

Countywide Sea Level Rise Adaptation Organizational Structure and Decision-making Process: Findings Report

June 2026

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Table of Contents

Executive Summary	3
1. Introduction	16
3. Where Marin Stands Today	26
4. Case Studies	37
5. Funding & Financing Sea Level Rise Adaptation	42
7. Recommendations	47
8. Appendix	52

Executive Summary

This County-funded Study assessed opportunities for multi-jurisdictional collaboration to support sea level rise (SLR) adaptation across Marin County

Purpose

Marin County faces more than **\$17 billion in SLR adaptation needs**, requiring regional collaboration since no single jurisdiction or agency has the resources or authority to address the challenge alone. This County-funded Study evaluates opportunities for multi-jurisdictional collaboration to strengthen SLR adaptation planning and implementation across Marin County through stakeholder engagement, coordination, and assessment of future collaborative governance approaches.

110 miles of shoreline spanning San Francisco Bay and the Pacific Coast

11 incorporated cities and towns — 8 with direct shorefront exposure

30+ special districts managing utility and flood control infrastructure

Goals

This Study sought to answer four questions:

- 1 What does the county (the County and local agencies) want to achieve collectively?**
- 2 How could agencies on Marin's bayside shoreline work together? Where and how does unincorporated West Marin fit in?**
- 3 What are the roles and responsibilities of partner agencies?**
- 4 What are the resourcing needs and sources to be successful?**

About this Report

This report frames the SLR adaptation challenges faced by the County, jurisdictions, agencies, and communities and outlines opportunities to strengthen collaboration. The report outlines:

- I. Where Marin Stands Today** on SLR adaptation efforts and interest in stronger collaboration, including findings from prior efforts and this Study's stakeholder engagement.
- II. What We Learned from Peer Agencies** summarizes key findings from case studies of collaborative governance models.
- III. Funding and Financing SLR Adaptation** discusses the significant benefits collaboration can have in funding and financing Marin County's adaptation needs.
- IV. Recommendations** for what a countywide collaborative approach to SLR could accomplish and how to get there.

Updates Since Summer 2025

Since the engagement process concluded in summer 2025, Marin County and regional partners have continued to advance planning, funding, and coordination efforts that support long-term SLR adaptation.

Expanded County Climate Capacity

- New County Climate Division established within the Office of the County Executive. Added:
 - Chief Climate Officer
 - 2 Sea Level Rise Planners
 - Administrative Analyst

Increased Funding + Regional Coordination

- Proposition 4 implementation funding advanced across the region
- In January 2026, Marin County, Marin Community Foundation (MCF), and Coastal Quest outlined priorities of a new Collaborative and how to bring together Coastal Quest's work with this Study's findings.
- Expanded coordination around countywide resilience priorities and funding alignment

Planning + Project Advancement

- Mill Valley and Tiburon advanced SB 1 RSAP planning efforts
- TAM completed Countywide Transportation Plan 2050
- San Rafael completed Community-Informed SLR Technical Feasibility Study
- Sausalito completed Gate 5 Drainage Management Study

Growing Urgency + Statewide Recognition

- In January 2026, storm flooding and king tides highlighted ongoing vulnerability
- San Rafael and Marin County were selected as one of 3 regions in California as a pilot for the CA FWD Resilience District Incubator

Components of SLR Adaptation

Effective SLR adaptation requires an integrated approach to the preparation, funding, and implementation of projects.

- **Preparation** involves coordination and collaboration between municipalities and agencies, policy creation, and research and best practice identification.
- **Funding** involves the identifying sources, securing funds and fundraising, and allocation of funds across efforts. Funding supports both preparation and implementation.
- **Implementation** includes public outreach and engagement, technical assistance, and capital projects and regulations. Implementation provides insights and experience to inform the preparation of future SLR adaptation projects.

Preparation

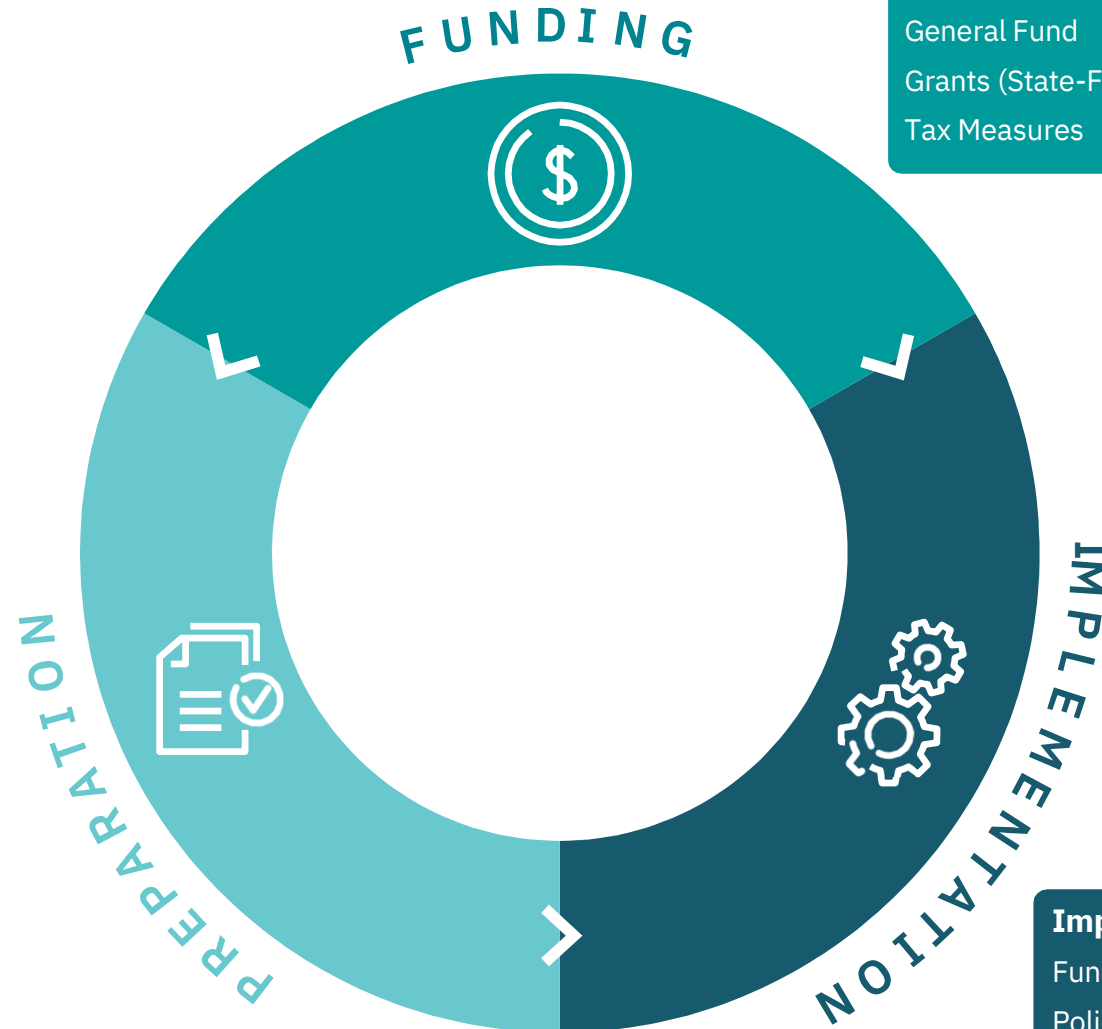
Guidance
Monitoring
Planning
Research

Funding

Financing Districts
General Fund
Grants (State-Federal)
Tax Measures

Implementation

Funding Mechanisms
Policies
Projects



Factors Driving Collaboration – The regulatory, funding, and implementation complexity of SLR adaptation drives the need for countywide collaboration

Regulatory

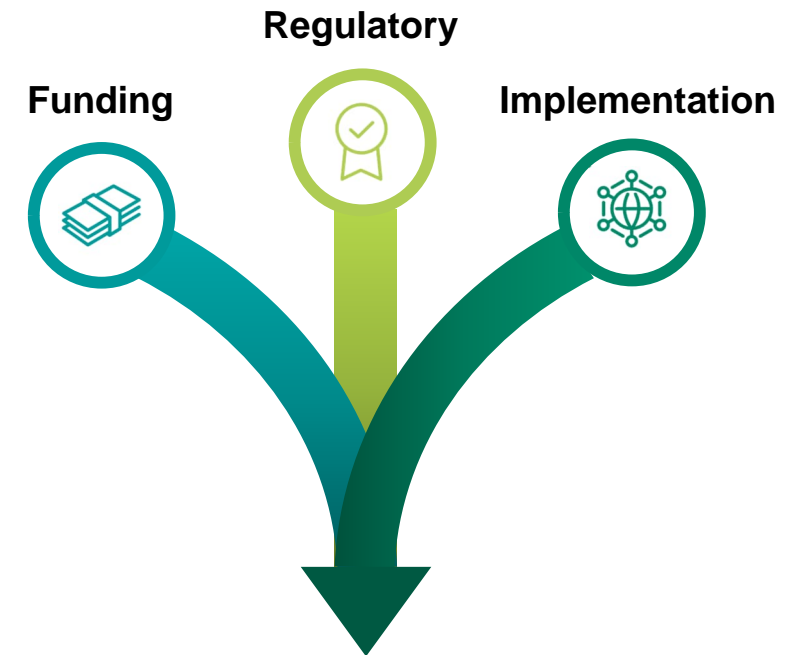
- Overlapping agency authorities require coordinated planning and permitting.
- State and regional policies increasingly encourage collaborative adaptation.

Funding

- Adaptation costs exceed the capacity of most individual jurisdictions.
- Competitive grant programs favor regional partnerships and shared priorities.

Implementation

- Flood risks and infrastructure cross jurisdictional boundaries.
- Coordinated project delivery improves efficiency and implementation success.



Findings (1/4): Existing SLR plans highlight shared priorities and unique local differences

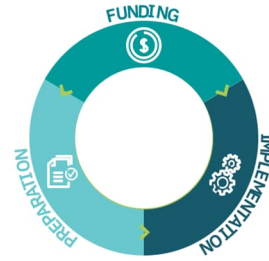
Shared Priorities

1. **Deliver nature-based solutions:** There is a collective interest and significant research effort in identifying and supporting nature-based adaptation opportunities.
2. **Secure funding and financing:** There is a universal need for more grant writing support through staffing and funding resources to aid in plan development and implementation.
3. **Coordinate regionally while maintaining local authority:** Many plans and studies emphasize the importance of regional coordination and information sharing while preserving local decision-making and implementation authority.
4. **Assess vulnerabilities:** Assessing vulnerabilities is key to effectively identifying areas most at risk from SLR and flooding (e.g. mapping critical infrastructure, residential areas, and natural habitats). Several plans also emphasized the importance of consistent sea level rise assumptions, projections, and planning methodologies across jurisdictions.
5. **Engage stakeholders:** There is a recognized need for inclusive and transparent communication engagement, particularly in highly vulnerable communities such as the Canal neighborhood in San Rafael.
6. **Develop project business cases:** Developing a business case to support a prioritized set of adaptation plans based on benefits, feasibility, and utility is important.

Differences

1. **Localized challenges:** Coastal and bayside areas have unique challenges that need to be addressed in locally responsive ways.
2. **Differing focus areas:** Different plans/reports have varied focus areas, such as drought, wildfire, extreme heat, tourism, ferry services, historic and archaeological resources, and shifting commuting patterns.
3. **Inconsistent levels of SLR planning:** Some jurisdictions are more engaged in addressing these issues. Some jurisdictions and agencies have already secured funding and are beginning to implement SLR adaptation projects.
4. **Different preferences for collaboration and governance structures:** While jurisdictions broadly support regional coordination, many plans and stakeholder discussions reflect a preference to strengthen existing coordination structures and partnerships rather than establish a new formal governance entity.

Findings (2/4): Stakeholder engagement identified key challenges, opportunities, and hesitations related to advancing SLR adaptation across Marin County



	Challenges	Opportunities	Hesitations
Preparation	SLR adaptation competes with more immediate priorities. Inconsistent awareness, fragmented engagement, and limited inclusion of frontline communities have slowed progress and left gaps in decision-making.	Clarify roles, establish a countywide collaboration framework, identify a coordinating lead, and build trust through shared pilot projects while embedding equity throughout.	There is uncertainty about establishing a new governance authority before roles, responsibilities, and coordination among existing agencies are clearly defined.
Funding	Local funding is insufficient, and agencies often compete rather than collaborate for grants. Complex application and grant management processes disproportionately burden smaller agencies.	A coordinated countywide funding strategy can strengthen grant competitiveness, reduce administrative burden, align investments, and create a more stable long-term funding base.	A countywide approach must not prevent local agencies from continuing to pursue local-scale work that reflects their specific community needs and priorities.
Implementation	Fragmented responsibilities, slow permitting, and limited cross-jurisdictional coordination delay project delivery and leave initiatives without clear ownership.	A shared countywide vision can strengthen advocacy, improve public awareness, leverage existing planning efforts, and support more coordinated, informed decision-making.	Governance must reflect the distinct regulatory environments and local contexts of coastal and bayside communities to preserve trust and effectiveness.
Cross-cutting	Limited staffing and technical resources constrain agencies' ability to secure funding, deliver projects, build partnerships, and sustain long-term adaptation efforts.		Varying awareness of SB 272 and agency readiness may limit participation until additional education and capacity-building are provided.

Findings (3/4): West Marin – Challenges and Opportunities

West Marin's coastal communities face a distinct set of SLR challenges from their bayside counterparts — different regulatory oversight (California Coastal Commission vs. BCDC), different economic bases, and a strong tradition of community-led planning. These differences mean that a one-size-fits-all countywide approach may not serve West Marin well. At the same time, West Marin stakeholders expressed clear interest in collaboration — particularly around grant strategy, regulatory navigation, and technical capacity — provided that local autonomy is preserved.

Preparation

1. **The lack of unified SLR adaptation planning across West Marin** results in fragmented efforts, creating inconsistencies in priorities and approaches that can hinder effective regional coordination.
2. **There is uncertainty and hesitation to establish a new governance authority for SLR adaptation** while roles, responsibilities, and coordination among agencies remains unclear, making collaboration and decision-making difficult.

Implementation

1. **Misaligned priorities between federal, state, and county entities** create delays and complicated pathways to implementation of SLR adaptation projects. The absence of a coordinated approach to engage with regulatory agencies leaves local communities without a clear strategy when working with agencies like the California Coastal Commission.
2. **Navigating collaboration and permitting with the County can be challenging** due to a lack of internal alignment, which affects external coordination and community-led adaptation efforts, ultimately impacting the effectiveness of project delivery and SLR adaptation efforts.

Funding

1. **Communities struggle to secure funding for SLR adaptation projects** due to the competing interests of County funds and the competitive grants landscape, leaving West Marin at a risk of getting access to resources specific to coastal communities and ensuring local priorities are represented in countywide funding decisions.

Opportunities

1. **A coordinated grant strategy would enable West Marin to pursue grants independent of bayside activities and provide grant application technical assistance** to help reduce barriers to apply for and secure funding.
2. **Integrating West Marin's skilled technical experts and harnessing community-derived talent into adaptation planning** would strengthen adaptation efforts, enhance local expertise and ensure that planning reflects the unique challenges and opportunities of West Marin.
3. **Stronger coordination with regional, state, and federal regulatory bodies would help align adaptation priorities**, reduce permitting obstacles, and streamline project approval.

Findings (4/4): Marin's \$17B+ adaptation need will require layered funding strategies that evolve alongside regional collaboration

Local revenue & financing tools

Governance authority and financing strategies are closely interconnected. The type of governance entity influences access to revenue tools, bonding authority, grant eligibility, and long-term implementation capacity.

- **Scale matters:** countywide and multi-jurisdictional mechanisms generate far greater revenue and bonding capacity than jurisdictions acting alone.
- **Parcel taxes:** the most proven local source — stable, predictable, and usable for grant matching.
- **Assessment districts & EIFDs:** tie costs to benefiting properties (districts) or capture future tax increment without voter approval (EIFDs).
- **Member dues:** foundational for staffing and coordination, though insufficient alone for capital projects.

Coordinated grant strategy

Coordinated grant strategies can improve competitiveness, reduce duplication, and strengthen implementation capacity across Marin County.

- **Coordinate grant timing and project priorities:** Align regional priorities and funding pursuits across jurisdictions to improve competitiveness and reduce duplication.
- **Maintain a shared funding pipeline:** Track grant opportunities, deadlines, eligibility, and application status through a centralized coordination system.
- **Coordinate project sequencing:** Align shoreline, transportation, habitat restoration, and infrastructure projects to strengthen large-scale funding opportunities.
- **Support local priorities through countywide coordination:** Local jurisdictions identify adaptation priorities while the County coordinates funding strategy, grant pursuits, and shared implementation support.

