

Attachment 1: List of projects undertaken in 2024 by marine protected area (MPA) management partner organizations that support implementation of the 28 Decadal Management Review (DMR) adaptive management recommendations as of October 2024. This list may underrepresent some of the work being done to implement the DMR. Text in the table was provided by contributors who responded to a call for input and was minimally edited by CDFW MPA Management Program staff.

Table 1. Near-term Priorities (Ongoing – 2 years)

Management Cornerstone	Category	Organization	Recommendation	Action	General Status Update
Governance	Tribal Coordination	MPA Collaborative Network (MPACN)	1. Improve state agencies' tribal engagement and relationship building efforts.	1a. Engage in early and frequent communication with California Native American Tribes.	MPACN communicated early and often, following OPC tribal engagement strategy, for land acknowledgements and place names on MPA sign, participation in enforcement trainings, and in outreach materials.
Governance	Tribal Coordination	MPA Collaborative Network	1. Improve state agencies' tribal engagement and relationship building efforts.	1b. Have an understanding and respect for tribal decision-making processes.	MPACN developed and shared a lesson learned document on Tribal engagement and prompts for partners to deepen their understanding of and relationships with tribes.
Governance	Tribal Coordination	MPA Collaborative Network	1. Improve state agencies' tribal engagement and relationship building efforts.	1c. Ensure a transparent and accountable process that provides clarity on agency decision-making and the potential for tribes to affect the final decision.	The MPACN model provides different pathways to decision-makers and connects tribes directly when possible, offering honorarium for engagement and participation.

Management Cornerstone	Category	Organization	Recommendation	Action	General Status Update
Governance	Regulatory and Review Framework	MPA Collaborative Network	4. Apply what is learned from the first Decadal Management Review to support proposed changes to the MPA Network and Management Program.	4a. Coordinate with CFGC to evaluate current and future proposed changes to Network design, individual MPAs, and current MPA Management Program priorities and policies in a manner consistent with the findings of this Review.	The MPACN has shared input provided by collaborative members and enforcement partners on potential changes to individual MPAs and wells as suggestions for management priorities. Link to summary of regulation recommendations.
Governance	Regulatory and Review Framework	MPA Collaborative Network	4. Apply what is learned from the first Decadal Management Review to support proposed changes to the MPA Network and Management Program.	4b. Identify and utilize best science-based approaches to inform potential changes to the MPA Network in order to enhance Network performance.	Suggestions from partners on science questions/studies to prioritize and ways to engage stakeholders in data collection has been shared with CDFW and FGC.
Governance	Justice, Equity, Diversity, and Inclusion	WILDCOAST	7. Expand targeted outreach and education materials and events to underrepresented user groups.	7a. Conduct a language assessment of census blocks within 10 miles of each MPA to translate MPA outreach materials into the top three to five languages used in a household and work on finding new approaches to effectively engage underrepresented audiences.	WILDCOAST / MPA Collaborative outreach materials including wildlife and rec guides, coloring books, activity guides are available in English, Spanish, and or Mandarin.

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Governance	Justice, Equity, Diversity, and Inclusion	MPA Collaborative Network	7. Expand targeted outreach and education materials and events to underrepresented user groups.	7b. Utilize MPA Program partners to target and engage underrepresented user groups in marine conservation.	The MPACN has a Pathways Initiative for justice, equity, diversity, and inclusion in ocean management and stewardship, focused on underrepresented communities: AAPI, Latine, and Black .
Governance	Justice, Equity, Diversity, and Inclusion	Reef Check	7. Expand targeted outreach and education materials and events to underrepresented user groups.	7b. Utilize MPA Program partners to target and engage underrepresented user groups in marine conservation.	Exploring collaborations with MPA Collaborative Pathway Community Groups and local tribes to engage diverse community members in MPA monitoring through the Dive into Science program.
Governance	Justice, Equity, Diversity, and Inclusion	Resources Legacy Fund	7. Expand targeted outreach and education materials and events to underrepresented user groups.	7b. Utilize MPA Program partners to target and engage underrepresented user groups in marine conservation. Also relevant to 7c.	Supporting outreach statewide on MPAs including through creation of culturally relevant materials and engagement with underrepresented users in marine conservation.
Governance	Justice, Equity, Diversity, and Inclusion	MPA Collaborative Network	7. Expand targeted outreach and education materials and events to underrepresented user groups.	7c. Solicit input on customized/targeted outreach materials from members of diverse user groups.	Pathways participants have provided feedback on outreach materials, and the CN and partners have been using the OCMPAC developed community vetted translation protocol .

