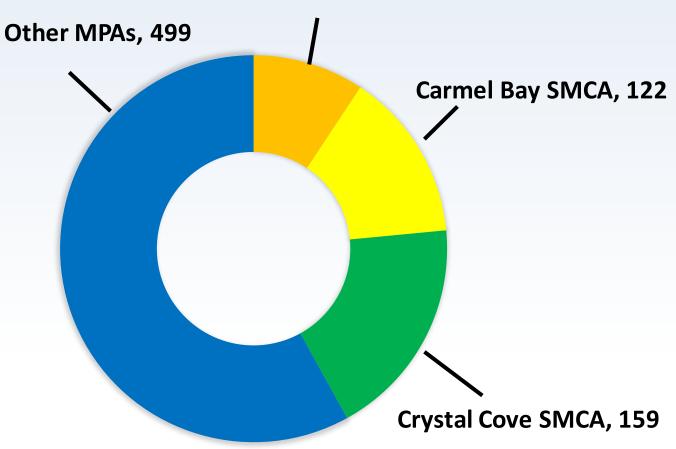


Policy and Permitting

MPA SCIENTIFIC COLLECTING PERMITS ISSUED,

2012-2021*

Bodega Head SMR, 80







*2021 data preliminary

Using MPA Monitoring Data

CALIFOR



Decadal Management Review (DMR)

- Expert working groups informing Review
- Digital resources
- Community meetings: 387 participants
- Long-term Monitoring reports: early 2022





California reviews its Marine Protected Area (MPA) Network every 10 years to inform the MPA Management Program.



The Calmonia Plan allo Galler Contraston with receive this Review at their December 2022 meeting of decide whether to direct CDFW and its pertners to pursue recommendations and identified next steps.

JOIN US! COMMUNITY MEETINGS

MPA Decadal Management Review Community Meetings

The Collionia Department of Fish and Wildlife, in partnership with the Collionria Ocean Protection Council and Collionria Fish and Game Commission, invites you to join Community Meetings to inform the 2022 Marine Protected Area (MPA) Decadal Management Review.

Recreational Ruhing	Communical Pathing	Non-consumptive	Government
Community	Community	Ocean Commanty	Agencies
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Please share your unique perspectives reporting Collomic's MPA Metwork and the MPA Management Program Join the state in a conversion about the last 0 years of MPA management.

research, enforcement, and outreach. Select the outdence you must elentify with or attend them off fach meeting will be recorded and open to the public, and will cover the same information and termst.

We request registration a minimum of one week before your dealed meeting Once registered, the meeting agendo and motenate will be sent to you we emp

For additional information: Weit CDF IV's Deceard Management: Review webpage, o email Web/acceptmentReview gwildlin on pay





DMR: Tribal Engagement

- Notification letter about MPA Management review sent to all Federally recognized Tribes
- North Coast Tribal Chairperson Association presentation
- Tribal representatives Stakeholder and Tribal Steering Committees formed
- Decadal Management Review updates for the Fish and Game Commission
 - Tribal committee
 - Marine Resources committee

Looking Forward: Decadal Management Review

- Independent from California's 30 x 30 Initiative
- National Center for Ecological Analysis and Synthesis Workgroup
- Continue Tribal and Stakeholder Engagement
- wildlife.ca.gov/Conservation/Marine/MPAs/Management/Decadal-<u>Review</u>
- MPAManagementReview@wildlife.ca.gov

Looking Forward: Anticipated Timeline

2022

- January: Long-term monitoring reports publicly available
- February: Overview of long-term monitoring reports at Commission meeting
- January-December: Ongoing Tribal and stakeholder engagement; Commission updates
- January-December: Department drafting DMR report

2023

- January: DMR and supporting reports publicly available
- February: DMR received at February Commission meeting
- March: DMR symposium/Partner Open House; MRC meeting to discuss DMR report recommendations and solicit public feedback
- **April**: Tribal Committee meeting to discuss DMR recommendations and solicit tribal feedback; DMR discussion at FGC meeting with direction on next steps

Thank You **Questions**?

Amanda Van Diggelen, Environmental Scientist Amanda.VanDiggelen@wildlife.ca.gov

MPA Management Project Staff:

- Program Manager, Becky Ota
- Senior Environmental Scientist Supervisor, Stephen Wertz
- Environmental Scientists: Elizabeth Pope, Michael Prall, Sara Worden, Chenchen Shen, Lara Slatoff, Kara Gonzales, Amanda Van Diggelen
- Associate Government Program Analyst: Tamara Heitzenrater
- Scientific Aide: Mara Salisbury