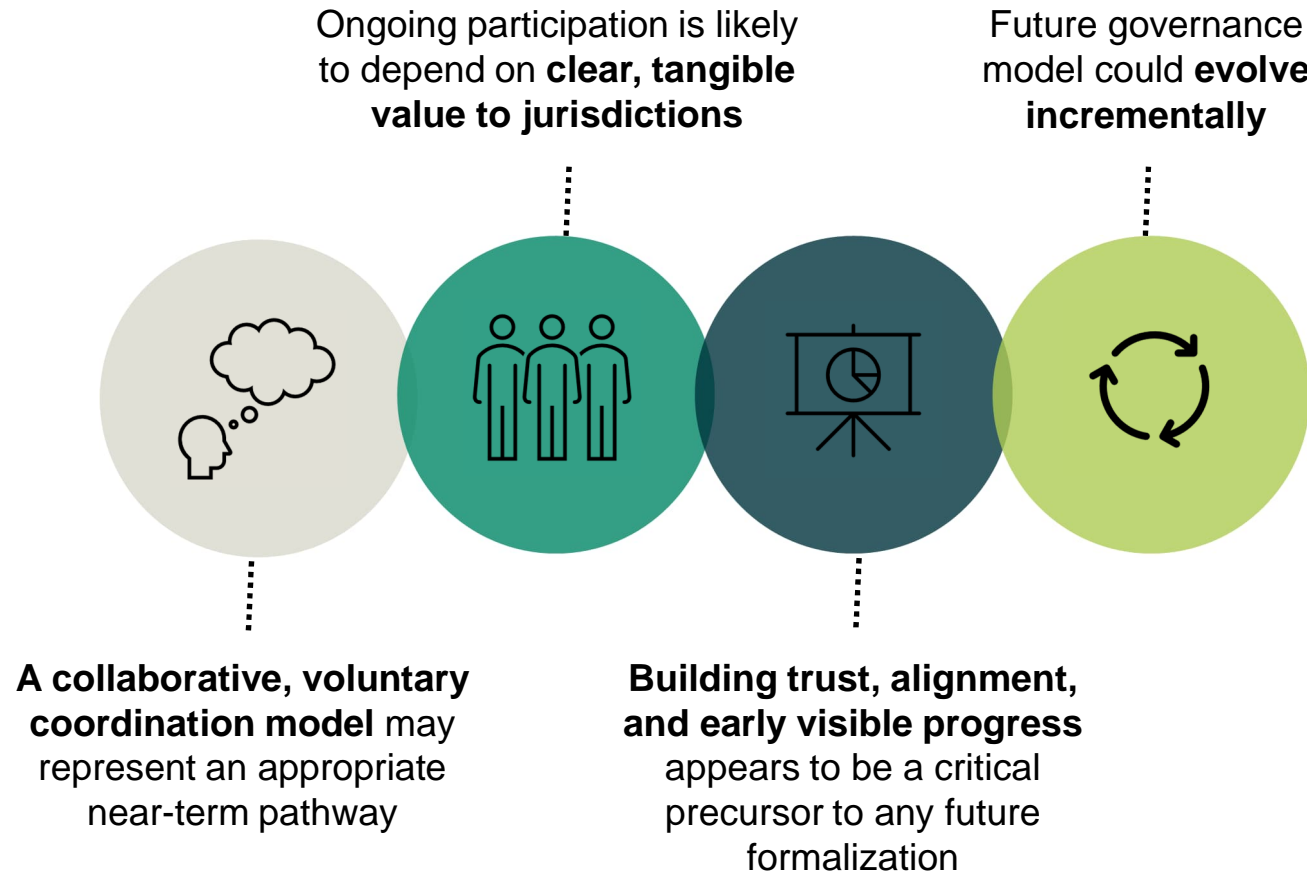
Philanthropic capital

The Marin Community Foundation (MCF): a unique regional partner whose philanthropic capital moves faster than public funding and can absorb early-stage project risk.

- Fund pre-development work that positions Marin for competitive grant applications
- Build community trust and stakeholder buy-in, which may support later fundraising efforts
- Serve as co-investor or guarantor in early project delivery
- Signal to federal/state partners that Marin's effort has strong community backing.

Key Considerations for Collaboration in Marin

Based on engagement findings, the case study research illuminates the following key considerations for Marin's approach to SLR collaboration



The recommended path forward is a phased approach that builds trust and creates the conditions for a more formal governance authority over time

Start with a Collaborative

Establish a voluntary coordination body to build trust, develop shared vision, and align on priorities — without formal governance authority.

Deliver Early Value

Coordinate grant strategy, provide technical assistance, and advance shared pilot projects that demonstrate practical benefits of working together.

Formalize When Ready

Link governance and financing decisions to specific triggers (rather than fixed timelines) and move into formal governance authority structures as trust and alignment grow.

Next steps start with positioning the Climate Office as the backbone agency

Marin County has recently developed a Climate Office, which sits within the County Executive's Office. The new Climate Office can be leveraged as a backbone agency: an organizing, momentum-building force to support longer-term collaboration.

Role of the County Climate Office

- 1. Position itself as the countywide coordination backbone organization** responsible for convening partners, expanded collaborative meetings, RSAP working groups, and project-specific coordination efforts.
- 2. Develop a shared collaboration framework and decision-making principles** supported by clear metrics, equity considerations, and alignment of countywide priorities and projects.
- 3. Lead a coordinated countywide grant strategy** by aligning projects with funding opportunities, coordinating multi-jurisdictional applications, and sequencing projects to improve competitiveness and reduce duplication.
- 4. Provide technical assistance and implementation support** related to grant administration, compliance tracking, permitting coordination, and project delivery, particularly for smaller jurisdictions with limited staffing capacity.
- 5. Establish a flexible Technical Advisory Committee (TAC) structure** to support shared planning, technical coordination, and implementation across jurisdictions, such as through RSAP development.
- 6. Explore co-location and shared working opportunities** to support collaboration between jurisdictional staff and create shared working sessions tied to funding deadlines and project development efforts.
- 7. Strengthen partnership opportunities with Marin Community Foundation (MCF)** to support early implementation efforts, pilot projects, pre-development activities, and community engagement.

Roadmap: near-term next steps lead to larger collaboration over time

An incremental approach to formal collaborative governance to support SLR adaptation should achieve the following steps, particularly in the near- and mid-terms. Agreements to continue to collaborate and the structure of that collaboration should be determined in Phase 2.



Pursue Grant Funding & Pilot Projects

Identify near-term funding opportunities, including grants and philanthropic investment, for projects and efforts of shared interest. Develop working committees to advance these efforts and advance long-term collaboration opportunities.



Implement Pilot Projects

Leverage working committees to test collaboration and identify lessons learned.

Phase 1: Near Term (0-12 Months)

Lower trust & collaboration



Launch Climate Office & Backbone Agency, Align on Vision

Build on prior collaborative efforts (BayWAVE, this Study's Steering Committee, etc) and formalize vision for collaboration and near-term collective goals.

Phase 2: Medium Term (1-3 years)

Higher trust & collaboration



Invest in Broader Coordination Needs

Including sustained community engagement and education, coordinated approach to regulatory agency and funding agency engagement.

Phase 3: Long Term (3+ years)



Formalize

Formalize coordinated approaches to project sequencing, permitting, and implementation. Evaluate readiness for formalized governance authority and funding/financing strategy.

1. Introduction

Purpose of the Study and this Report

The County of Marin (County) funded study intends to identify opportunities for multi-jurisdictional collaboration to support the planning and implementation of sea level rise (SLR) adaptation strategies throughout the county. The study includes stakeholder engagement and coordination to understand existing SLR adaptation efforts, opportunities for collaboration, and what a framework for future multi-jurisdictional collaboration might look like.

The study aims to answer the following questions:

- 1 **What does the county (the County and local agencies) want to achieve collectively?**
- 2 **How could agencies on Marin's bayside shoreline work together? Where and how does unincorporated West Marin fit in?**
- 3 **What are the roles and responsibilities of partner agencies?**
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About this Report

The following report frames the challenges faced by the County, jurisdictions, agencies, and communities when planning for and implementing SLR adaptation and outlines opportunities and recommendations for strengthening collaboration. The report outlines:

- I. **Where Marin Stands Today** on SLR adaptation efforts and interest in stronger collaboration, including findings from prior efforts and this Study's stakeholder engagement.
- II. **What We Learned from Peer Agencies** summarizes key findings from case studies of collaborative governance models.
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Components of SLR Adaptation

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Preparation

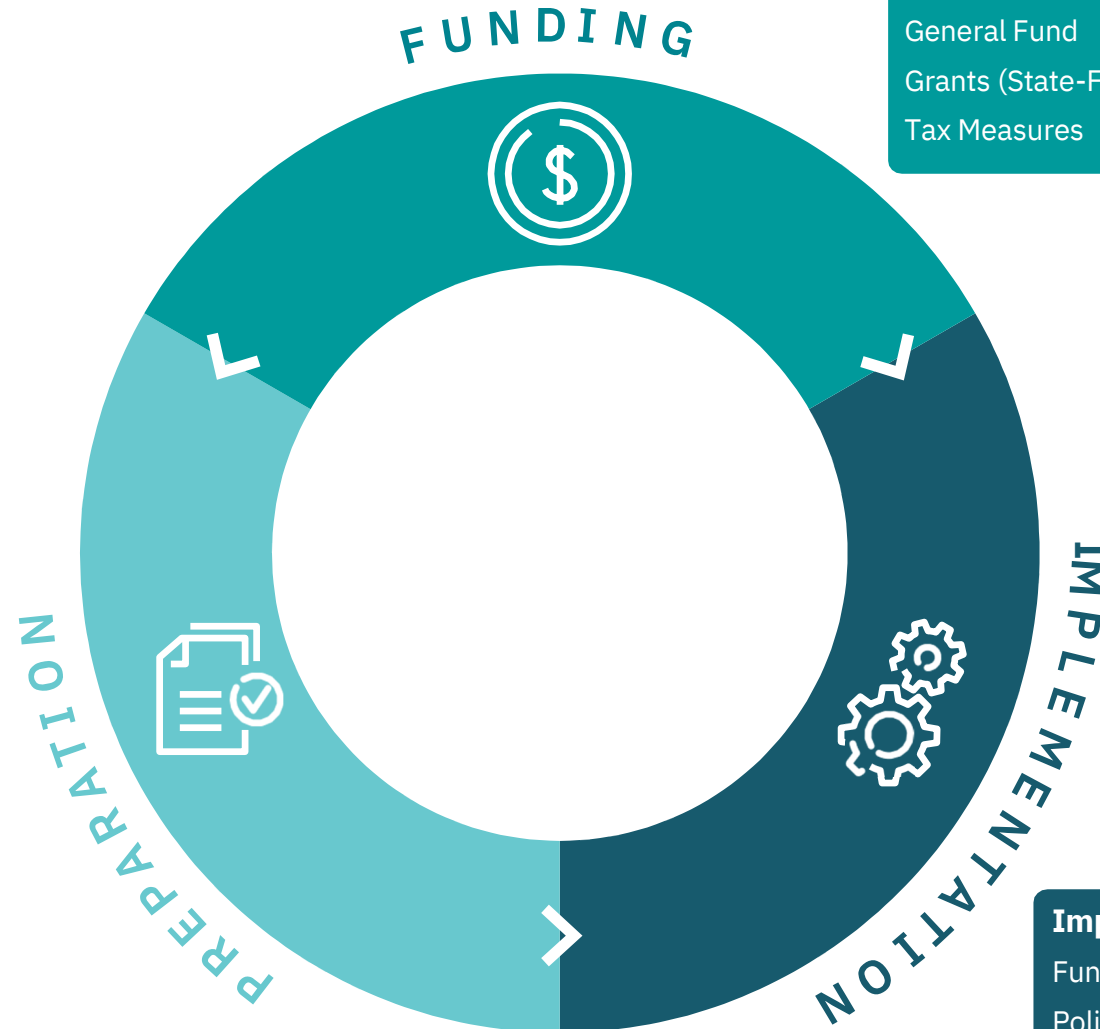
Guidance
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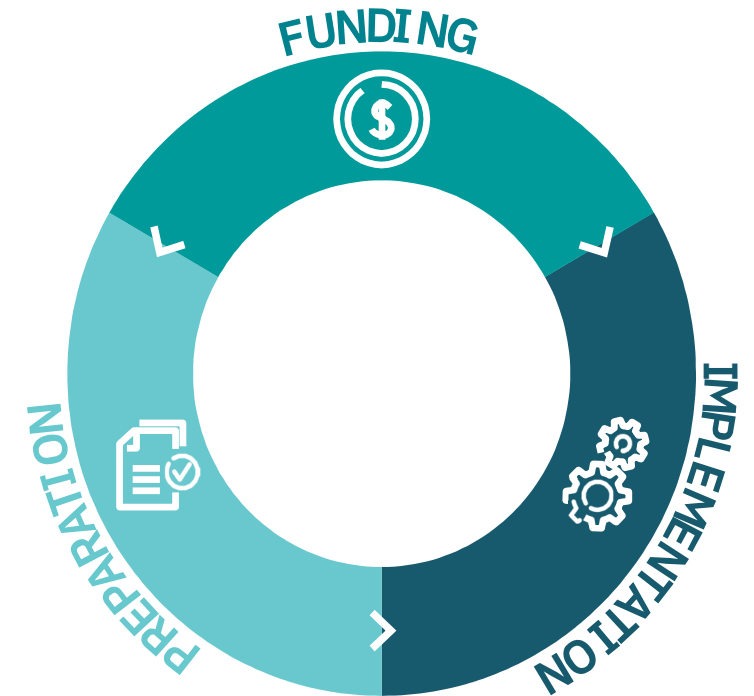
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- **Implementation** includes public outreach and engagement, technical assistance, and capital projects and regulations. Implementation provides insights and experience to inform the preparation of future SLR adaptation projects.

Benefits of Collaboration

- ➔ - Regional alignment on priorities
- ➔ - Resource sharing
- ➔ - Centralized technical support
- ➔ - Increased project scale opportunities
- ➔ - Shared funding pipeline visibility
- ➔ - Coordinated grant strategy
- ➔ - More competitive regional grants
- ➔ - Access to higher funding caps
- ➔ - Shared grant administration support
- ➔ - Shared staff and technical resources
- ➔ - Streamlined contract management and delivery
- ➔ - Increased project sequencing alignment
- ➔ - Support for compliance tracking and reporting



Factors Driving Collaboration - Regional Landscape of SLR Adaptation

Marin County's sea level rise adaptation efforts operate within a complex landscape of regulatory requirements, funding constraints, and implementation challenges. Federal, state, regional, and local actors each play distinct but interconnected roles in permitting, planning, funding, and project delivery, creating both a need and an opportunity for greater collaboration across jurisdictions.*

Regulatory

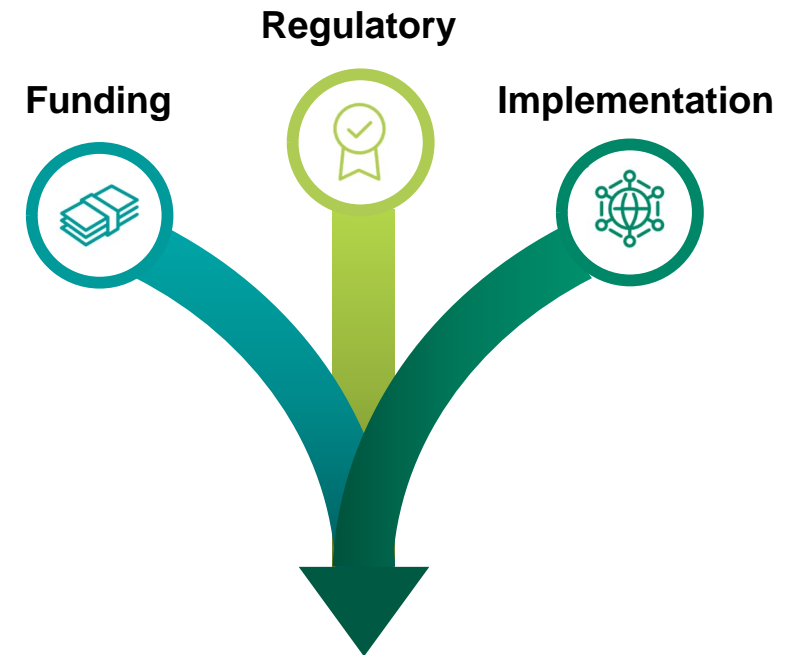
- Multiple agencies have overlapping authority over shoreline planning, permitting, water quality, habitat protection, and coastal land use.
- Complex permitting and compliance requirements often require coordination across agencies and jurisdictions.
- Regional and state planning requirements increasingly encourage aligned adaptation strategies and coordinated implementation.

Funding

- Adaptation costs exceed the capacity of most individual jurisdictions, requiring coordinated funding approaches.
- Grant programs prioritize regional collaboration and multi-jurisdictional projects.
- Competitive funding opportunities favor shared priorities, project pipelines, and coordinated grant strategies.

Implementation

- Critical infrastructure, ecosystems, and flood risks span jurisdictional boundaries, requiring coordinated solutions.
- Multi-benefit projects often involve multiple sectors and agencies, increasing the need for collaboration.
- Regional partnerships provide a foundation for information sharing, technical assistance, and project advancement.



Approach

LITERATURE REVIEW

Reviewed existing research, reports, policies, and guidance on SLR governance, financing, and regional collaboration.

CASE STUDIES

Examined comparable regional entities and multi-jurisdictional adaptation efforts to understand models, approaches, and lessons learned.

STAKEHOLDER ENGAGEMENT

Engaged jurisdictions, agencies, partners, and community stakeholders to understand local needs, challenges, and priorities.



+



WHAT'S POSSIBLE

The literature review and case studies show us what works elsewhere and what is possible.



WHAT'S NEEDED

Engagement tells us what Marin needs, values, and is ready to support.

Engagement Overview

Engagement activities were designed to be comprehensive and exploratory, using interviews, focus groups, and surveys to build a broad understanding of the existing sea level rise (SLR) landscape in Marin County. These conversations surfaced stakeholder perspectives, priorities, and readiness for action, and highlighted a strong appetite for regional collaboration. **Across these conversations, a consistent theme emerged: strong appetite among stakeholders to collaborate on regional SLR efforts.** However, while Marin County has the awareness and technical foundation to advance SLR planning, **stakeholders identified significant structural and capacity barriers that slow progress.**

Challenges

1. Lack of coordinated multi-jurisdictional planning
2. Limited agency capacity and resources
3. An inefficient and competitive funding landscape
4. A complex permitting and regulatory environment
5. Persistent gaps in community awareness and equity

Opportunities

1. Develop unified vision and voice
2. Build on existing plans and studies
3. Coordinate grant strategies
4. Leverage countywide revenue-generation opportunities
5. Use SB 272 requirements as a catalyst for action

Summary of Engagement Activities

Research and engagement occurred between May 2024 and April 2025. A more detailed summary of the timeline of activities is provided in the appendix.