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Governance	Justice, Equity, Diversity, and Inclusion	Reef Check	7. Expand targeted outreach and education materials and events to underrepresented user groups.	7c. Solicit input on customized/targeted outreach materials from members of diverse user groups.	Collaborating with tribes and foster youth organizations to customize training and outreach materials to better adapt to communities' needs. Creating outreach videos of the stories of Dive into Science participants.
Governance	MPA Statewide Leadership Team and Partner Coordination	MPA Collaborative Network	9. Continue to coordinate and collaborate with OPC and other agencies on California's ocean and coastal priorities to enhance coastal biodiversity, climate resiliency, human access and use, and a sustainable blue economy.	9a. Support OPC and partners on the MSLT to prioritize relevant OPC Strategic Plan and MSLT Work Plan objectives. Assess feasibility of current timeframes for taking action and adjust if needed.	The MPACN has updated the status of tasks listed within the most recent MSLT work plan , and has created a "crosswalk" document that connects DMR recommendations with future Work Plan outcomes.
Governance	MPA Statewide Leadership Team and Partner Coordination	Resources Legacy Fund	9. Continue to coordinate and collaborate with OPC and other agencies on California's ocean and coastal priorities to enhance coastal biodiversity, climate resiliency, human access and use, and a sustainable blue economy.	9a. Support OPC and partners on the MSLT to prioritize relevant OPC Strategic Plan and MSLT Work Plan objectives. Assess feasibility of current timeframes for taking action and adjust if needed.	Participate in MSLT meetings and working groups to inform the state's MPA objectives and timeframe for accomplishing tasks.
Governance	MPA Statewide Leadership Team and Partner Coordination	MPA Collaborative Network	10. Improve partnership coordination across the four pillars of the MPA Management Program.	10a. Develop and implement a workflow for enhanced coordination between CDFW's Scientific Collecting Permit Program and other agencies' permitting requirements.	Collaborative meetings and trainings include CDFW personnel from all management pillars, including Environmental Scientists, the SCP program, LED officers, and Marine Region management.

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Governance	MPA Statewide Leadership Team and Partner Coordination	Reef Check	10. Improve partnership coordination across the four pillars of the MPA Management Program.	10b. Develop strategic plan to strengthen communications between MPA Monitoring Program partners, tribes, and agencies that have overlapping jurisdiction at monitoring sites.	Ongoing conversations and trust building with local tribes through the Dive into Science program to develop monitoring programs specific to their traditional territories.
Governance	MPA Statewide Leadership Team and Partner Coordination	MPA Collaborative Network	10. Improve partnership coordination across the four pillars of the MPA Management Program.	10c. Strengthen connections and communication between CDFW's Marine Law Enforcement Division (LED) and allied agencies.	Local LED officers regularly attend collaborative meetings. Enforcement trainings provide in-person coordination, connections, and communications channels for CDFW LED and allied agencies.
Governance	MPA Statewide Leadership Team and Partner Coordination	WILDCOAST	10. Improve partnership coordination across the four pillars of the MPA Management Program.	10c. Strengthen connections and communication between CDFW's Law Enforcement Division and allied agencies.	Monthly MPA Compliance call including CDFW LED, Lifeguards, City Attorneys, District Attorneys, MPA Collaborative Members to discuss ongoing compliance concerns and solutions.
Governance	MPA Statewide Leadership Team and Partner Coordination	WILDCOAST	10. Improve partnership coordination across the four pillars of the MPA Management Program.	10d. Strengthen cross-border MPA management with West Coast states, Mexico, and Canada.	WILDCOAST works in California and Mexico on Marine Protected Area compliance, outreach, and stewardship. We work in 9 MPAs in Mexico including work on corals reefs and mangroves.

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Governance	MPA Statewide Leadership Team and Partner Coordination	MPA Collaborative Network	10. Improve partnership coordination across the four pillars of the MPA Management Program.	10f. Provide partners with consistent MPA messaging and branding for outreach and education activities to support compliance with MPAs.	The MPACN works with the CDFW Education & Outreach team to flag potentially confusing or inflammatory messaging, tailoring to specific audiences while ensuring statewide consistency.
Management Program	Research and Monitoring	Reef Check	11. Update the MPA Monitoring Action Plan framework to improve and sustain a cost-effective long-term monitoring program, including guidelines to ensure monitoring consistency and sustainable funding.	11b. Explore more localized and bioregion-specific monitoring strategies.	Engaging with different constituencies: recreational divers, commercial divers, tribes and underserved communities in the different bioregions to monitor resources of interest to them and their concerns.
Management Program	Research and Monitoring	Southern California Coastal Water Research Project	11. Update the MPA Monitoring Action Plan framework to improve and sustain a cost-effective long-term monitoring program, including guidelines to ensure monitoring consistency and sustainable funding.	11b. Explore more localized and bioregion-specific monitoring strategies.	Worked with the S. CA Wetland Recovery Project to develop a regional estuary monitoring program consistent with the statewide Estuary MPA program.

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Management Program	Research and Monitoring	Reef Check	11. Update the MPA Monitoring Action Plan framework to improve and sustain a cost-effective long-term monitoring program, including guidelines to ensure monitoring consistency and sustainable funding.	11c. Explore CDFW capacity to participate in MPA monitoring to increase long-term program stability.	Discussion with MPA management team about collaboration on MPA surveys including CDFW boat use, training of CDFW staff and collaborative data analysis and reporting.
Management Program	Outreach and Education	WILDCOAST	16. Conduct more targeted outreach to specific audiences to connect stakeholders with coastal resources and to encourage stewardship and compliance with regulations.	16a. Work closely with fishing communities to identify the most effective communication channels and outreach materials for these audiences.	WILDCOAST continues to work with the fishing community in San Diego to educate on MPA success and need for compliance.
Management Program	Outreach and Education	MPA Collaborative Network	16. Conduct more targeted outreach to specific audiences to connect stakeholders with coastal resources and to encourage stewardship and compliance with regulations.	16a. Work closely with fishing communities to identify the most effective communication channels and outreach materials for these audiences.	Fishing collaborative members provide helpful input on how to reach their communities. New relationships are being forged and strategies developed to have info come directly from trusted sources.
Management Program	Outreach and Education	MPA Collaborative Network	16. Conduct more targeted outreach to specific audiences to connect stakeholders with coastal resources and to encourage stewardship and compliance with regulations.	16c. Tailor outreach to better serve specific audiences, such as increasing the availability of waterproof materials, pocket-sized MPA maps, digital and online tools, and regionally tailored teacher toolkits.	Collaboratives have developed waterproof brochures and other materials with local nuances and needs in mind. Many are complete, but specific audience outreach is always needed.

Management Cornerstone	Category	Organization	Recommendation	Action	General Status Update
Management Program	Outreach and Education	Resources Legacy Fund	16. Conduct more targeted outreach to specific audiences to connect stakeholders with coastal resources and to encourage stewardship and compliance with regulations.	16c. Tailor outreach to better serve specific audiences, such as increasing the availability of waterproof materials, pocket-sized MPA maps, digital and online tools, and regionally tailored teacher toolkits. Also relevant to 16e.	Supporting a wide range of partners to develop and create digital and physical MPA outreach materials relevant to their local communities.
Management Program	Outreach and Education	WILDCOAST	16. Conduct more targeted outreach to specific audiences to connect stakeholders with coastal resources and to encourage stewardship and compliance with regulations.	16c. Tailor outreach to better serve specific audiences, such as increasing the availability of waterproof materials, pocket-sized MPA maps, digital and online tools, and regionally tailored teacher toolkits.	WILDCOAST and the MPA Collaborative Network produce and distribute waterproof wildlife and recreation guides, pocket sized fishing guides, teacher toolkits, and coloring books/activity guides.
Management Program	Outreach and Education	MPA Collaborative Network	16. Conduct more targeted outreach to specific audiences to connect stakeholders with coastal resources and to encourage stewardship and compliance with regulations.	16e. Create more regionally focused and culturally informed MPA outreach materials and weave MPA messaging into general ocean content produced by other partners.	Localizing messaging and leveraging and incorporating MPA outreach into existing and partner general ocean materials is a key focal area of the collaboratives.