Prior Engagement Efforts

Reviewed previous countywide and regional SLR coordination efforts, governance discussions, adaptation studies, and existing partnerships to understand historical challenges, opportunities, and areas of alignment across Marin.



Steering Committee

Convened Steering Committee members representing County departments, local jurisdictions, partner agencies, and regional organizations to guide project direction, review findings, and provide strategic input throughout the process.



One-on-one Interviews

Conducted interviews with local jurisdiction staff, regional partners, and stakeholders to understand needs, staffing constraints, funding challenges, and collaboration priorities.



Focus Groups

Convened targeted focus groups with community stakeholders involved in sea level rise-related efforts to discuss adaptation challenges, regional priorities, and opportunities for multi-jurisdictional collaboration.



Surveys

Distributed surveys to gather feedback on governance preferences, coordination needs, institutional capacity gaps, funding and implementation challenges, and priority areas for County or regional support.

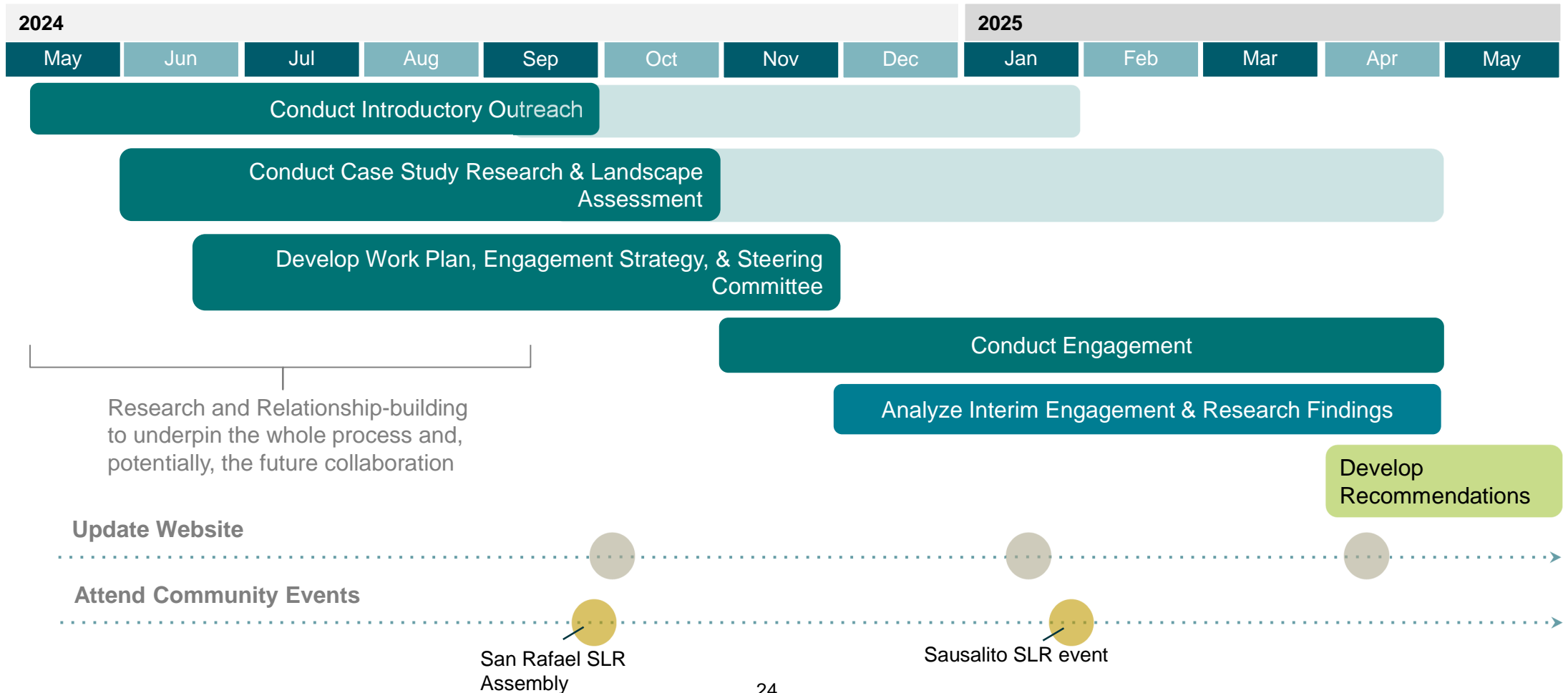


BayWAVE

Incorporated insights from BayWAVE meetings and ongoing regional coordination discussions to understand existing collaboration structures, peer learning opportunities, and stakeholder interest in strengthening collaboration efforts.

Timeline

Research and engagement occurred between May 2024 and April 2025. In May 2025, the County-led study was paused to allow for hiring for the new County Climate Division and coordination with parallel County and partner efforts.



Updates Since Summer 2025

Since completion of the engagement process, Marin County and regional partners have continued to advance planning, funding, and coordination efforts that support long-term sea level rise adaptation.

Expanded County Climate Capacity

- New County Climate Division established within the Office of the County Executive. Added:
 - Chief Climate Officer
 - 2 Sea Level Rise Planners
 - Administrative Analyst

Increased Funding + Regional Coordination

- Proposition 4 implementation funding advanced across the region
- Marin County and Marin Community Foundation (MCF) initiated collaboration efforts with Coastal Quest in January 2026 on outlining priorities of a new Collaborative and how to bring together Coastal Quest's work with this Study's findings.
- Expanded coordination around countywide resilience priorities and funding alignment

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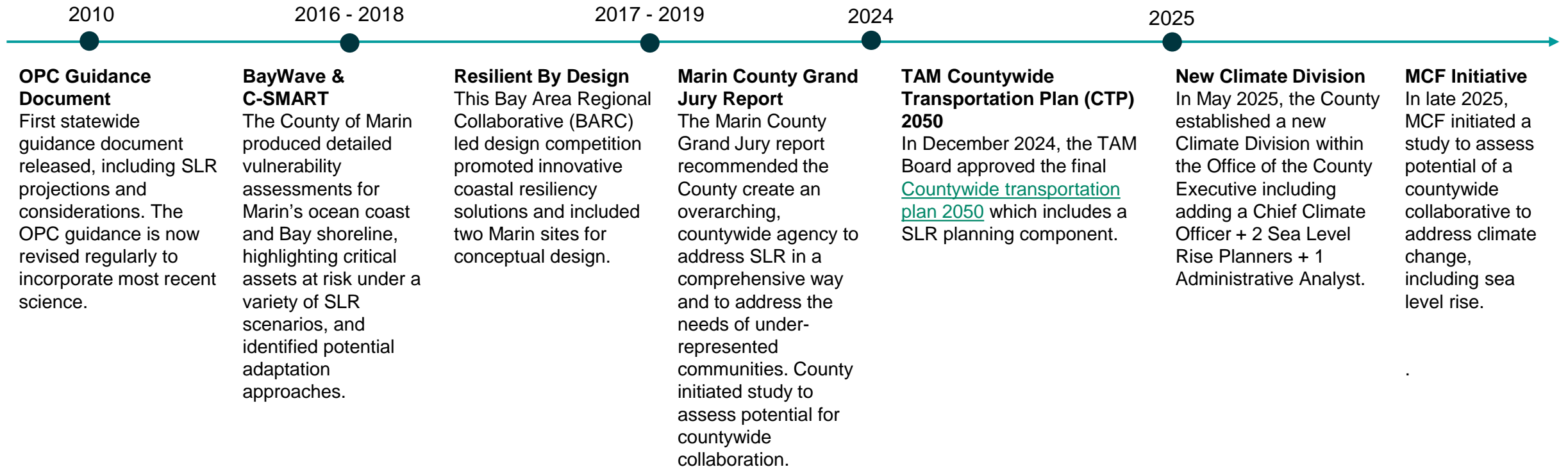
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- January 2026 storm flooding and king tide impacts highlighted ongoing vulnerability
- San Rafael and Marin County were selected as one of 3 regions in California as a pilot for the CA FWD Resilience District Incubator

2. Where Marin Stands Today: Progress, Alignment, Challenges, and Opportunities for SLR Action

Background

Over the last decade, SLR has become a more prominent issue in Marin County, as demonstrated by the following SLR vulnerability assessments and planning activities. Significant regional and county SLR adaptation initiatives have assessed vulnerabilities, identified adaptation approaches, and demonstrated the need for further action to address SLR across the county.



Appendix II provides a more comprehensive, although not exhaustive, overview of SLR-related activities across Marin County.

Review of Existing Plans: Shared Priorities and Differences

Many SLR adaptation plans and studies have been conducted across the county. An assessment of the findings from these prior efforts uncovered **shared priorities, which provide a robust foundation for collaboration. This assessment also uncovered key differences, which are important considerations for further exploration.**

Planning

- 1. Deliver nature-based solutions:** There is a collective interest and significant research effort in identifying and supporting nature-based adaptation opportunities.
- 2. Secure funding and financing:** There is a universal need for more grant writing support through staffing and funding resources to aid in plan development and implementation.
- 3. Coordinate regionally while maintaining local authority:** Many plans and studies emphasize the importance of regional coordination and information sharing while preserving local decision-making and implementation authority.
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Differences

- 1. Localized challenges:** Coastal and bayside areas have unique challenges that need to be addressed in locally responsive ways.
- 2. Differing focus areas:** Different plans/reports have varied focus areas, such as drought, wildfire, extreme heat, tourism, ferry services, historic and archaeological resources, and shifting commuting patterns.
- 3. Inconsistent levels of SLR planning:** Some jurisdictions are more engaged in addressing these issue. Some jurisdictions and agencies have already secured funding and are beginning to implement SLR adaptation projects.
- 4. Different preferences for collaboration and governance authority:** While jurisdictions broadly support regional coordination, many plans and stakeholder discussions reflect a preference to strengthen existing coordination structures and partnerships rather than establish a new formal governance authority.

Review of Existing Plans: Shared Next Steps and Actions

An assessment of existing plans and studies identified shared next steps for SLR adaptation planning and highlights opportunities for interjurisdictional collaboration and coordination.

Next Steps and Actions

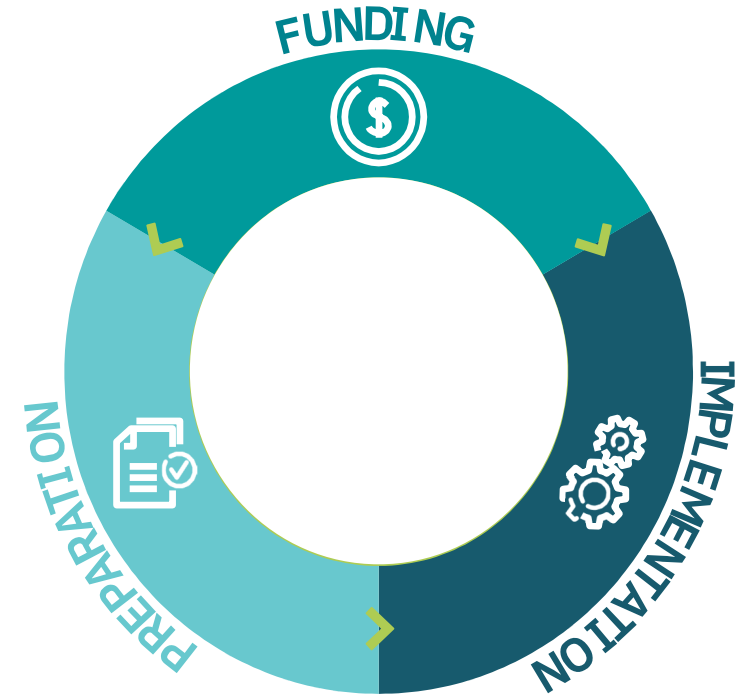
- 1. Develop educational resources and shared technical guidance:** Create guidance documents, planning resources, and educational materials to support jurisdictions and communities preparing for sea level rise impacts.
- 2. Coordinate engagement and strengthen existing partnerships:** Continue community engagement efforts, maintain and enhance multi-jurisdictional coordination and collaboration, and conduct community workshops and city council presentations. Several plans emphasized building upon existing forums, partnerships, and regional coordination structures to improve alignment and information sharing.
- 3. Conduct risk analysis and planning:** Conduct further analysis of risks that inform adaptation studies and planning efforts to address SLR adaptation.
- 4. Develop comprehensive adaptation plans:** Develop adaptation plans that identify specific adaptation strategies to address SLR.
- 5. Establish a Technical Advisory Committee:** Collaborate with other public agencies, jurisdictions, and technical experts to develop climate change adaptation solutions, share best practices, and coordinate across entities.
- 6. Collaborate on long-term strategies:** Work together on long-term shoreline adaptation strategies, transportation resilience, habitat restoration, and multi-jurisdictional projects that cross jurisdictional boundaries.
- 7. Remove barriers to project delivery:** Modify existing codes and ordinances, secure project approvals and funding, and improve grant administration, reporting, compliance tracking, and implementation support capacity, particularly for smaller jurisdictions.
- 8. Implement pilot adaptation projects:** Identify, prioritize, and implement pilot projects to test and refine adaptation strategies before broader implementation. Several plans emphasized phased implementation approaches tied to funding availability, technical feasibility, and community priorities.

Additional details about the landscape of existing studies and plans are provided in Appendix II.

Key Takeaways: Challenges

Stakeholder engagement conducted as part of this Study surfaced challenges to advancing SLR adaptation across Marin County across four interconnected areas, many of which underscore findings from prior studies.

- ➔ **Preparation** - At both the community and agency level, SLR adaptation competes with more immediate priorities. Inconsistent awareness across stakeholders, uncoordinated and duplicative engagement efforts, and the exclusion of frontline communities from past planning processes have slowed progress and left significant gaps in who has a voice in decision-making.
- ➔ **Funding** - Local budgets are insufficient to fund SLR adaptation at the scale required. Agencies currently compete against one another for the same grants, rather than pursuing coordinated strategies. Grant application and post-award management processes are burdensome, particularly for smaller agencies with no dedicated grant-writing staff..
- ➔ **Implementation** - There is no unifying force bringing agencies together to plan and act at scale. Permitting is slow, resource-intensive, and misaligned with infrastructure needs. Responsibility for SLR is often unclear — both within agencies and across jurisdictional lines — leaving projects without clear champions or pathways to completion.
- ➔ **Agency Capacity** - Most municipalities and agencies in Marin are small, with limited staff and technical resources. This constrains their ability to pursue funding, manage complex projects, build the cross-jurisdictional partnerships that effective SLR adaptation requires, and maintain SLR as a consistent priority alongside competing demands.



Challenges: Community Factors

Findings were broadly consistent across jurisdictions, agencies, and organizations. Community-related challenges refer to those that our broadly identified by communities and relate less to agency operations.

Preparation: Community Factors

- 1. Many communities are facing more pressing and immediate challenges** which makes prioritizing and planning for SLR adaptation complex and at odds with the daily challenges being faced.
- 2. The threat of SLR is interconnected with and compounds long-term systemic barriers** including displacement fears, a lack of affordable housing, frontline communities, public health concerns, and underinvestment in communities and infrastructure.
- 3. Communities of color and low-income residents have historically been excluded from climate change conversations** which means their priorities and needs have not been adequately addressed through planning and implementation and may require specific attention in the future.
- 4. Inconsistent levels of understanding among agencies and community members related to the risks of SLR** impacts decision-making and limits support for necessary adaptation measures.
- 5. Uncoordinated and duplicative engagement efforts are overwhelming and resource intensive for communities** which overburdens community members, misses opportunities to address immediate community needs, and slows down realization of tangible benefits.

Challenges: Agency Capacity & Funding

Findings were broadly consistent across jurisdictions, agencies, and organizations.

Agency Capacity

1. **Agencies are small with limited capacity** which limits the ability of individual entities to pursue funding, manage projects, and lead the engagement required to successfully plan for and implement SLR adaptation projects.
2. **Competing priorities and limited resources often delay SLR adaptation efforts** as projects compete with other pressing needs, including housing, transportation, economic development, and other capital improvement priorities.
3. **Municipalities and agencies face logistical challenges in planning for large-scale adaptation projects** including a lack of clearly assigned responsibility to address SLR across departments, jurisdictions, and stakeholder groups.
4. **Permitting and regulatory processes are complex, resource-intensive, and often misaligned with infrastructure needs**, slowing project delivery and creating significant challenges for municipalities, agencies, and communities seeking to advance adaptation projects.
5. **Even small-scale adaptation investments require significant staff time, funding, and coordination**, making progress slow and causing larger-scale investments to appear unattainable.
6. **Many special districts are already faced with deteriorating infrastructure** which makes it challenging to incorporate SLR adaptation into existing maintenance practices and to upgrade plans without additional resources.

Funding

1. **Individual communities, municipalities, and agencies lack sufficient funding capacity** to pay for projects that are not immediately critical which means entities must seek external resources to fund SLR adaptation.
2. **A lack of coordination in pursuing grant opportunities results in municipalities and agencies competing for the same funding** which is inefficient, duplicative, and results in missed opportunities.
3. **Grant applications and post-award management processes are resource intensive and complex** which makes securing funding for SLR adaptation prohibitive for municipalities and agencies, especially for those with constrained resources.
4. **Special districts often compete for the same funding opportunities rather than pursuing coordinated regional strategies**, resulting in missed opportunities and duplication.
5. **Agencies lack in-house grant writing expertise** which limits their ability to secure and manage funding for SLR adaptation projects.

Challenges: Collaboration & Implementation

Findings were broadly consistent across jurisdictions, agencies, and organizations.

Implementation: Alignment Between Agencies

1. **Effective SLR adaptation planning requires strong partnerships** between municipalities and agencies which are challenging to build, require trust between entities and the community, and shared priorities.
2. **A lack of coordinated, multi-jurisdictional SLR adaptation planning results in a project-by-project approach** that does not address the scale of Marin County SLR challenges.
3. **Inconsistent prioritization of or capacity for SLR adaptation** makes planning for SLR adaptation and effective collaboration between municipalities and agencies complicated, thereby hindering progress.
4. **Inconsistent and cumbersome processes slow down progress** especially when preparing larger studies that cross multiple jurisdictions.
5. **The lack of a formal, agreed upon collaboration framework** impacts municipal and agency ability to align priorities and overcome barriers presented by competing interests.
6. **Overlapping jurisdictional boundaries and unclear roles and responsibilities hinder** effective planning for SLR adaptation projects, often leading to inefficiencies and delays.
7. **There lacks a unifying, driving force** that brings municipalities and agencies together to collaborate and plan for and implement SLR adaptation, including establishing consistent approaches and coordinated efforts.

Key Takeaways: Opportunities

Engagement for this Study also surfaced opportunities across three interconnected areas:

- ➔ **Collaboration** – Building collaboration infrastructure between agencies requires clarifying roles and responsibilities, establishing a clear collaboration framework, and identifying a champion agency to lead these coordination efforts to help maintain momentum and ensure sustained progress. This collaboration can be practiced through shared pilot projects, such as SB 272, which builds trust among partners and demonstrates the value of working together. Finally, embedding equity from the outset is critical to addressing systemic barriers and ensuring that vulnerable communities are supported throughout the process.
- ➔ **Funding** – Developing a unified countywide grant strategy can reduce competition among jurisdictions, strengthen applications while advancing equity outcomes, reduce administrative burden, better align investments with shared countywide priorities, and accelerate project delivery timelines and lower overall costs by streamlining the permitting process. Leveraging countywide revenue potential further supports the creation of a more stable and scalable funding base that can sustain long-term initiatives.
- ➔ **Voices (and Knowledge)** - Developing a unified countywide vision and voice can strengthen regional advocacy efforts and increase influence over funding and policy decisions. Increasing awareness and education around sea level rise supports more informed and inclusive decision-making among stakeholders and community members. Building on existing plans and studies (such as SB 272) helps avoid duplication of effort while accelerating implementation of effective strategies and lays the foundation for sustained, long-term partnership.

Key Takeaways: Hesitations

Stakeholders also raised important hesitations that any future collaboration framework will need to address directly:

- ➔ **Uncertainty** - There is uncertainty about establishing a new governance authority before roles, responsibilities, and coordination among existing agencies are clearly defined.
- ➔ **Locality** - A countywide approach must not prevent local agencies from continuing to pursue local-scale work that reflects their specific community needs and priorities.
- ➔ **Regulatory oversight** - Coastal and bayside communities have meaningful differences — in regulatory context, community character, and institutional relationships — and a governance structure that treats them as identical risks losing the local knowledge and trust that effective adaptation depends on.
- ➔ **Readiness** - Awareness of SB 272 and readiness to engage with its requirements varies significantly across agencies, and this gap will need to be addressed before subregional planning can proceed effectively.

West Marin – Challenges and Opportunities

West Marin's coastal communities face a distinct set of SLR challenges from their bayside counterparts — different regulatory oversight (California Coastal Commission vs. BCDC), different economic bases, and a strong tradition of community-led planning. These differences mean that a one-size-fits-all countywide approach may not serve West Marin well. At the same time, West Marin stakeholders expressed clear interest in collaboration — particularly around grant strategy, regulatory navigation, and technical capacity — provided that local autonomy is preserved.

Preparation

1. **The lack of unified SLR adaptation planning across West Marin** results in fragmented efforts, creating inconsistencies in priorities and approaches that can hinder effective regional coordination.
2. **There is uncertainty and hesitation to establish a new governance authority for SLR adaptation** while roles, responsibilities, and coordination among agencies remains unclear, making collaboration and decision-making difficult.

Implementation

1. **Misaligned priorities between federal, state, and county entities** create delays and complicated pathways to implementation of SLR adaptation projects. The absence of a coordinated approach to engage with regulatory agencies leaves local communities without a clear strategy when working with agencies like the California Coastal Commission.
2. **Navigating collaboration and permitting with the County can be challenging** due to a lack of internal alignment, which affects external coordination and community-led adaptation efforts, ultimately impacting the effectiveness of project delivery and SLR adaptation efforts.

Funding

1. **Communities struggle to secure funding for SLR adaptation projects** due to the competing interests of County funds and the competitive grants landscape, leaving West Marin at a risk of getting access to resources specific to coastal communities and ensuring local priorities are represented in countywide funding decisions.

Opportunities

1. **A coordinated grant strategy would enable West Marin to pursue grants independent of bayside activities and provide grant application technical assistance** to help reduce barriers to apply for and secure funding.
2. **Integrating West Marin's skilled technical experts and harnessing community-derived talent into adaptation planning** would strengthen adaptation efforts, enhance local expertise and ensure that planning reflects the unique challenges and opportunities of West Marin.
3. **Stronger coordination with regional, state, and federal regulatory bodies would help align adaptation priorities**, reduce permitting obstacles, and streamline project approval.

3. Case Studies: What We Learned from Peers

Approaches to Multi-jurisdictional Collaboration

Various governance models support multi-jurisdictional collaboration. Each governance model provides differing levels of authority, formation complexity, decision-making ability, and collaborative strengths, which should be considered in the context of the challenge being addressed and the collaboration priorities of partner municipalities and agencies. They serve as models for how collaboration could occur in Marin County.

Governance Model	Definition	Level of Authority	Primary Collaborative Strength
Committee	Multi-entity body formed to focus on a specific task or project, primarily for education and stakeholder collaboration rather than planning or implementation.	Very Low — no independent authority; dependent on approval and direction from the governing bodies of all organizations involved.	Effective for building consensus and aligning communication across governing bodies on a specific issue or project area.
Partnership	Informal agreement between local government agencies to collaborate toward a common goal, without independent authority to finance or implement projects.	Low — no independent taxing or implementation authority; relies entirely on the powers of participating member agencies.	Flexible and easy to establish; well-suited for coordination, information-sharing, and early-stage collaboration across agencies.
Special District	Independent local government entity created to deliver a specific service (e.g., water, fire, sanitation) within a defined geographic boundary.	High — can levy special taxes (with 2/3 voter approval), issue bonds, and enforce regulations within its service area.	Purpose-built governance for a single service area enables focused, community-responsive delivery within defined boundaries.
Climate Resilience District (CRD)	A new type of principal act special district designed to address climate resilience and adaptation through cross-jurisdictional collaboration.	High — can raise revenue via Tax Increment Financing (TIF), bonds, special taxes, and service charges exclusively for climate-focused projects.	Purpose-built for climate adaptation with access to unique financing tools (e.g., TIFs) not typically available to standard special districts.
Joint Powers Authority (JPA)	Formal legal agreement between two or more public agencies to jointly exercise common powers, share resources, and implement programs.	High — inherits the authority of member agencies; can issue revenue bonds, hold property, and enforce regulations without voter approval.	Flexible and relatively easy to form; pools member agency expertise and resources to advance shared goals across jurisdictions.
State Multi-Jurisdictional Agency	State-created authority or agency with a broad mandate, ranging from regional bodies to state agencies focused on a specific topic area.	Very High — broad state-granted authority; may leverage funding, issue bonds, and implement plans across jurisdictions.	State-backed mandate supports coordination across multiple jurisdictions at a regional or statewide scale.

Additional details about collaborative governance models are available in Appendix III.

Key Themes from Case Study Research

To understand the benefits, challenges, and lessons learned from other collaborative governance models, case study research was conducted on 12 governance models. Key themes are outlined below.

1: Impactful Collaboration

1. Cross-boundary coordination enables funding and project delivery at a scale individual jurisdictions cannot achieve alone.
2. Early, visible project delivery is the most reliable measure of impact, building credibility and momentum for continued action.

2: Purpose of Collaboration

1. Shared risk brings jurisdictions together, but sustained participation depends on clear, tangible benefits.
2. Most regional efforts begin as coordination and convening bodies, rather than implementation authorities, focused on building alignment, trust, and a durable coalition over time.

3: Process for Collaboration

1. Catalysts for collaboration, such as urgent events or strong champions, are typically required to initiate regional efforts, providing the momentum needed to bring jurisdictions together.
2. Alignment at the staff and city manager level is foundational, followed by board member buy-in.

4: Roles & Responsibilities

1. Board composition is a critical (and contentious) design decision.
2. Layered committee structures distribute governance effectively.
3. Shared staffing across organizations is a viable and proven early-age solution to improve efficiencies.

Additional about the case studies are available in Appendix IV.

Key Themes from Case Study Research

To understand the benefits, challenges, and lessons learned from other collaborative governance models, case study research was conducted on 12 governance models. Key themes are outlined below.*

5: Resourcing

1. A single source of funding is a vulnerability, which is why layered funding is the industry norm.
2. Parcel taxes are the most proven local independent revenue.
3. A governance model can be established before dedicated funding is in place.

6: Value-Drive Participation

1. Funding access (e.g. grant eligibility, pooled revenues) is the single strongest participation incentive.
2. Technical support (e.g. shared data, coordinated permitting) is a meaningful secondary initiative.
3. Preserving local autonomy is a condition of participation.

7: Building Trust

1. Small, visible wins are the most reliable trust-building tool.
2. Formal governance should follow demonstrated effectiveness, not precede it.
3. Stakeholder readiness varies and must be assessed honestly.

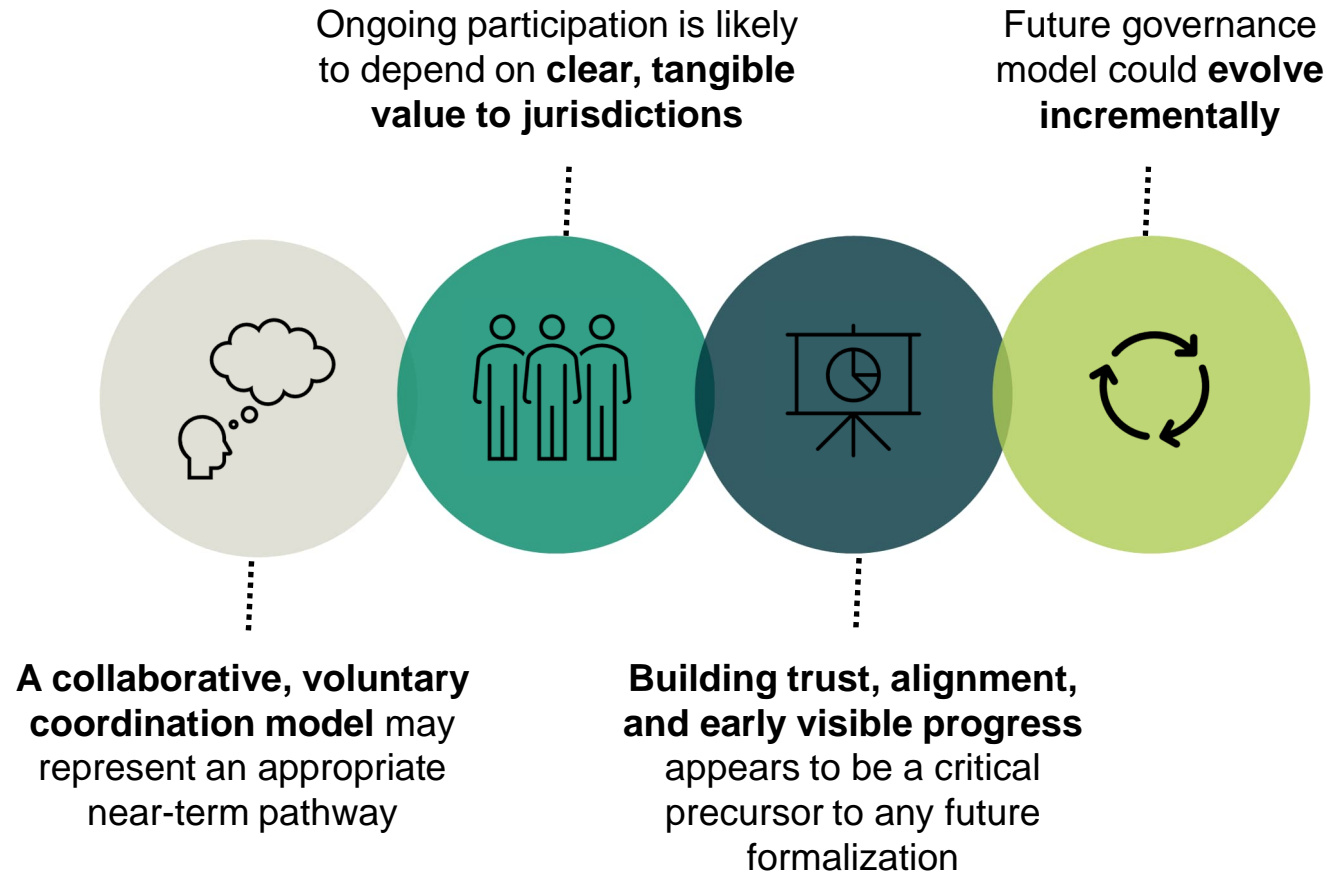
8: Evolving Governance

1. Informal and semi-structured mechanisms are proven first steps.
2. Build flexibility in from the start.
3. Formalization should be tied to concrete triggers, not fixed timelines.
4. The formation-era steering committee and the future governing board serve distinct functions.

Additional about the case studies are available in Appendix IV.

Key Considerations for Collaboration in Marin

Based on engagement findings, the case study research illuminates the following key considerations for Marin's approach to SLR collaboration



5. Funding & Financing Sea Level Rise Adaptation

Funding & Financing SLR Adaptation

Marin County's estimated \$17B+ sea level rise adaptation need will require coordinated regional funding and financing strategies that combine local revenue, grants, debt financing, and implementation partnerships. As project costs increase from planning to implementation, financing needs become significantly larger and more complex.

This section summarizes key findings from the governance research and case study analysis, highlighting key takeaways from comparable regional entities.

While this research helps identify what is possible and provides guidance on potential next steps, significant additional analysis and planning would be needed to evaluate financing structures capable of addressing Marin County's estimated \$17B+ sea level rise adaptation need.

Key Considerations

- 1 Think regionally.** Multi-jurisdictional models attract state and federal dollars single-county efforts cannot.
- 2 Bigger body = bigger capacity.** Scale your taxing geography to your ambition.
- 3 Start with a dedicated source.** Even modest revenue unlocks authority and credibility.
- 4 Leverage bridge capital.** Philanthropic funding seeds the early work.
- 5 Deliver early.** A visible project is the best campaign tool for future revenue.
- 6 Govern and fund in parallel.** Design both together, not in sequence.

Benefits of Collaborative Governance

Governance and financing strategies are closely interconnected. The type of governance entity influences access to revenue tools, bonding authority, grant eligibility, and long-term implementation capacity. Long-term SLR adaptation will require governance models that align financing authority, implementation capacity, and regional coordination.

Governance and Financing Must Be Developed Together

- 1. Governance and financing decisions should be developed in parallel, not sequentially,** to avoid limiting future funding authority and implementation capacity. Research and case studies consistently show that governance models developed separately from funding strategies can require significant restructuring later. Governance type and financing strategy should be treated as a coordinated, parallel decision-making process.
- 2. The type of governance entity, such as a JPA, special district, or Climate Resilience District,** influences eligibility for larger grant opportunities, access to revenue tools, bonding authority, and long-term implementation capacity.
- 3. Governance, funding authority, and implementation responsibilities should be considered early** to avoid future legal, financial, and implementation obstacles.
- 4. Early project delivery and coordinated funding strategies help build public trust, grant competitiveness, and long-term financing credibility.** Successful governance entities delivering capital projects consistently relied on predictable local revenue sources to support staffing, implementation, and long-term operational capacity.
- 5. Upfront investment from agencies or local foundations can help catalyze early successes** through support for pre-development work, partnership building, and community-backed implementation efforts.

Options for Generating Local Revenue

- 1. Countywide and multi-jurisdictional revenue mechanisms can generate significantly greater revenue and bonding capacity** than individual jurisdictions acting alone. Regional approaches may better align with the scale of Marin's shared shoreline risks and infrastructure needs.
- 2. Parcel taxes can provide stable, long-term implementation funding** as a predictable local revenue source that can support long-term adaptation planning, implementation, and grant matching. Successful measures typically require sustained political coordination, coalition-building, and demonstrated project benefits.
- 3. Assessment and Benefit Districts can target high-risk shoreline areas** by allowing funding responsibilities to be tied to properties receiving a direct benefit from adaptation infrastructure, making them well-suited for geographically targeted shoreline projects.
- 4. EIFDs may support long-term capital investment strategies** by capturing future tax increment to fund public infrastructure without requiring voter approval, offering a potential tool for phased, large-scale adaptation investments.
- 5. Member agency dues and contributions are commonly used to fund staff capacity,** coordination activities, grant matching, and early-stage implementation support. While insufficient alone for major capital projects, they are foundational for sustaining collaborative governance efforts.

Coordinated Grant Strategy

Coordinated grant strategies can improve competitiveness, reduce duplication, and strengthen implementation capacity across Marin County. Given the scale of investment required for SLR adaptation, collaboration is essential to achieve outcomes no single jurisdiction can deliver alone.

Why Multi-Jurisdictional Grant Applications Win

- 1. Multi-jurisdictional coordination is increasingly prioritized:** The type of governance entity (e.g., JPA, special district, or Climate Resilience District) shapes access to revenue tools, grant eligibility, and the ability to issue bonds. At the same time, state and federal funding programs increasingly favor regional partnerships and demonstrated coordination across jurisdictions.
- 2. County-level applications may qualify for larger funding allocations:** Programs such as SB 1 and other resilience funding opportunities may provide higher funding caps to county-led or multi-jurisdictional applications than to individual jurisdictions.
- 3. Coordinated strategies can reduce intra-county competition:** Regional coordination can reduce overlap between jurisdictions pursuing the same limited funding opportunities and strengthen overall competitiveness.
- 4. Shared grant support can improve implementation capacity:** Shared grant writing, reporting, compliance tracking, and administration support can reduce staffing burdens, particularly for smaller jurisdictions.