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Management Program	Outreach and Education	WILDCOAST	16. Conduct more targeted outreach to specific audiences to connect stakeholders with coastal resources and to encourage stewardship and compliance with regulations.	16e. Create more regionally focused and culturally informed MPA outreach materials and weave MPA messaging into general ocean content produced by other partners.	WILDCOAST is developing a South Coast Wildlife and Recreation Guide and continues to maintain San Diego specific MPA signage and distribute MPA outreach materials.
Management Program	Policy and Permitting	MPA Collaborative Network	17. Improve the application and approval process for scientific collecting permits.	17c. Increase transparency and communication in the SCP review and issuance process.	CDFW SCP presentations now occur at all MPA Enforcement Trainings in partnership with CDFW LED. Orange County Collaborative members are working with CDFW to develop application guidelines.
Management Program	Policy and Permitting	Southern California Coastal Water Research Project	18. Develop a framework to evaluate and approve appropriate restoration and mitigation actions within MPAs and marine managed areas.	18b. Use statewide policy guidance and best available science to inform restoration and mitigation actions and decisions in MPAs and marine managed areas, such as permitting the removal of invasive species. Enforcement and Compliance.	Develop agency guidelines that use Estuary MPA monitoring data and SOPs to inform selection of reference sites and development of restoration performance standards.
Management Program	Enforcement and Compliance	MPA Collaborative Network	20. Increase enforcement capacity.	20a. Continue MPA-focused training for CDFW Wildlife Officers and allied agency partners.	The MPACN has an ongoing Compliance Initiative which includes MPA-focused training for CDFW Wildlife Officers and allied agencies in each coastal county, cycling statewide every 3 years.

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Management Program	Enforcement and Compliance	Resources Legacy Fund	20. Increase enforcement capacity.	20a. Continue MPA-focused training for CDFW Wildlife Officers and allied agency partners.	Supporting MPA Collaborative Network through OPC and philanthropic funding to lead MPA officer trainings for CDFW and allied agencies.
Management Program	Enforcement and Compliance	WILDCOAST	20. Increase enforcement capacity.	20a. Continue MPA-focused training for CDFW Wildlife Officers and allied agency partners.	WILDCOAST and the MPA Collaborative Network put on MPA-focused officer enforcement trainings. Last one was April 2023, but are conducted about every 2 years.
Management Program	Enforcement and Compliance	Resources Legacy Fund	20. Increase enforcement capacity.	20c. Explore utilizing technologies that could assist with enforcement cases and evidence-gathering in more remote locations.	Supporting California Marine Sanctuary Foundation to implement use of M2 radar and eFINS to assist with data collection by CDFW and partners, and WILDCOST on M2 implementation.
Management Program	Enforcement and Compliance	WILDCOAST	20. Increase enforcement capacity.	20c. Explore utilizing technologies that could assist with enforcement cases and evidence-gathering in more remote locations.	WILDCOAST manages 3 Marine Monitor (M2) RADARs in SD County to observe five San Diego County MPAs and integrate their use into MPA enforcement activities.

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Management Program	Enforcement and Compliance	Resources Legacy Fund	21. Enhance MPA citation record keeping and data management.	21a. Identify enforcement gaps and violation hotspots for inclusion in enforcement plan and finalize manual data entry of any citations not yet entered into the database from before 2016, as well as citations from 2021 through May 2022.	Funding of eFINS and M2, enforcement technologies that produce data which can help to identify compliance hotspots for CDFW and partner enforcement agencies.
Management Program	Enforcement and Compliance	WILDCOAST	21. Enhance MPA citation record keeping and data management.	21a. Identify enforcement gaps and violation hotspots for inclusion in enforcement plan and finalize manual data entry of any citations not yet entered into the database from before 2016, as well as citations from 2021 through May 2022.	Data from WILDCOAST's three M2 RADARs are analyzed monthly to identify violation hotspots. This data is shared with enforcement partners. Example of analysis reports.
Management Program	Enforcement and Compliance	MPA Collaborative Network	21. Enhance MPA citation record keeping and data management.	21b. Track MPA patrol hours alongside the number of contacts, warnings, and citations in one database.	The MPACN, in collaboration with ProtectedSeas, is in the early stages of geographically tracking MPA patrol presence/hours for allied agencies.
Management Program	Enforcement and Compliance	MPA Collaborative Network	21. Enhance MPA citation record keeping and data management.	21c. Identify efficient ways to track repeat offenders when out in the field.	The MPACN connects officers to eFINS presentations on the app's ability to track repeat offenders and share data between agencies. The online violator training will also identify repeat offenders.

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Management Program	Enforcement and Compliance	Resources Legacy Fund	21. Enhance MPA citation record keeping and data management.	21c. Identify efficient ways to track repeat offenders when out in the field.	eFINS allows for immediate information on past offenses while on patrol.
Network Performance	Climate Resilience and Adaptation	Southern California Coastal Water Research Project	25. Develop and implement climate change research and monitoring priorities and metrics for California's MPA Network.	25a. Develop models for climate change risk on shorter timescales and for both nearshore and deep-water marine species and habitats. Better incorporate tribal-led ecological monitoring into the broader MPA Monitoring Program and adaptation of the MPA Monitoring Action Plan.	Developing and testing climate resiliency indicators for estuaries.

Table 2. Mid-term Priorities (2 – 5 years)

Management Cornerstone	Category	Organization	Recommendation	Action	General Status Update
Governance	Tribal Coordination	Resources Legacy Fund	2. Create a clear pathway to tribal MPA management.	2b. Work with tribes to develop and support co-management programs that can enrich tribal cultural practices and renew traditional values.	Supporting Tribal Marine Stewards Network .
Governance	Tribal Coordination	Resources Legacy Fund	2. Create a clear pathway to tribal MPA management.	2c. Work with tribes to include and integrate traditional knowledge in MPA management, specifically coastal and marine science. Also relevant to 3a and 3b.	Supporting Tribal Marine Stewards Network and Tribal engagement in MPA Watch community science program.
Governance	Tribal Coordination	Reef Check	3. Build tribal capacity to participate in MPA management activities.	3b. Better incorporate tribal-led ecological monitoring into the broader MPA Monitoring Program and adaptation of the MPA Monitoring Action Plan.	Dive into Science program equips tribal communities with knowledge and experience in kelp forest ecology and scientific diving, including Reef Check's monitoring protocol while incorporating TEK: Tolowa Dee-ni' Nation, Pomo Indians and Coastal Chumash and Tongva.

Management Cornerstone	Category	Organization	Recommendation	Action	General Status Update
Governance	Justice, Equity, Diversity, and Inclusion	MPA Collaborative Network	6. Include and fund more diverse researchers and stakeholders in research and monitoring projects that directly contribute to the MPA Monitoring Program.	6c. Explore innovative approaches to engage the fishing industry in MPA research and management.	The MPACN offers MPA collaborative meeting spaces as a place for the recreational and commercial fishing community to suggest and participate in MPA outreach and monitoring programs. We have conducted multiple Subsistence Angling Fishing events in Santa Barbara and multiple Youth Fishing trips in Los Angeles.
Governance	Justice, Equity, Diversity, and Inclusion	WILD Coast	8. Evaluate the accessibility of MPAs to various community groups.	8a. Promote novel projects and utilize existing human use datasets to evaluate accessibility of MPAs to different user groups.	WILD Coast stands as the statewide manager of MPA Watch , a community science program where volunteers observe and collect data on human uses of coastal/marine resources both inside/outside of MPAs.
Management Program	Research and Monitoring	UC Davis Center for Community and Citizen Science, Resources Legacy Fund	12. Invest in improving understanding of the human dimensions of MPAs and develop a human dimensions working group and research agenda.	12a. Improve collection of demographic data of ocean users and visitors to the California coast. Also relevant to 12c and 12e.	Developed and piloted an intercept survey for potential statewide implementation by the MPA Watch network, a community science program, to collect beachgoer surveys related to ocean visitation and MPA awareness. Final report and recommendations in prep.