Building a Coordinated Grant Strategy

- 1. Coordinate application timing and project prioritization:** Align regional priorities and grant pursuits across jurisdictions to strengthen competitiveness and reduce duplication.
- 2. Maintain a centralized funding calendar and grant pipeline:** Track grant deadlines, eligibility requirements, funding opportunities, and application status across jurisdictions through a shared coordination system.
- 3. Align project sequencing across jurisdictions:** Coordinate shoreline, transportation, habitat restoration, and infrastructure projects to improve competitiveness for large-scale funding opportunities.
- 4. Jurisdictions identify priorities while the County supports coordination:** Local jurisdictions identify adaptation priorities while a county-level effort supports funding identification, grant strategy, and shared implementation support.

Catalyzing Early Implementation and Investment

Addressing Marin’s long-term SLR adaptation needs will require coordinated public, private, and philanthropic investment strategies.

The Marin Community Foundation (MCF) represents a unique regional partner that can help catalyze early implementation and demonstrate visible early successes that build public trust, strengthen regional momentum, and position Marin for larger-scale public investment. Philanthropic capital can move faster than public funding, support early-stage project risk, and fund pre-development activities, including community engagement, feasibility analysis, and governance development, that public agencies often lack the capacity to prioritize.

Benefits of Early Investment

- Fund pre-development work that positions Marin for competitive grant applications
- Build community trust and stakeholder buy-in, which may support later fundraising efforts
- Serve as co-investor or guarantor in early project delivery
- Signal to federal/state partners that Marin's effort has strong community backing.

7. Recommendations

What We Heard

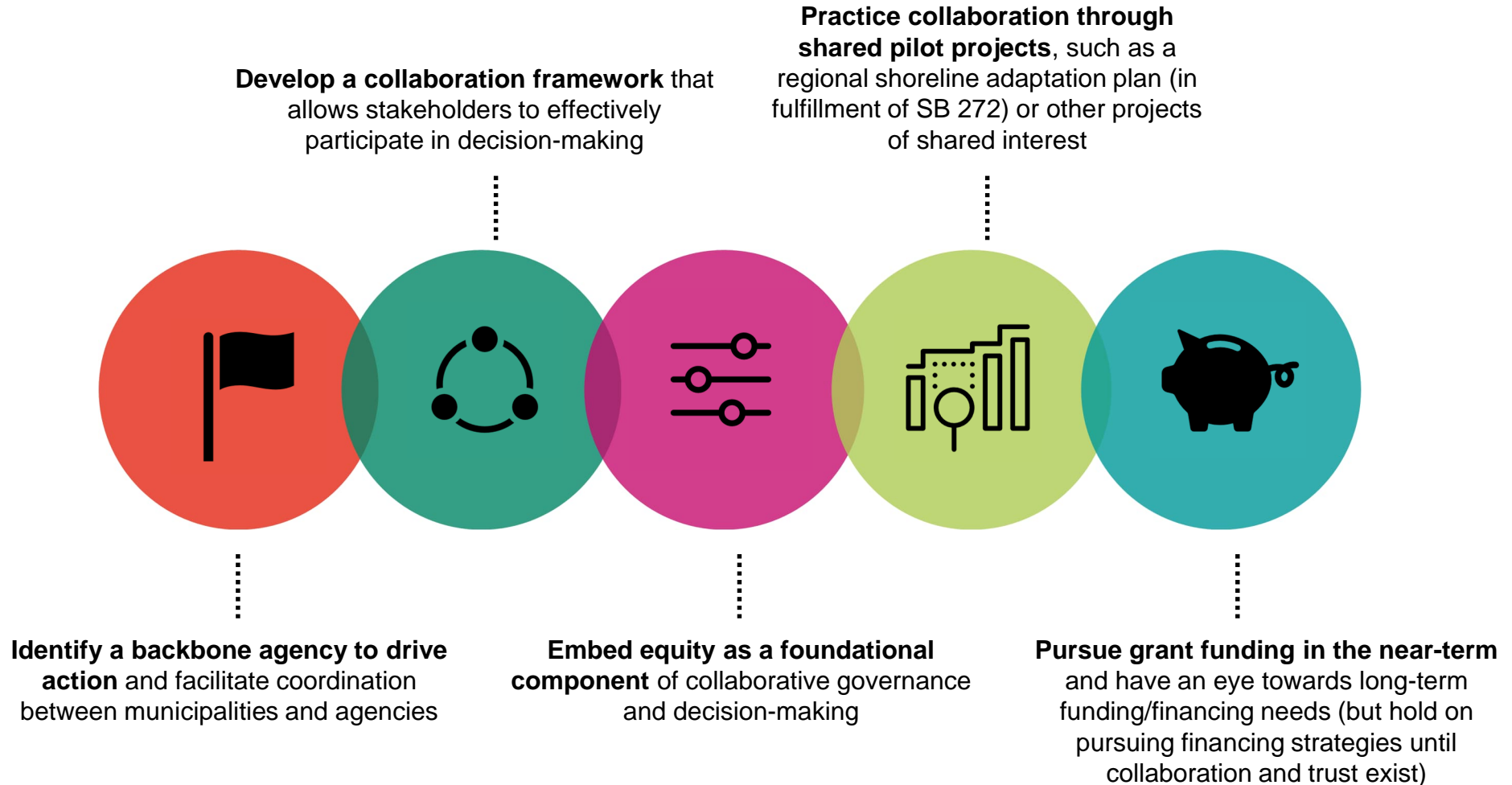
Overall, there is significant appetite for collaboration and there is a shared understanding of the outsize impacts that collaboration can have in making progress on SLR adaptation in Marin County. The success of collaboration will be determined by a shared vision, mutual trust, and early successes.

What does the county want to achieve together?

1. **Develop a shared vision and principles** that guide long-term SLR adaptation planning, prioritization, and near-term implementation actions.
2. **Advance projects of shared regional importance**, particularly projects protecting transportation corridors, utilities, shoreline infrastructure, and vulnerable communities.
3. **Coordinate funding and financing strategies** to support cost-sharing, coordinated grant pursuits, long-term revenue strategies, and reduced administrative burdens on local jurisdictions.
4. **Develop a unified approach to regulatory coordination and permitting** to streamline project delivery, reduce uncertainty, and support implementation across jurisdictions.
5. **Coordinate community engagement and education efforts** that align with local priorities, strengthen trust, and support inclusive participation in adaptation planning.
6. **Advance collaborative pilot projects and early implementation actions** to demonstrate progress, refine coordination, and build momentum for future funding efforts.
7. **Develop the business case for SLR adaptation investments** by demonstrating economic, infrastructure, and community benefits that support long-term funding and financing strategies.

Recommendations for Strengthening Collaboration

Research and engagement indicates that designing a formal collaborative governance authority today would be premature: investment in a shared vision, trust building, and pilot projects are needed to test collaboration and build the buy-in needed for sustained engagement. An incremental approach is recommended, with the following key objectives.



County Climate Office as the Backbone Agency

Since this Study kicked off, Marin County has developed a Climate Office, which sits within the County Executive's Office. The new Climate Office can be leveraged as an organizing, momentum-building force to support longer-term collaboration - a backbone agency.

Role of the County Climate Office

- 1. Position the County Climate Office as the countywide coordination backbone organization** responsible for convening BayWAVE, expanded collaborative meetings, RSAP working groups, and project-specific coordination efforts.
- 2. Develop a shared collaboration framework and decision-making principles** supported by clear metrics, equity considerations, and alignment of countywide priorities and projects.
- 3. Lead a coordinated countywide grant strategy** by aligning projects with funding opportunities, coordinating multi-jurisdictional applications, and sequencing projects to improve competitiveness and reduce duplication.
- 4. Provide technical assistance and implementation support** related to grant administration, compliance tracking, permitting coordination, and project delivery, particularly for smaller jurisdictions with limited staffing capacity.
- 5. Establish a flexible Technical Advisory Committee (TAC) structure** to support shared planning, technical coordination, and implementation across jurisdictions, such as through RSAP development.
- 6. Explore co-location and shared working opportunities** to support collaboration between jurisdictional staff and create shared working sessions tied to funding deadlines and project development efforts.
- 7. Strengthen partnership opportunities with Marin Community Foundation (MCF)** to support early implementation efforts, pilot projects, pre-development activities, and community engagement.

Roadmap

An incremental approach to formal collaborative governance to support SLR adaptation should achieve the following steps, particularly in the near- and mid-terms. Agreements to continue to collaborate and the structure of that collaboration should be determined in Phase 2.



Pursue Grant Funding & Pilot Projects

Identify near-term funding opportunities, including grants and philanthropic investment, for projects and efforts of shared interest. Develop working committees to advance these efforts and advance long-term collaboration opportunities.



Implement Pilot Projects

Leverage working committees to test collaboration and identify lessons learned.



Low trust & collaboration

High trust & collaboration



Launch Climate Office & Backbone Agency, Align on Vision

Build on prior collaborative efforts (BayWAVE, this Study's Steering Committee, etc) and formalize vision for collaboration and near-term collective goals.



Invest in Broader Coordination Needs

Including sustained community engagement and education, coordinated approach to regulatory agency and funding agency engagement.



Formalize

Formalize coordinated approaches to project sequencing, permitting, and implementation. Evaluate readiness for formalized governance authority and funding/financing strategy.

Appendix

Appendix I

Regional Landscape of Sea Level Rise Adaptation Efforts

Factors Driving Collaboration: Regulatory

Different regulatory requirements have resulted in collaboration or encouraged collaborative efforts.

Coastal and bayshore plan requirements

The SB 272: Regional Shoreline Adaptation Plan requires all municipalities within BCDC's Bay Area jurisdiction to develop strategies and identify projects addressing future SLR by 2034. This mandate promotes a standardized, coordinated approach to reduce inconsistencies across existing SLR planning efforts.

Complex permitting requirements and overlapping authority

Some permitting requirements give multiple agencies authority over the same project, requiring coordination to define roles and responsibilities. Projects involving Bay fill, sediment reuse, and nature-based solutions face significant regulatory complexity. The Bay Restoration Regulatory Integration Team (BRRIT) provides regional permitting support, though eligibility is currently limited to SFBRA-funded restoration projects. Expanded collaboration could extend the BRRIT model to support all SLR projects.

Preference to strengthen existing structures before creating new authority

Stakeholder engagement highlighted a preference to strengthen and build upon existing coordination structures and partnerships before establishing a new formal governance authority, emphasizing the importance of identifying the need of any new structures created over leveraging existing ones

Need to align across various regional plans and policies

In addition to meeting regulatory requirements, projects must be aligned with the goals and objectives of multiple regional and local plans, including Plan Bay Area 2050 (MTC/ABAG), San Francisco Bay Plan (BCDC), Estuary Blueprint (SFEP), SF Bay Water Board plan, Sea Level Rise Adaptation Funding and Investment Framework (BCDC and MTC/ABAG), and Regional Shoreline Adaptation Plan (BCDC).

Existing coordination efforts provide a strong foundation for collaboration

Existing coordination efforts, including BayWAVE, provide a long-standing foundation for countywide collaboration and information sharing related to SLR adaptation planning, funding, and implementation. These existing efforts could support relationship-building, coordination, peer learning, and jurisdictional alignment.

Factors Driving Collaboration: Funding and Implementation

Complex funding and implementation requirements can drive more collaboration among agencies, municipalities, and Tribal nations.

High-level of funding needs

SLR projects are costly, with an estimated \$15 billion in project costs for Marin County through 2050 and \$76 to \$152 billion across the Bay Area region, according to analysis from MTC's Sea Level Rise Adaptation Funding and Investment Framework. Collaboration can support more competitive, region-wide funding applications while minimizing competition between Bay area jurisdictions.

Grant funding landscape

Federal, state, and local adaptation funding programs all have specific requirements, criteria, contracting processes, and timelines. There are limited funding opportunities (mainly through the SBRA and SCC) which creates high demand for grants, necessitating collaboration between agencies.

Complexity of nature-based solution projects

Nature-based solutions require collaborative planning and across technical fields to navigate limited guidance, few example projects, permitting and engineering design criteria complexities. The SCC is developing the Regionally Advancing Living Shorelines projects - 10 pilots that will provide a model and framework for collaborative planning and permitting nature-based solution projects.

Need for multi-benefit projects

Limited funding means the most competitive projects will address multiple benefits and goals, which will require a high level of collaboration with organizations across multiple sectors and subject areas (e.g., recreation, transportation, ecosystems) to plan and implement.

Cross-jurisdiction projects

Many effective SLR adaptation strategies will likely be implemented outside of their right-of-way because the Bay Area's infrastructure networks span multiple jurisdictions. Resilient SR-37 started as a MOU between county transportation authorities (e.g. Caltrans, MTC) and grew to include State agencies, Tribes, and environmental agencies when it became clear effective solutions would not happen in silo.

Key Agencies and Roles

The regulatory landscape in Marin County is complex, with multiple federal, state, and local agencies in charge of creating, shaping, and implementing policies related to SLR. Multiple agencies have authority on the Bay side, the California Coastal Commission has regulatory authority over land use in the coastal zone, and other agencies have regulatory authority over certain areas on both sides (e.g., water quality or habitat protection).

Agencies with Regulatory Authority

- 1. San Francisco BCDC:** BCDC has regional authority over the Bay, the Bay's shoreline band and the Suisun Marsh. Its mission is to protect these areas for future generations and address the impacts of SLR on our communities (*Bay side*).
- 2. California Coastal Commission (CCC):** The CCC plans and regulates the use of land and water in the coastal zone, including new construction, divisions of land, and activities that change land use or public access to coastal waters (*coastal side*).
- 3. San Francisco Bay Regional Water Quality Control Board:** The Water Board is a state agency whose mandate is to protect water quality in the San Francisco Bay Area. To accomplish this, the Water Board regulates discharge of dredge and fill materials, wastewater, and stormwater (*both sides*).
- 4. United States Army Corps of Engineers San Francisco District (USACE):** USACE San Francisco aims to protect and maintain the navigable capacity of the nation's waters by 1) provide safe and reliable waterborne transportation systems for the movement of commerce, national security, and recreation; 2) issuing permits for discharge of dredged or fill material; 3) own and operate recreation sites (*both sides*).
- 5. Environmental Protection Agency (EPA) Region 9:** Enforces federal environmental laws in Arizona, California, Nevada, the Pacific Islands, and 148 Tribal Nations (*both sides*).
- 6. US Fish and Wildlife Service:** Conserve, protect, and enhance fish and wildlife and their habitats in the public trust (*both sides*).
- 7. California Department of Fish and Wildlife:** Manages diverse fish, wildlife, and plant resources and habitats to enhance and protect ecological value in California (*both sides*).
- 8. Department of Toxic Substance Control (DTSC):** Protect public health and the environment from harmful toxic substances through hazardous waste management, toxic site cleanup and remediation, enforcing permits and compliance for facilities that handle hazardous waste, and conducting inspections to prevent illegal disposal (*both sides*).
- 9. Greater Farallones National Marine Sanctuary (GFNMS):** GFNMS covers much of the West Marin coastline, including Tomales Bay and Bolinas Bay, extending to the mean high water line. The Sanctuary would play a regulatory and permitting role for living shorelines and other adaptation projects within Sanctuary boundaries. Sanctuary working groups have also explored native oyster restoration strategies which has implications for living shoreline solutions (*coastal side*).

Key Agencies and Roles

Local and state agencies with implementation authority are charged with executing and enforcing the regulations set by regulatory agencies to ensure day-to-day compliance.

Agencies with Implementation Roles

1. **State Coastal Conservancy (SCC):** A non-regulatory state agency that supports projects to protect coastal resources and increase opportunities for the public to enjoy the coast.
2. **Metropolitan Transportation Planning Commission (MTC)/ Association of Bay Area Governments (ABAG):** MTC is the transportation planning, financing and coordinating agency for the Bay Area, supporting streets, roads, highways, transit systems and other transportation resources. ABAG was created by local governments to meet planning and research needs related to land use, environmental and water resource protection, disaster resilience, energy efficiency and hazardous waste mitigation and provide financial services to local counties, cities, and towns.
3. **Bay Area Regional Collaborative (BARC):** A consortium of regional and regionally oriented state agencies working together to address shared challenges in the San Francisco Bay Area. Members include ABAG, MTC, the Bay Area Air Quality Management District (BAAQMD), BCDC, Caltrans District 4, SF Bay Water Board, and the SCC.
4. **San Francisco Estuary Partnership (SFEP):** A non-regulatory program of the EPA that convenes agencies and organizations in the region to facilitate collaboration and funding for projects that will protect and restore water quality and ecological integrity of the San Francisco Estuary and its watersheds.
5. **San Francisco Joint Venture:** A partnership of over 100 organizations that aims to protect, restore, and enhance habitats in the Bay.
6. **San Francisco Bay Restoration Authority:** A regional agency created to administer and oversee projects funded by Measure AA, a 20-year, \$12 parcel tax to raise \$25 million annually for restoration projects in the Bay.



Belvedere, Marin County

Key Regional Resources

SLR and coastal flooding have long been the focus of Bay Area agencies. BCDC has spearheaded project and program organization to identify and develop resources, data, and tools for local agencies to better understand and address SLR challenges.

Adapting to Rising Tides (ART)

BCDC's **Adapting to Rising Tides (ART)** program provides staff support, guidance, tools, and information to help agencies and organizations conduct local SLR vulnerability assessments and resilience studies, including common SLR flood data for the Bay Area. The ART platform includes an easy-to-use tool for visualizing and downloading data (ART Flood Explorer) and findings by sector (e.g., business and industry, hazardous materials) and issue (e.g., governance, groundwater rise, social equity). ART Bay Area is the first regional comparison of the impacts of SLR, evaluating the impacts of SLR on transportation networks, vulnerable communities, future growth areas, and natural lands.

The success of ART inspired the creation of the **Bay Adapt Joint Platform** in 2021, BCDC's regional framework for addressing sea level rise, setting out guiding principles and priority actions to adapt to climate change. It is endorsed by over 50 local, state, and federal agencies and non-profit organizations and provides the Bay Area with a roadmap for how to work across scales, jurisdictional lines, and authorities to adapt better, faster and more equitably.

Regional System Assessment for Adapting to Climate Change

In 2023 BARC led an assessment to lay the foundation for BARC and its member agencies to explore their respective roles in advancing adaptation through coordinated planning and technical assistance.

Bay Adapt

Through Bay Adapt, BCDC is shifting its focus from vulnerability assessments to adaptation planning. Bay Adapt recommended and was the impetus behind Senate Bill No. 272 (SB 272), passed in 2023, which requires BCDC to develop a **Regional Shoreline Adaptation Plan (RSAP)** and requires all municipalities along the Bay shoreline to develop local shoreline adaptation plans within their jurisdiction by 2034. The RSAP is a regulatory extension of SB 272 that provides information, tools, and instructions to guide the development of coordinated local sea level rise adaptation actions that meet regional goals.

Measure AA Funded-Restoration Projects

Since Measure AA was passed nearly a decade ago, SFBRA has authorized more than \$159 million for over 40 restoration projects across the Bay Area's nine counties. The SCC and SFEP staff and coordinate the SFBRA.

Water Resources Development Act

Most recently, the Water Resources Development Act of 2024 (WRDA), signed on January 4, 2025, authorized and instructed the USACE to conduct a study of measures to adapt to rising sea levels in the Bay Area. The **San Francisco Bay Sea Level Rise Study** is contingent on federal funding. If funding is secured, the study will assess the impacts of SLR, with a focus on economically disadvantaged communities, vulnerable infrastructure, and nature-based strategies. It will also assess measures to adapt to SLR.

Tracking SLR adaptation projects and funding

In 2024, MTC and BARC led the creation of the Shoreline Adaptation Project Map (SAPMap) hosted on EcoAtlas, which spatially tracks adaptation projects. The SAPMap will be critical in the implementation of actions called for in Bay Adapt. BCDC partnered with MTC/ABAG on the ART Sea Level Rise Adaptation Funding and Investment Framework.

Appendix II

Inventory of Existing SLR Adaptation Plans and Studies by Operational Landscape Unit

Existing SLR Adaptation Plans and Studies

Many SLR adaptation plans and studies have been conducted across the county's OLU and countywide. This Appendix provides a summary of representative plans and studies organized by Operational Landscape Unity. Note that this summary is not exhaustive.

What is an Operational Landscape Unit?

The 2019 San Francisco Estuary Institute (SFEI) produced Adaptation Atlas which identified thirty Operational Landscape Units (OLUs) around the Bay and outlined adaptation opportunities for each OLU. SFEI defines OLU as distinct areas characterized by their shared physical features, such as watersheds and tidal wetlands that support a coherent suite of ecosystem functions. The use of OLU supports climate adaptation strategy development by pairing landscape characteristics with adaptation measures. SFEI identified five distinct Bayshore OLU: Richardson, Corte Madera, San Rafael, Galinas, and Novato.

Novato OLU

1. **Resilient 37** – A Caltrans project to raise the low elevation sections of State Route 37 (SR-37) in Marin on a causeway.
2. **Novato Baylands Restoration** – The Marin County FCD is working on restoring Deer Island Basin to provide extensive habitat areas and flood control benefits.
3. **Bel Marin Keys Flood Protection Efforts**
4. implemented approximately four miles of levee improvements supported through bond financing and grant funding. The effort included extensive community engagement and demonstrated early local support for adaptation, though long-term coordination and momentum remained ongoing challenges.

Richardson OLU

Sausalito SLR Task Force + Shoreline Adaptation Plan – A task force to address the unique challenges of addressing SLR and coordinate adaptation efforts across Richardson Bay.

Marin City Stormwater Plan + Pond Flood Reduction Project – The Marin County Flood Control District (FCD) is working with the Marin City community and California Department of Transportation (Caltrans) to address recurrent flooding.

U.S. Highway 101, State Route 1 Sea-Level Rise Project – A Caltrans study to address flooding and SLR impacts from the Manzanita interchange to Marin City.

Mill Valley Coastal Flooding Adaptation Project – An OPC grant was awarded to develop an adaptation plan informed by existing data on vulnerabilities and community engagement.

Tiburon General Plan – Includes a chapter on SLR resilience that identifies vulnerabilities and potential adaptation methods.

Sausalito Gate 5 Area Drainage Management Study – The City of Sausalito completed the Gate 5 Area Drainage Management Study to evaluate flooding challenges, drainage improvements, and adaptation strategies for vulnerable shoreline infrastructure and properties.

Existing SLR Adaptation Plans and Studies

Corte Madera OLU

1. **Corte Madera Climate Adaptation Assessment** – Identifies vulnerable areas, resilience project concepts, and policies to promote resiliency. The assessment identifies the need for alignment on SLR projections and priorities when planning for restoration projects.
2. **Larkspur General Plan and Climate Action Forum** – Larkspur is currently in the process of launching a Climate Action Forum to help raise awareness on climate change issues and discuss potential actions to address hazards and vulnerabilities.

San Rafael OLU

1. **San Rafael SLR Collaborative Outreach Efforts** – The Canal Community Resilience Planning Project explores the feasibility of different adaptation actions and preferred alternatives.
2. **Canal Priority Development Area planning** – San Rafael advances Canal neighborhood development, balancing housing and adaptation needs.
3. **San Rafael Community-Informed SLR Technical Feasibility Study** – San Rafael completed a community-informed technical feasibility study evaluating sea level rise adaptation alternatives and implementation considerations within vulnerable shoreline areas.

West Marin OLU

1. **Stinson Adaptation and Resilience Collaboration (ARC)** – County-led project to engage the community, evaluate the feasibility of adaptation opportunities, and identify thresholds to trigger specific adaptation actions.
2. **Tomales Bay Living Shorelines project, Tomales Bay Bulkhead Vulnerability Assessment** – Studies to identify adaptation opportunities in Tomales Bay and shoreline vulnerabilities in East Shore.
3. **Local Coastal Program (LCP) Environmental Hazards Update** – Update to the Coastal Hazards section of LCP to shape adaptation opportunities on a parcel-by-parcel level.

Gallinas OLU

1. **Santa Venetia Floodwall Project** – The Marin County FCD's Santa Venetia Floodwall project addresses the intersecting challenges of subsidence of development on former marshlands, stormwater management, and SLR.
2. **China Camp Feasibility Study** – Led by Marin County Parks to evaluate the feasibility of improvements to reduce high tide roadway flooding.

Existing SLR Adaptation Plans and Studies

Countywide Efforts

- 1. SLR Adaptation of Marin County's Transportation System** – This Transportation Authority of Marin study included a detailed analysis of SLR impacts to assets within 19 focus areas.
- 2. Multi-jurisdictional Hazard Mitigation Plan** – A 2023 update to identify uniquely vulnerable areas and include mitigation actions to address erosion and flooding.
- 3. Race Equity Action Plan** – Developed by the County to guide racial equity in Marin County.
- 4. North Bay Water Reuse Authority (NBWRA)** – NBWRA is integrating SLR adaptation into regional climate resilience planning across Marin, Sonoma, and Napa counties. Efforts include protecting vulnerable water infrastructure, coordinating regional resilience planning, and supporting habitat restoration and nature-based adaptation projects.
- 5. Transportation Authority of Marin (TAM) Countywide Transportation Plan 2050** — TAM completed its Countywide Transportation Plan 2050, which incorporates sea level rise adaptation and resilience considerations into long-term transportation planning and investment priorities.
- 6. CA FWD Resilience District Incubator Pilot** — San Rafael and Marin County were selected as one of three pilot regions statewide for the California Forward Resilience District Incubator, supporting exploration of regional governance and financing approaches for climate resilience implementation.

Existing Collaborations in Marin County

The study draws upon lessons learned from collaboration frameworks tackling complex, cross-boundary issues already in place in the county. These existing collaborative efforts reflect distinct and effective structural models, from County-led initiatives such as the Measure W Working Group to JPAs like Marin Wildfire Protection Authority.

Marin Wildfire Joint Protection Authority

Governance Type: Joint Powers Authority.

Membership: 17 agencies throughout Marin County, including fire districts.

Function: Coordinates county-wide wildfire prevention and preparedness efforts.

Funding: Measure C parcel tax.

Transportation Authority of Marin

Governance Type: Joint Powers Authority.

Membership: 11 cities and towns and the County of Marin County.

Function: Plans and funds transportation projects within Marin County.

Funding: Administers funds from local sales tax measures, vehicle registration fees, and other funds.

Measure W Working Group

Governance Type: Resident advisory working group established by Marin County.

Membership: Volunteers that live and/or work in West Marin.

Function: Oversees the implementation of Measure W, guides funding prioritization to reflect community housing need.

Funding: While Measure W is a Transient Occupancy Tax (TOT) that funds projects, the group is volunteer based.

BayWave

Governance Type: Collaborative initiative led by Marin County.

Membership: Marin County departments, local municipalities, and community organizations.

Function: Addresses sea level rise vulnerabilities along Marin County's bay shoreline.

Funding: County of Marin.

Appendix III

Governance Structures

Delivering a better world



Summary of Governance Structure Components

Category	Joint Powers Authorities	Special Districts						
		A district must be classified as either dependent or independent, and as either enterprise or non-enterprise.						
		Independent	Dependent	Enterprise	Non-Enterprise	Climate Resilience District	Geologic Hazard Abatement Districts	
Authority	<p>A Joint Powers Agreement allows two or more public agencies to jointly exercise a common power, while a Joint Powers Authority (JPA) creates a separate legal entity based on that agreement. A JPA's service can be any common powers of the members used to facilitate cooperative efforts among member agencies. Any agencies can come together to form a JPA. California's Joint Exercise of Powers Act authorizes two kinds of JPA arrangements:</p> <ul style="list-style-type: none"> The first allows two or more public agencies to contract to jointly exercise common powers. The second allows two or more public agencies to form a separate legal entity. This new entity has independent legal rights, including the ability to enter into contracts, hold property and sue or be sued. <p>Its key legal authorities include jointly performing services of member agencies, forming a separate legal entity, issuing revenue bonds, and pooling funds and risk management.</p>	<p>Special districts' powers are granted and overseen by the state of California. Special districts may be created by a Local Agency Formation Commission (LAFCO) to provide one or more specific services to a community. California has nearly 3,300 special districts. They deliver only the services the public wants and is willing to pay for. Examples include fire protection districts, cemetery districts, and mosquito abatement districts. Most special districts provide only a single service to a specifically defined area, unlike counties and cities that provide numerous services throughout their boundaries. Many types of special districts are governed by specific principal acts, such as Fire Protection Districts (Fire Protection District Law of 1987) and Community Services Districts. A principal act is a generic state law that governs all special districts of a specific type; there are about 60 principal acts in California, and they appear in the state's codes. For example, Marin's LAFCO utilizes a community service principal act in creating community service districts.</p>	<p>Independent special districts are not tied to other public bodies, which is reflected in the specific provisions of their principal act. For example, Alameda County Mosquito Abatement District (ACMAD) is a California Independent Special District funded by a parcel tax (non-enterprise). The Alameda County Board of Supervisors is represented by a trustee on ACMAD's Board, but it is not overseen by them.</p>	<p>Dependent special districts are closely tied to another unit of local government, meaning its governance is subject to the interests, influence, and authority of other governmental bodies. For example, the Yucca Valley Recreation and Park District is tied to the San Bernardino County Board of Supervisors.</p>	<p>Enterprise districts run much like business enterprises and provide specific benefits to their customers. For example, the Marin Municipal Water District, is an enterprise district that serves a large number of utility customers.</p>	<p>Non-enterprise districts can be funded by property taxes instead of revenue. For example, the Buena Park Library District is independent, non-enterprise special district in Orange County that offers free basic library services and a variety of programs for children and adults.</p>	<p>Climate Resilience Districts (CRD) can raise revenue, plan climate mitigation or adaptation projects, and implement those projects. The only current one formed is the Sonoma County Regional Climate Protection Authority. Climate resilience districts are governed by a board that has the same membership as a public financing authority, and has the same powers and requirements as a public financing authority, allowing them to raise funds and finance climate resilience projects within their boundaries. CA Govt Code § 62305 (2023)</p>	<p>A Geological Hazard Abatement District (GHAD) is a special district formed to prevent, mitigate, abate, or control a geologic hazard or a structural hazard partly or wholly caused by a geologic hazard. GHADs function as political subdivisions of the State of California and can encompass both private and public lands in hazardous areas. Also, while they can help protect physical property, they cannot mitigate other losses caused by hazards, such as emotional distress or reduced property values. GHADs are statutorily authorized by the 1979 Beverly Act. This act sets out the purpose, power, procedures, voting and election rules, development projects, and financial components of GHADs. As independent political subdivisions of the state, GHADs possess many of the same legal authorities as local government agencies. These include: the power to tax, bond, and borrow money from lenders, certain legal immunities from the California Environmental Quality Act and Local Agency Formation Commissions, the ability to sue and be sued in a court action, and eminent domain.</p>
Formation Process	<p>To enter into a JPA (either to jointly exercise common powers or to form a separate legal entity), the public agencies must enter into an agreement. This agreement must state both the powers of the JPA and the manner in which it will be exercised. The governing bodies of all the contracting public agencies must approve the agreement.</p>	<p>Formation usually requires the approval of the region's Local Agency Formation Commission (LAFCO) and voter approval. Relies on state laws for their legal authority and elected or appointed boards of directors for their governance. The vast majority of independent special districts are governed by a constituent-elected board of directors.</p>	<p>Formation usually requires the approval of the region's Local Agency Formation Commission (LAFCO) and voter approval. Dependent districts must be formed by another agency. Relies on state laws for their legal authority and elected or appointed boards of directors for their governance.</p>	<p>Formation usually requires the approval of the region's Local Agency Formation Commission (LAFCO) and voter approval. Relies on state laws for their legal authority and elected or appointed boards of directors for their governance which provide for how the district may set up an enterprise service which customers may pay for. They are run like a business enterprise; they charge for their customers' services. For example, a hospital district charges room fees paid by patients, not the district's other residents. Water districts charge water rates to their customers. Virtually all water, waste, and hospital districts are enterprise districts.</p>	<p>Formation also requires the approval of the region's Local Agency Formation Commission (LAFCO) and voter approval. While non-enterprise districts (73% of districts) provide services which don't lend themselves to fees, they are still overseen by state laws for their legal authority to provide services. Examples include fire protection services, flood control districts, and mosquito abatement programs, which benefit the entire community, not just individual residents.</p>	<p>All participating member jurisdictions must adopt a resolution of intent with a public hearing to define the needs and goals of the CRD within specific boundaries. Legally, they resemble "Enhanced Infrastructure Financing Districts" and must comply with all laws (SB 852). Once a resolution has been adopted that states its boundaries, project types, the need for it, and the goals it proposes to achieve, it can then form. A public hearing is also required.</p>	<p>GHADs are established in one of two ways: through a petition signed by owners of at least ten percent of the real property in the district, or through a majority vote in the local legislative body.3 A petition for a GHAD must include a "plan of control," a detailed hazard assessment plan, prepared by a certified California engineering geologist, that explains how the proposed district and its constituents will tackle the hazardous problem they face.</p>	
Leadership & Decision-making Structure	<p>Governance structure is determined by a JPA's member agencies. Personnel, expertise, equipment, and property of member agencies can be consolidated into it. A JPA's governance structure depends on what the member agencies agreed to, so there is some flexibility on member roles (by contrast, for special districts, state law spells out the election or appointment requirements to select governing boards). The terms of governance, including representation and decision-making powers, are determined by the specific terms laid out in their agreement.</p>	<p>Run by a governing board, can be elected or appointed, and must be approved by the region's Local Agency Formation Commission (LAFCO). Independent districts have their own elected governing boards. About 2/3 of special districts are independent districts with independently elected boards or appointed boards whose directors serve for fixed terms. Most have five-member boards but they vary with the size and nature of the district. Cemetery, Fire Protection, and Community Services Districts are mostly independent districts.</p>	<p>Run by a governing board, can be elected or appointed, and must be approved by the region's Local Agency Formation Commission (LAFCO). Dependent districts are often governed by officials from another local government entity, like a city or county, which is reflected in the specific provisions of the principal act governing them. Approximately 1/3 of special districts in California are dependent districts governed by either a city council or county board of supervisors. County Service Areas are dependent districts. Dependent special districts are closely tied to another unit of local government. Typically, city councilmembers, a county's elected executive board members, or their appointees, serve as the board of directors for a dependent special district and control their budget, management, and operation.</p>	<p>Run by a governing board, can be elected or appointed, and must be approved by the region's Local Agency Formation Commission (LAFCO).</p>	<p>Run by a governing board, can be elected or appointed, and must be approved by the region's Local Agency Formation Commission (LAFCO).</p>	<p>Once it has been formed, it can create a governing board (public financing authority) of local agency board members and public members.</p>	<p>Once established, GHADs are independent government entities controlled by an elected board of five land-owning directors. They are then empowered to acquire, construct, operate, manage, or maintain improvements on the lands within their district.</p>	
Agency Membership and Geographic Boundaries	<p>According to California's Joint Exercise of Powers Act, members can include but are not limited to any federal department or agency, this state, another state or any state department or agency, a county, county board of education, county superintendent of schools, city, public corporation, public district, regional transportation commission of this state or another state, a federally recognized Indian tribe, or any joint powers authority formed pursuant to this article by any of these agencies. Recently, nonprofit hospitals and mutual water companies won legislative permission to join JPAs, so other nongovernmental organizations may sponsor their own special bills to the state legislature.</p>	<p>Districts serve residents who live within the boundaries of the special district. Members can also include elected officials of the district's governing board and other appointed officials. All Special Districts are overseen by LAFCOs.</p>	<p>Districts serve residents who live within the boundaries of the special district. Members can also include elected officials of the district's governing board and other appointed officials. All Special Districts are overseen by LAFCOs. Dependent districts are overseen by other governmental agencies, like cities or counties.</p>	<p>Districts serve residents who live within the boundaries of the special district. Members can also include elected officials of the district's governing board and other appointed officials. All Special Districts are overseen by LAFCOs.</p>	<p>Districts serve residents who live within the boundaries of the special district. Members can also include elected officials of the district's governing board and other appointed officials. All Special Districts are overseen by LAFCOs.</p>	<p>Based on participating member jurisdictions.</p>	<p>Based on participating member jurisdictions. There are currently thirty-five GHADs organized in California. Most of these are concentrated in the San Francisco bay area and coastal Los Angeles County.</p>	
Roles and Responsibilities	<p>JPAs can only exercise the roles/responsibilities as noted in the state legislation AND based on the roles/responsibilities that ALL member agencies share.</p>	<p>Roles and responsibilities of special districts vary by type, but are each governed by a Principal Act.</p>					<p>Climate resilience districts are limited to funding projects that address sea level rise, extreme heat, extreme cold, and the risk of wildfire, drought, and the risk of flooding.</p>	<p>For coastal adaptation hazard purposes, GHADs have been formed in areas facing increased rates of bluff erosion, beach loss, or storm surge. As sea levels rise, GHADs may be suitable where a citizen coalition or local government agrees on the need for a self-funded and mostly autonomous adaptation program, tailored to its particular needs and goals. Existing GHADs can also act swiftly and effectively to address hazards as they happen, with authority and resources already in place, in ways local governments might not. GHADs also enjoy a degree of immunity from liability for tortious claims.</p>