Management Cornerstone	Category	Organization	Recommendation	Action	General Status Update
Management Program	Research and Monitoring	WILDCOAST	12. Invest in improving understanding of the human dimensions of MPAs and develop a human dimensions working group and research agenda.	12a. Improve collection of demographic data of ocean users and visitors to the California coast.	WILDCOAST and UC Davis implemented a pilot project in 2023 to bolster MPA Watch data by intercepting beach users to survey them on their use of the ocean in addition to their demographic data.
Management Program	Research and Monitoring	UC Davis Center for Community and Citizen Science	12. Invest in improving understanding of the human dimensions of MPAs and develop a human dimensions working group and research agenda.	12c. Conduct more robust studies about compliance with MPA regulations and the impact of outreach and enforcement efforts.	Ongoing work to refine analysis of MPA Watch data, to examine temporal and spatial coastal use patterns. Publication in prep, slide deck and 1-pager available upon request.
Management Program	Research and Monitoring	Central Coast Wetlands Group @ MLML	13. Explore the use of innovative technologies such as remote sensing, drones, and eDNA, to enhance and streamline traditional monitoring projects.	13b. Augment existing monitoring programs to explore new and improved survey methods.	The Estuary MPA Monitoring Program has incorporated eDNA into its monitoring framework. The resulting data are being compared to other sampling methods of the fish community.
Management Program	Research and Monitoring	Resources Legacy Fund	13. Explore the use of innovative technologies such as remote sensing, drones, and eDNA, to enhance and streamline traditional monitoring projects.	13a. Develop and fund pilot projects to explore novel data collection methods to scale up to regional and statewide monitoring.	Supporting implementation of the Marine Monitor (M2) radar system to remotely assess vessel traffic in select California MPAs; data has been used to support prosecution of poachers.

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Management Program	Research and Monitoring	WILDCOAST	13. Explore the use of innovative technologies such as remote sensing, drones, and eDNA, to enhance and streamline traditional monitoring projects.	13a. Develop and fund pilot projects to explore novel data collection methods to scale up to regional and statewide monitoring.	WILDCOAST and UC Davis implemented a pilot project in 2023 to bolster MPA Watch data by intercepting beach users to survey them on their use of the ocean to scale up statewide monitoring.
Management Program	Research and Monitoring	MPA Collaborative Network	14. Develop a comprehensive community science strategy for MPAs and better utilize community science to supplement core monitoring programs.	14d. Improve coordination between existing community science programs and identify opportunities for new programs.	The MPACN's new community science project with remotely operated vehicles (ROVs) to assess subtidal habitat health in and out of MPAs will launch soon.
Management Program	Research and Monitoring	Reef Check	14. Develop a comprehensive community science strategy for MPAs and better utilize community science to supplement core monitoring programs.	14a. Evaluate the effectiveness and applicability of current community science programs involved in MPA monitoring.	Evaluating Reef Check community science approach with CDFW and engage in OPC's community science strategy development. Broaden engagement in subtidal community science with tribes.
Management Program	Research and Monitoring	UC Davis Center for Community and Citizen Science	14. Develop a comprehensive community science strategy for MPAs and better utilize community science to supplement core monitoring programs.	14d. Improve coordination between existing community science programs and identify opportunities for new programs. Also relevant to 12b.	Advanced research -- surveys and interviews -- on how MLPA has impacted community science programs. Publications in prep. Posters and slides available upon request.