Category	Joint Powers Authorities	Special Districts					
		A district must be classified as either dependent or independent, and as either enterprise or non-enterprise.					
		Independent	Dependent	Enterprise	Non-Enterprise	Climate Resilience District	Geologic Hazard Abatement
Funding - General	<p>JPA's can levy taxes themselves: The Joint Exercise of Powers Act does not allow a JPA to levy new taxes or assessments. However, a JPA's member agencies could levy their own taxes or benefit assessments and contribute the revenues to the JPA's operation. Many finance options: Can finance improvements like parks, city halls, and schools. Can purchase equipment, finance insurance pools, refinance member agencies debts, and provide working capital by selling bonds. Can sell bonds. Specifically, JPAs are subject to the restrictions and powers of the agencies that make up the authority, and any power to levy taxes must align with the powers granted to those member agencies.</p> <p>A JPA can only levy taxes if one of its member agencies has the authority to do so. CA Govt Code § 6509.5 (2023)</p>	<p>State law permits special districts to impose a "special tax," if it is "submitted to the electorate and approved by two-thirds of the votes cast." With voter approval, they have the authority to levy special taxes themselves. Some collect fees to fund their activities, while others rely more heavily on property tax revenues. Both enterprise and non-enterprise districts can issue bonds to pay for capital improvements. Others rely on user fees. Proposition 5 on California's November 2024 ballot may have implications for local bond funding, as it lowers the threshold required for local bond approval from 2/3s to 55% of voter approval.</p>	<p>State law permits special districts to impose a "special tax," if it is submitted to the electorate and approved by two-thirds of the votes cast." Some collect fees to fund their activities, while others rely more heavily on property tax revenues. Both enterprise and non-enterprise districts can issue bonds to pay for capital improvements. Others rely on user fees</p>	<p>State law permits special districts to impose a "special tax," if it is submitted to the electorate and approved by two-thirds of the votes cast." Some collect fees to fund their activities, while others rely more heavily on property tax revenues. Both enterprise and non-enterprise districts can issue bonds to pay for capital improvements. Others rely on user fees. These districts are primarily funded by the fees that customers pay for services. About 27% of special districts are enterprise districts and include airport, harbor, hospital, transit, waste disposal, and utility districts. In 2006-07, enterprise districts generated about \$23.9 billion in revenues.</p>	<p>State law permits special districts to impose a "special tax," if it is submitted to the electorate and approved by two-thirds of the votes cast." Some collect fees to fund their activities, while others rely more heavily on property tax revenues. Both enterprise and non-enterprise districts can issue bonds to pay for capital improvements. No direct cost/benefit relationship exists in the services provided by non-enterprise districts. Non-enterprise districts deliver services that provide general benefits to entire communities. These services, such as fire protection, flood control, cemeteries, and road maintenance, do not lend themselves to fees. Non-enterprise districts rely primarily on property taxes for their revenues. In 2006-07, non-enterprise districts generated about \$13.6 billion in revenues.</p>	<p>Can include TIFs, user fees, local sales tax, benefit assessments, special taxes, property related fees, gifts and grants, and service charges. Can also issues bonds.</p>	<p>GHADs can levy and collect assessments for the associated costs of projects enacted pursuant to the purpose of the GHAD.5 These assessments attach as liens on a property and are collected simultaneously and in the same manner as general property taxes.</p>
Funding - Grants	Can apply for and receive grants.	Can apply for and receive grants.	Can apply for and receive grants.	Can apply for and receive grants.	Can apply for and receive grants.	Can apply for and receive grants.	
Dissolution	JPAs have no fixed timespan. Some joint powers agreements include specific protocols that make it difficult to dissolve the agreements.	Dismantling can be initiated by the subject district by a resolution, an outside agency (e.g., county, city, or school district) by resolution, registered voters by petition, or by a LAFCO by resolution.	Dismantling can be initiated by the subject district by a resolution, an outside agency (e.g., county, city, or school district) by resolution, registered voters by petition, or by a LAFCO by resolution.	Dismantling can be initiated by the subject district by a resolution, an outside agency (e.g., county, city, or school district) by resolution, registered voters by petition, or by a LAFCO by resolution.	Dismantling can be initiated by the subject district by a resolution, an outside agency (e.g., county, city, or school district) by resolution, registered voters by petition, or by a LAFCO by resolution.	No legal requirements around dissolution.	Cannot be easily dissolved.
Considerations	<p>PRO: More flexible, easiest to form. Can issue revenue bonds without voter approval. Can be authorized to own property, incur debt, issue revenue bonds, provide utility services, and set utility rates. Can be used to promote regional coordination. Effective for sharing resources and lowering administrative costs. Can finance public works like parks and schools.</p> <p>CON: Powers of JPAs are limited by those that are common to all member agencies. Can be hard to maintain momentum with members as participation is voluntary and it is difficult to fully dissolve.</p>	<p>PRO: More difficult to form but provides the greatest amount of authority. Has authority to issue bonds and levy special taxes.</p> <p>CON: Requires continual overhead funding. Subject to same approval laws as Counties and Cities. Cannot levy general taxes.</p>				<p>PRO: Easy to form. Unlike most other special districts, CRDs can utilize TIFs as they resemble EIFDs.</p> <p>CON: Only one example (Sonoma CRD) due to newness.</p>	<p>PRO: Can benefit both private landowners and local governments. For example, a local government can establish a GHAD in order to ensure that private property owners internalize the costs of maintaining existing development in a hazard-prone area. Relatedly, private landowners can combine their resources and utilize a GHAD to divide the costs of vulnerability assessments, project engineering costs, and any necessary or voluntary mitigation efforts. Under these scenarios, the utility of a GHAD is enhanced by the cooperation of neighboring landowners and local governments securing funding together. Can support long term-property values.</p> <p>CON: GHADs do, however, raise equitable and democratic concerns based on how they are organized. First, the voting authorities utilized during the establishment of a GHAD are premised upon assessed property value instead of mere membership. This distribution gives homeowners with higher value homes more voting sway than their neighbors, regardless of other relevant factors, such as relative risks from coastal hazards. Also, while they can help protect physical property, they cannot mitigate other losses caused by hazards, such as emotional distress or reduced property values. Limited revenue generating potential. Subject to Proposition 218.</p>

References

California Coastal Commission
The Ins and Outs of Joint Powers Authorities in California (bbktaw.com)
csda_guide_proposition_218.pdf (ca.gov)
Funding (sonomalaifco.org)
Proposition 5 | Official Voter Information Guide | California Secretary of State
Geologic Hazard Abatement Districts.pdf
CRD-webinar-Geoff-Neill-2023-02-01.pdf
Today's Law As Amended - SB-852 Climate resilience districts: formation; funding mechanisms.
Microsoft Word - Document1
Measure C
Paying for Climate Adaptation in California
GHFinalversion2
030616-000294A.PDF
RID_273.pdf
About the Delta Stewardship Council (ca.gov)
County Structure & Powers - California State Association of Counties
Bill Text: CA SB852 | 2021-2022 | Regular Session | Chaptered | LegIScan
Source: CA State Legislature. Governments Working Together: A Citizens Guide to Joint Power Agreements

Appendix IV

Case Study Research

Delivering a better world



Purpose & Methodology

Case studies provide informed guidance about the benefits and limitations of existing governmental structures. The goal of this approach is to create a framework for discussion about the opportunities and gaps in existing SLR efforts in Marin County in addition to potential outcomes, roles, and challenges associated with various structures.

Case studies were developed using desktop research, discussions with subject matter experts at AECOM, and interviews with BayWAVE members. A long list of case studies was created, which was then reviewed and consolidated based on relevance and feedback from the County project team and BayWAVE members.

Selected case studies:

- *Marin County Wildfire Protection Authority*
- *OneShoreline*
- *Sonoma County Regional Climate Protection Authority*
- *San Francisco Bay Restoration Authority*
- *Duwamish Valley Resilience District*
- *Resilience Authority of Annapolis and Anne Arundel County*
- *Oakland Alameda Adaptation Council*
- *Delta Stewardship Council*
- *San Francisquito Creek Joint Powers Authority*
- *Hayward Area Shoreline Planning Agency*
- *Southeast Florida Regional Climate Change Compact*
- *ResilientCoasts Initiative*

Key Themes: Collaborative Governance for Sea Level Rise Adaptation

What case studies tell us about outcomes, purpose, process, and resourcing.

What Makes Collaboration Impactful

Cross-boundary coordination enables outcomes, such as funding, shared infrastructure, and project delivery, that individual jurisdictions cannot achieve alone. Climate hazards extend beyond political boundaries, making regional collaboration essential.

Early, visible project delivery is the most reliable measure of impact and credibility. Tangible results, not governance structures or plans, build public confidence, demonstrate institutional effectiveness, and create momentum for expanded authority over time.

Process For Developing Collaboration

Catalysts (e.g. urgent events or strong champions) are typically required to initiate regional efforts and create momentum for collaboration.

Alignment at the staff and city manager level is foundational, with trusted subject matter experts providing the technical credibility needed to sustain collaboration through political complexity; board-level buy-in typically follows.

Purpose Of Collaboration

Shared risk motivates formation, but sustained participation depends on tangible benefits, such as funding access, technical support, and coordinated permitting.

Coordination and convening, not control, are typically the starting purpose, with most efforts beginning as planning and alignment bodies and evolving over time. A narrow initial scope is a deliberate strategy for building alignment, trust, and a broad coalition.

Roles And Responsibilities

Board composition is a critical (and often contentious) design decision, with approaches such as representative structures and weighted voting used to balance interests across jurisdictions.

Layered governance structures distribute responsibilities effectively, drawing on policy, operational, and technical expertise without overloading any single body.

Shared staffing is a practical early-stage solution, enabling organizations to build capacity and deliver results without requiring full independent staffing.

Key Themes: Collaborative Governance for Sea Level Rise Adaptation

What case studies tell us about outcomes, purpose, process, and resourcing.

Resourcing

1. Layered funding models are the norm, combining member contributions, grants, and dedicated revenue to support both operations and project delivery.
2. Parcel taxes are the most proven mechanism for sustained local funding, but require significant public support and demonstrated project value.
3. Governance structures can form before dedicated funding is secured, with member contributions and shared technical support providing an initial foundation for coordination and early capacity building.

Results Build Trust

1. Small, visible wins are the most reliable tool for building trust, demonstrating credibility, and creating momentum for larger, more complex efforts.
2. Formal governance should follow demonstrated effectiveness—governance authorities that emerge from proven value are more likely to sustain participation and legitimacy.
3. Stakeholder readiness varies and should guide the pace of formalization, with collaboration evolving in line with actual engagement and capacity across jurisdictions.

Participation Is Driven By Clear Value

1. Access to funding is the strongest participation incentive, as jurisdictions see clear financial returns (e.g. grant eligibility, pooled revenues, cost-sharing).
2. Technical support is a meaningful secondary incentive, with shared data, coordinated permitting, and planning capacity helping smaller jurisdictions overcome resource constraints.
3. Preserving local autonomy is a critical condition of participation, with successful structures maintaining local control.

Governance Evolves Incrementally

1. Informal and semi-structured mechanisms are effective first steps to build trust and allow iteration.
2. Flexibility should be built in from the outset, with governance structures designed to adapt over time as conditions, priorities, and collaboration mature.
3. Formalization should be tied to concrete triggers (e.g. specific events, completed plans, successful ballot measures) rather than fixed timelines.
4. The formation-era steering committee and future governing board serve distinct functions. Early coordination bodies build consensus/structure and formal governing bodies focus on implementation.

Marin Wildfire Prevention Authority (Est. 2020)

Interviewed on October 10, 2024

Governance Type

Joint Powers Authority

Location

Marin County, California

Scale

County

Member Agencies

17 agencies throughout Marin County, including fire districts

Leadership & Decision-Making Structure

Governed by a Board of Directors comprising elected leaders from each member agency. Directors

Staffing & Operational Resources

Committees are composed of agency staff from each of the MWPA member agencies.

In addition to member agency staff on committees, the MWPA employs the following dedicated staff members:

- Executive Officer
- Planning and Program Manager
- Grants Specialist
- Management Analyst
- Vegetation Management Specialist

Purpose, Roles, and Responsibilities

- It aims to ensure that communities are capable of withstanding major fires, minimizing the loss of life and property, while also preserving the area's environmental diversity.
- MWPA was formed to serve as the governing body to manage the funds raised through Measure C. MWPA also supports and enables coordination and communication across county entities.
- Measure C contributes funds to MWPA. 80% of its “core” budget must be spent in the geographic region from which the revenue is generated. Broadly, 60% of Measure C funds go to the “JPA Core” cross-jurisdictional projects, 20% of funding goes towards defensible space evaluations and home hardening, and 20% funds community-level wildfire prevention mitigation.

Formation History and Process

- The Marin County Fire Department initially ideated the passage of a ballot measure in 2018 following the 2017 North Bay Fire Siege. The Marin County Board of Supervisors created a “Lessons Learned” committee and, shortly thereafter, formally requested to place a parcel tax measure to fund wildfire prevention efforts on the March 2020 ballot.
- Measure C approved a parcel tax in Marin County, giving the Authority 10 years of continuous funding.
- Measure C also formalized a joint powers agreement among 17 member agencies covering most of Marin County.

Projects or Programs Underway or Completed

- Vegetation management projects, including the 38-mile Greater Ross Valley Shaded Fuel Break Project.
- Marin City Fuel Reduction Zone Project
- Other miscellaneous vegetation management projects, including those in Muir Beach and West Marin

Relevance

- Recently formed multi-jurisdictional governance structure in Marin County.
- Has a dedicated funding source.
- People inside and outside of the organization have described the governance structure to be transparent.
- Governance structure has proportional voting/representation structure.
- Agreement details annual budget allocation with a portion being for multi-jurisdictional projects and 20% set aside for community-level prevention thereby allowing partner agencies to directly benefit from the Measure C revenue.

Lessons Learned

- Its 17-member Board of Directors provides proportional representation but can pose a bureaucratic challenge.
- Multiple oversight committees creates transparency but is also resource intensive.
- Having a ballot measure/funding be the starting point of the organizational structure may create challenges (and opportunities) for developing a representative board structure; negotiating about funding right out the gate led to stronger preference for everyone to have direct representation.

OneShoreline (Est. 2018)

Interviewed on September 27, 2024

Governance Type

Special District

Location

San Mateo County, California

Scale

County

Member Agencies

- San Mateo County
- 20 Cities in County

Leadership & Decision-Making Structure

Representative Board of Directors consists of seven elected officials that are representative of all jurisdictions, including three coastal representatives, two bayside representatives, and two at-large representatives.

Staffing & Operational Resources

Member organizations provide seed funding to support resourcing and operations, while the County has provided additional staffing resources. No other dedicated funding.

Purpose, Roles, and Responsibilities

- OneShoreline partners with the County of San Mateo and 20 cities and towns within the County. The District assumes the role of lead agency for key flood control and sea level rise investments and aligns its future goals with those of member jurisdictions.

Formation History and Process

- In 2014, the County of San Mateo reviewed potential governance models, and decided repurposing the existing flood control district offered the greatest authority, so it negotiated with cities to collaborate.
- In 2018, the City/County Association of Governments of San Mateo County (C/CAG) developed a proposal to expand the existing San Mateo County Flood Control District through state legislation.
- Assembly Bill 825 expanded the existing Flood Control District and permitted the formation of the San Mateo County Flood and Sea Level Rise Resiliency District (i.e., OneShoreline).
- The County of San Mateo and all 20 cities and towns are contributing start-up funding to address the impacts of sea level rise, flooding, and coastal erosion.

Projects or Programs Underway or Completed

- Bayfront Canal & Atherton Channel Flood Protection and Ecosystem Restoration Project (Underway)
- Belmont Creek Stormwater Detention and Creek Restoration Project
- Colma Creek Flood Zone (Underway)
- Special District has developed Planning Policy Guidance (adopted by Board of Directors in June 2023).

Relevance

- OneShoreline was formed by modifying its existing flood control district.
- OneShoreline is led by an appointed board of directors consisting of city councilmembers and members of the San Mateo County Board of Supervisors.
- Enabling legislation indicates that the formation of OneShoreline does not limit individual cities' ability undertake or complete flood control projects.
- Funding originates from member agencies, and there is currently no additional funding available to support staffing and project needs.