Management Cornerstone	Category	Organization	Recommendation	Action	General Status Update
Management Program	Research and Monitoring	UC Davis Center for Community and Citizen Science	14. Develop a comprehensive community science strategy for MPAs and better utilize community science to supplement core monitoring programs.	14d. Improve coordination between existing community science programs and identify opportunities for new programs. Also relevant to 3b, 6a, 6b, 6c, 12a, 12b, 14a, 14b, and 14c.	Memo submitted to Fish and Game Commission outlining opportunities for community science in MPAs.
Management Program	Research and Monitoring	WILDCOAST	14. Develop a comprehensive community science strategy for MPAs and better utilize community science to supplement core monitoring programs.	14b. Create clear frameworks on regional and statewide scales for the intended use of community science from project onset.	Coordinate statewide MPA Watch program to increase and understanding of community science data on public MPA activities. See reports here.
Management Program	Outreach and Education	Central Coast Wetlands Group @ MLML	15. Evaluate outreach needs, assess effectiveness of resources, and identify and pursue the most impactful and cost-efficient outreach tools for increasing MPA awareness and compliance.	15b. Leverage partnerships to develop projects targeted at closing knowledge gaps in outreach needs. Also relevant to 16b.	The Estuary MPA Monitoring Program is working with San Francisco Estuary Institute to develop an outreach plan for the north coast region of California to build capacity for coordinated estuary monitoring.
Management Program	Outreach and Education	MPA Collaborative Network	15. Evaluate outreach needs, assess effectiveness of resources, and identify and pursue the most impactful and cost-efficient outreach tools for increasing MPA awareness and compliance.	15b. Leverage partnerships to develop projects targeted at closing knowledge gaps in outreach needs.	Collaboratives provide intel on what outreach is most needed for community-driven, effective resource management that is founded on buy-in of diverse community members.

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Management Program	Outreach and Education	MPA Collaborative Network	15. Evaluate outreach needs, assess effectiveness of resources, and identify and pursue the most impactful and cost-efficient outreach tools for increasing MPA awareness and compliance.	15c. Expand the use of mobile apps, digital technologies, and social media to reach wider audiences.	The MPACN has a signage inventory app we created and we use social media and a regular digital newsletter and blog posts to share and amplify MPA outreach, reaching wider audiences.
Management Program	Outreach and Education	WILDCOAST	15. Evaluate outreach needs, assess effectiveness of resources, and identify and pursue the most impactful and cost-efficient outreach tools for increasing MPA awareness and compliance.	15c. Expand the use of mobile apps, digital technologies, and social media to reach wider audiences.	WILDCOAST has reached 1.2 million people via social media, op-eds, video and other media campaigns to spread awareness on MPAs and ocean conservation at large.
Management Program	Enforcement and Compliance	MPA Collaborative Network	22. Increase information gathering regarding MPA violation prosecutions and judicial outcomes.	22a. Track prosecution outcomes to better understand how fines may vary by county for similar offenses.	The MPACN works with district attorney contacts to gather MPA case prosecution outcomes and compile data into lists by county, sharing press releases when applicable. Fine data needs analysis. Approaches vary by county with some DA's using criminal procedures and some using civil. Some county traffic courts (infraction level cites) are more supportive of MPA violations than others.

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Management Program	Enforcement and Compliance	Resources Legacy Fund	22. Increase information gathering regarding MPA violation prosecutions and judicial outcomes.	22a. Track prosecution outcomes to better understand how fines may vary by county for similar offenses.	Support convening of District Attorney MPA Task Force which meets quarterly to discuss MPA prosecution and compliance.
Management Program	Enforcement and Compliance	WILDCOAST	22. Increase information gathering regarding MPA violation prosecutions and judicial outcomes.	22a. Track prosecution outcomes to better understand how fines may vary by county for similar offenses. Also relevant to 22b.	WILDCOAST works closely with San Diego City Attorneys and District Attorneys to monitor prosecution outcomes and support in evidence through WILDCOAST's three Marine Monitor RADARs.
Management Program	Enforcement and Compliance	MPA Collaborative Network	22. Increase information gathering regarding MPA violation prosecutions and judicial outcomes.	22b. Encourage MPA and marine resource outreach to district attorneys and judges to highlight importance of resource prosecution.	The MPACN along with the DA MPA Taskforce, conduct outreach to Commissioners, judges, prosecutors, and judicial staff to highlight the importance of resource prosecution using an enforcement video.
Management Program	Enforcement and Compliance	Resources Legacy Fund	22. Increase information gathering regarding MPA violation prosecutions and judicial outcomes.	22b. Encourage MPA and marine resource outreach to district attorneys and judges to highlight importance of resource prosecution.	Support MPA Collaborative Network through OPC and philanthropic funding to engage with DAs and judges on MPA-specific compliance.
Network Performance	Climate Resilience and Adaptation	MPA Collaborative Network	26. Consider climate change impacts from the outset of planning for monitoring MPA human dimensions.	26a. Leverage planned OPC Science Advisory Team human dimensions working group to identify social and economic service provision of MPAs and intersections with climate change.	The MPACN hosted Community Climate webinars and forums with OPC Science Advisory Team to contribute to the human dimensions input from community members.

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Network Performance	Climate Resilience and Adaptation	MPA Collaborative Network	26. Consider climate change impacts from the outset of planning for monitoring MPA human dimensions.	26b. Assess equity issues around MPAs in a changing climate.	Per the above, the MPACN facilitated discussion around equity and access issues in/near MPAs in a changing climate during 14 collaborative hosted climate and MPAs forums.
Network Performance	Fisheries Integration and Other Influencing Factors	MPA Collaborative Network	28. Further integrate influencing factors into ecological and human study designs and interpretations of MPA performance.	28a. Improve estimates of other anthropogenic metrics such as visitation, enforcement presence, other regulatory management actions, and water quality.	The MPACN is partnering with ProtectedSeas to graphical display the MPACN's inventory of MPA signs, education programs, and enforcement presence.

Table 3. Long-term Priorities (5 – 10 years)

Management Cornerstone	Category	Organization	Recommendation	Action	General Status Update
Management Program	Enforcement and Compliance	MPA Collaborative Network	19. Create and implement a cohesive and actionable MPA Enforcement Plan.	19a. Create a standard operating procedure and citing blueprint/authority for use by CDFW's Law Enforcement Division and allied agencies.	The MPACN has created a standard form for allied agencies to share compliance and patrol data. The MPACN is also working with ProtectedSeas on mapping "patrol presence" of participating allied agencies. Additionally, eFINS is a standardized yet customizable tool shared at our enforcement trainings.
Management Program	Enforcement and Compliance	MPA Collaborative Network	19. Create and implement a cohesive and actionable MPA Enforcement Plan.	19b. Provide guidance on confirming validity of a SCP for collections occurring in the field and improve communications between patrolling officers and field researchers.	CDFW SCP presentations now occur at all MPA Enforcement Trainings. The use of identifiable clothing/banners is encouraged in all collaboratives to reduce confusing permitted activities with violations.
Management Program	Enforcement and Compliance	WILDCOAST	19. Create and implement a cohesive and actionable MPA Enforcement Plan.	19c. Identify ways to determine if an MPA requires heightened enforcement efforts using existing RMS data.	The monthly analysis of data from WILDCOAST's 3 Marine Monitor RADARs informs enforcement agencies on violation hotspots where additional enforcement is necessary.
Management Program	Enforcement and Compliance	MPA Collaborative Network	19. Create and implement a cohesive and actionable MPA Enforcement Plan.	19d. Identify outreach materials enforcement officers most need when contacting individuals in the field.	Enforcement officers get MPA Officer Reference Guides with surveyed boundary images, and often request outreach materials, including localized waterproof brochures with maps and regulations.

Management Cornerstone	Category	Organization	Recommendation	Action	General Status Update
Management Program	Enforcement and Compliance	MPA Collaborative Network	19. Create and implement a cohesive and actionable MPA Enforcement Plan.	19e. Identify potential alternative deterrents to MPA poaching for misdemeanor offenses and/or repeat offenders (example: possible MPA school prior to license renewal).	The MPACN is developing an online training for MPA violators for court assignment to educate violators, deter future violations, and provide a system of tracking repeat offenders.
Network Performance	MPA Network Design	Sea of Clouds	24. Work with CFGC and partners to better incorporate marine cultural heritage into the design of the MPA Network.	24a. Develop a process to incorporate state marine cultural preservation areas (MMAIA section 36700(d)) into existing MPAs and new locations across the Network.	Developing Maritime Heritage Working Group representing CDFW, CA State Parks: (1) Applying existing CA State Parks processes to nominate and designate new areas, (2) Management implications, (3) Connections to sister agencies.