Lessons Learned

- During the formation process, they included more powers/authorities than they're currently exercising; they wanted to limit need to go through intense legislative process later to amend their authority.
- They engaged their state elected officials early in the process since they knew, as a special district, that they would need their involvement for the legislation.
- The agency does not have the authority to review project proposals but wish they did.
- Not having a dedicated funding source is a challenge for them. Member agency contributions must fund staff to support project work.
- One project related to the construction of a flood barrier from SFO to the City of San Mateo faced significant pushback from officials in Millbrae, who cited lack of public meetings. The existence of a strategic plan may have mitigated some of these challenges.

Sonoma County Regional Climate Protection Agency (Est. 2009)

Interviewed on October 10, 2024

Governance Type

Special District

Location

Sonoma County, California

Scale

County

Member Agencies

Local agencies in Sonoma County

Leadership & Decision-Making Structure

Governed by a 12-member Board of Directors comprised of representatives from the Sonoma County Board of Supervisors and council members from each of the 9 municipalities. Board of Directors are the same as that of the Sonoma Transportation Agency.

Staffing & Operational Resources

Dedicated staff are shared with the Sonoma Transportation Agency. Additionally, one administrative consultant has been hired.

Purpose, Roles, and Responsibilities

- RCPA coordinates local government efforts to address climate change and implement the county's goals to reduce greenhouse gas emissions.
- Climate resilience districts (CRD) are special districts that promote cross-jurisdictional collaboration by leveraging financing tools toward adaptation measures.

Formation History and Process

- Sonoma Transportation Agency aimed to support jurisdictional climate adaptation initiatives and expanded the roles that they could take on.
- The State's creation of Climate Resilience Districts (SB 852) allowed the newly created RCPA to be grandfathered in as the first official CRD.
- In 2023, RCPA conducted a poll to gauge appetite for a new revenue source to support the CRD, though there was not enough appetite.

Projects or Programs Underway or Completed

RCPA has multiple ongoing plans and strategies, including:

- Sonoma Climate Mobilization, to support a resolution declaring a Climate Emergency (2019).
- Climate Ready Sonoma County, which prepares local leaders to protect long-term climate adaptation plans for the County.
- Shift Sonoma County, which, alongside the Sonoma County Transportation Authority, helps facilitate a shift in transportation behavior in the County.

Relevance

- RCPA does not have a dedicated funding source. In the absence of a dedicated funding source, it is not able to fully realize many of the powers and authorities of a CRD.
- Utilizes the existing governance structure of the Sonoma County Transportation Authority to facilitate and plan for projects.
- RCPA has developed an Equity Statement, which establishes community engagement practices, attracts and recruits a diverse set of staff and consultants, and assesses the concept of equity, among other criteria.
- RCPA has a strategic plan, the 2021 Climate Mobilization Strategy.

Lessons Learned

- The CRD is not able to realize many of its powers and authorities without a dedicated funding source.
- Trust in the SCTA board and executive team enabled SCTA to expand its role to take on climate and, eventually, to serve as the backbone of the CRD.

San Francisco Bay Restoration Authority (Est. 2009)

Interviewed on September 27, 2024

Governance Type

Joint Powers Authority

Location

9-County San Francisco Bay Area

Scale

Multi-County

Member Agencies

ABAG member agencies

Leadership & Decision-Making Structure

- Governing Board: Local elected officials who oversee management of funding.
- Advisory Committee: Community representatives that advise funding.
- Independent Citizens Oversight Committee: Annual review of conformance with Measure AA.

Staffing & Operational Resources

SFBRA is staffed by the State Coastal Conservancy and ABAG, including the SF Estuary Partnership. 5% of Measure AA proceeds support operations.

Draft Report

Purpose, Roles, and Responsibilities

- SFBRA was created to fund shoreline projects along the San Francisco Bay through the allocation of funds raised by the Measure AA parcel tax.
- This includes funding for projects that expand natural habitats, create public access points, and improve access or recreational amenities.
- Holds annual grant rounds (\$25M in funding available) that are awarded in spring or summer of each year and distributed to projects throughout the region.
- It does not duplicate the missions of other public agencies and private organizations working on Bay restoration; it is designed to deliver essential local funding to restoration projects developed by others.

Formation History and Process

In 2008, California Assembly Bill 2954 created the SFBRA to find solutions to the need for new local funding, due to reduced funding from other sources. SFBRA then levied the Measure AA parcel tax to secure additional local funding, deciding not to pursue a sales tax. SFBRA initially worked with Save the Bay.

Projects or Programs Underway or Completed

The SFBRA has funded projects throughout the San Francisco Bay shoreline, including:

- Bay Rise Park Project (Underway): Nearly \$1M to conduct site studies and community engagement in preparation for state-owned bayfront land in Burlingame to be restored.
- 900 Innes Remediation Project (Completed): Remediation of site in Bayview Hunters Point, which was awarded \$5M.

Relevance

- This organization may be less relevant than others, as its primary purpose is grant distribution.
- The Board of Directors is only seven members, so not all members organizations have representation.
- In 2024, the Governing Board established Equity Guidelines.
- Equity has been incorporated through the allocation of the Community Grants Program, which aim to improve equity in the Authority's grantmaking process. These include grants to community-based organizations in economically disadvantaged communities, featuring a shorter application form and increased staff support.

Lessons Learned

- While they do not have a Strategic Plan, their Campaign Goals provide a set of targets which they are on track to achieve.
- Current staffing needs require more funding than the enabling legislation allows (5% of revenue from Measure AA). Member agencies provide additional resources to cover additional resource needs.

Duwamish Valley Resilience District (Est. 2016)

Interviewed on October 10, 2024

Governance Type

Partnership

Location

South Park and Georgetown, Seattle, Washington

Scale

Neighborhoods

Member Agencies

- Seattle Office of Sustainability and Environment
- Seattle Office of Planning & Community Development

Leadership & Decision-Making Structure

- Advisory Committee, consisting of community members
- Action Team members, consisting of agency and CBO staff

Staffing & Operational Resources

Staffed by 5 members of two City of Seattle departments

Purpose, Roles, and Responsibilities

- The Duwamish Valley Resilience District advances environmental justice and equitable development in the Duwamish Valley through place-based, geographic strategy and designation.

Formation History and Process

- In 2016, the City of Seattle adopted two overarching strategies: (1) equity and the environment agenda, including codifying environmental justice strategies within governance to support frontline communities; (2) equitable development agenda, which considers the legacy of disinvestment among communities of color, ownership, and self-determination.
- This resulted in successive community engagement with community stakeholders to form the first iteration of the Duwamish Valley Action Plan in 2017, which serves as the Program's primary, annually updated planning document.

Projects or Programs Underway or Completed

The Duwamish Valley Action Plan has identified seven priority areas of focus and long-term strategies but does not serve as a project implementing body.

Relevance

- The Duwamish Valley Resilience does not currently have funding or regulatory authority but exists primarily to facilitate the planning process among community stakeholders.
- Equity is a key component of the Duwamish Valley Program, as the City of Seattle conducted equitable community engagement process with residents and community-based organizations prior to its formation.
- This included 1-on-1 meetings in small groups with a variety of community stakeholders.
- Updated in 2023, the Duwamish Valley Action Plan identifies the city-community shared vision by incorporating updated environmental justice guiding principles and racial equity outcomes.

Lessons Learned

- Relationships and community trust matter! Building community trust over a multi-year process is itself an anti-displacement strategy.
- Equitable engagement and relationship-building preceded the development of an Action Plan. The Resiliency District (i.e., Program) aims to establish a ballot measure or secure funding, next.

Resilience Authority of Annapolis and Anne Arundel County (Est. 2022)

Governance Type

Special District

Location

Anne Arundel County, Maryland

Scale

County

Member Agencies

- Anne Arundel County
- City of Annapolis

Leadership & Decision-Making Structure

12-member Board of Directors originate from a variety of organizations, including private companies and nonprofit organizations. None are government employees.

Staffing & Operational Resources

Two dedicated staff receive compensation from the Resilience Authority

- Resilience Authority Director
- Chief Financial Officer

Purpose, Roles, and Responsibilities

- The Resilience Authority develops, finances, and supports resilient infrastructure projects on behalf of Anne Arundel County and the City of Annapolis.
- The Resilience Authority has the authority to acquire property for the purpose of resilience infrastructure, in addition to constructing, altering, and improving this infrastructure.
- The Resilience Authority may issue and sell bonds for project implementation and to refund outstanding bonds.

Formation History and Process

- Maryland Senate Bill 457 authorized local governments to create resilience authorities.
- In 2022, the Resilience Authority was established by the Anne Arundel County Board of Directors.

Projects or Programs Underway or Completed

To date, the Resilience Authority has delivered a Request for Proposals (RFP) for the design of Annapolis Waterworks Resilience Park, a new park intending to create new environmental, recreational, and community amenities.

Relevance

- There is no explicit mention of equity within founding documentation.
- To date, the Resilience Authority has not developed a strategic plan beyond its enabling legislation, though project planning and implementation has begun.
- The Authority oversees the construction of resilience improvements in parklands managed by either the County of Anne Arundel or City of Annapolis.
- The Authority may issue and sell bonds for the purpose of resilience infrastructure projects and may receive discretionary grant funding from state or federal entities.

Lessons Learned

As it is relatively new, its long-term strategic plans remain unclear, which may be limiting. Currently, its primary focus is designing a new waterworks resilience park.

Oakland Alameda Adaptation Committee (*Est. 2022*)

Governance Type
Committee

Location
East Bay, California

Scale
Cities

Member Agencies

- Alameda County
- Cities: Alameda, Oakland, and San Leandro
- Regional agencies
- Community-based organizations

Leadership & Decision-Making Structure

A working group, steering committee, community partners, and scientific advisor consist of member agencies.

Staffing & Operational Resources

City of Alameda serves as lead project initiator, providing in-kind staff support. Most projects are funded by grants from the National Fish and Wildlife Foundation, FEMA, Caltrans, San Francisco Estuary Partnership, and City of Alameda.

Purpose, Roles, and Responsibilities

- OAAC is a coalition of shoreline communities and stakeholders working to accelerate sea level rise adaptation, protect and restore water quality, and promote community resilience.
- OAAC establishes the values, agreements, and practices that underpin coalitions of public agencies, non-governmental organizations, and consultants.
- Its goals are to define strategies for various levels of sea level rise, groundwater, and storm flooding, and will prioritize co-benefits of equity, public access, open space, and nature-based solutions.

Formation History and Process

Following concern about the impact of sea level rise on Oakland and Alameda's communities, OAAC formed in 2022 through an inclusive community engagement planning process between municipalities, county agencies, and community-based organizations.

Projects or Programs Underway or Completed

Grant funding has supported the development of the following plans and projects:

- *Sub-Regional Adaptation Plan (underway)*: Long-range plan that details preliminary strategies and pathways for shoreline communities. This project is lead by Pathways Climate Institute (subconsultant) and CMG Landscape Architecture (consultant).
- *Oakland-Alameda Estuary Adaptation Project (underway)*: Design concept that includes strategies to elevate and adapt low-lying areas of the shoreline.
- *Bay Farm Island Adaptation Project (underway)*: Planning effort to address two feet of sea level rise within Bay Farm Island.

Relevance

- Engages with community-based organizations, including Tribal organizations, local nonprofit organizations, and other key community stakeholders through the development of its plans and programs.
- Develops key strategic documents, including the Existing Conditions Report, Projects Planning Principles, and Projects Team Charter, which underpin project plans and design concepts.
- As a committee, OAAC does not have the authority to implement projects; implementation responsibility remains with member agencies, including the Cities of Alameda, Oakland, and San Leandro.

Lessons Learned

- Although in its early stages, OAAC already has a MOU, organizational principles, a work plan, and strong dedication to function. They're a highly-functional committee with direction and operating much like an independent entity. The development of an MOU may be helpful before the formation of a distinct government entity.

Delta Stewardship Council (Est. 2020)

Governance Type

State Agency

Location

Sacramento-San Joaquin River
Delta

Scale

Regional

Member Agencies

19 federal, state, and regional
agencies

Leadership & Decision-Making Structure

- Seven council members advised by independent 10-member science board. Four of the members are appointed by the governor, one each by the Senate and Assembly, and the seventh is the chair of the Delta Protection Commission.

Purpose, Roles, and Responsibilities

- Cooperates and coordinates with local and state agencies with a common vision to mitigate current and predicted challenges.
- Provides scientific information to inform management of the Delta.
- The Council was formed as a state agency as the Delta holds authority over much of California's key regional water resources.
- The Delta Plan serves as the Delta Stewardship Council's strategic plan; the Plan captures performance measures within each of the Council's subject areas.
- The Council has the authority to issue and sell \$11.1 billion in general obligation bonds for financing drought relief projects, water supply reliability projects, water system improvements, and shed and conservation programs.

Formation History and Process

The California Legislature passed the Delta Reform Act in 2009, establishing DSC to serve the Sacramento-San Joaquin River Delta.

Projects or Programs Underway or Completed

Recent efforts include:

- Delta Conveyance Initiative, which is an ongoing project to convey water from the Sacramento River in the north Delta to the existing State Water Project pumping plants in the south Delta.
- Stone Lakes Restoration Project, which consists of large-scale, ongoing seasonal wetland and riparian and oak woodland restoration within the Stone Lakes National Wildlife Refuge.

Planning efforts include:

- *Delta Adapts* Vulnerability Assessment and Adaptation Plan.

Relevance

The Delta Stewardship Council may not be a suitable case study for sea level rise in Marin County given that it was created to manage a water resource of statewide significance.

Staffing & Operational Resources

Full-time staff on Executive Team support 8 council members and are appointed by Delta Plan Implementation Committee (DPIIC), which coordinates and oversees the actions of the Delta Stewardship Council.

San Francisquito Creek Joint Powers Authority (Est. 1999)

Governance Type

Joint Powers Authority

Location

East Palo Alto, Palo Alto, and Menlo Park, California

Scale

Multi-City

Member Agencies

Cities of East Palo Alto, Menlo Park, and Palo Alto; San Mateo County Flood Protection and Sea Level Rise Resiliency Agency; Santa Clara Water District

Leadership & Decision-Making Structure

Board of Directors consists of members, each representing one of the five member agencies.

Staffing & Operational Resources

Employs an executive director and three professional staff, who are substantially assisted by the staff of its founding agencies.

Purpose, Roles, and Responsibilities

- SFCJPA plans, manages, and coordinates flood risk reduction measures through the contributions of its member agencies and by establishing policy direction and central communications for watershed, creek, and shoreline activities.
- The SFCJPA's objectives are to reduce the risk of flooding to protect people and property, preserve and enhance the environment, and create public amenities for enjoyment while promoting community awareness and participation in these processes.

Formation History and Process

Following a flood that damaged over 1,700 properties in 1998, five local agencies, including the Cities of Palo Alto, Menlo Park, and East Palo Alto, came together to create a new regional government agency. San Francisquito Creek is one of the few remaining natural watercourses in the region.

Projects or Programs Underway or Completed

- In 2019, the JPA completed a channel widening and bridge replacement project between Highway 101 and the Pope-Chaucer Bridge. (Completed)
- Currently, the SFCJPA has taken a leadership role in the SAFER Bay project (Strategy to Advance Flood Protection, Ecosystems, and Recreation along San Francisco Bay), which intends to rebuild or construct new levees or other flood and sea level rise resiliency measures.

Relevance

- SFCJPA operations and staffing is funded by annual member agency contributions.
- Has latent authority to levy parcel taxes and develop a community facility or benefit assessment district
- Has received grant funding from SF Bay Restoration Authority.
- Its highly-collaborative approach ensures its concerns are addressed unilaterally. Notably, most of the creek is surrounded by private property, so the JPA must also work alongside property owners.

Hayward Area Shoreline Planning Agency (Est. 1970)

Governance Type

Joint Powers Authority

Location

City of Hayward, California

Scale

City

Member Agencies

- City of Hayward
- East Bay Regional Park District
- Hayward Area Recreation and Park District

Leadership & Decision-Making Structure

Consists of the following bodies comprising member agency staff:

- 3 Trustees
- 5 Technical Advisory Committee members

Staffing & Operational Resources

HASPA has no dedicated staff. Staff from the Park District's Planning, Trails, Cultural and GIS department manage HASPA, providing all coordinating tasks, public meetings, technical advisory committee meetings and other work of the JPA.

Draft Report

Purpose, Roles, and Responsibilities

- HASPA coordinates agency planning activities and adopts and carries out policies for the improvement of the Hayward Shoreline.
- Its funding originates from trustee agencies and grants, such as a Water Quality Improvement Fund grant to the San Francisco Estuary Partnership. Ten percent of the total amount of \$550k can contribute to HASPA's operating costs. This will primarily be community engagement and public agency outreach. Its Shoreline Master Plan has been funded by a Sustainable Transportation Planning Grant.

Formation History and Process

- Founded in 1970, HASPA initially intended to protect the Hayward shoreline from industrial development, address future sea level rise, and implement projects.
- In 2024, the HASPA Board of Trustees and member agencies signed a JPA agreement that grants greater legislative and financing authority.

Projects or Programs Underway or Completed

- HASPA has purchased 3,150 acres along the shoreline for public ownership; currently in the process of being returned to wetlands, marshes, and protected uplands (underway).
- HASPA has conducted two vulnerability assessments for the Hayward shoreline and completed a long-range Shoreline Master Plan that outlines adaptation measures to prepare for and mitigate against sea level rise.

Relevance

- During its Shoreline Master Plan process, it identified its primary challenges as: soliciting feedback from the Alameda County Flood Control District; developing cost estimates for such a complex and long-range Plan (which was cause for concern among elected officials), and having no full-time dedicated staff, which made managing the project difficult.
- HASPA transitioned from a committee to a Joint Powers Authority to better coordinate and manage the complex challenges of shoreline planning and climate change adaptation alongside member agencies.

Southeast Florida Regional Climate Change Compact (*Est. 2009*)

Governance Type

Partnership

Location

Southeast Florida

Scale

Multi-County

Member Agencies

Broward, Miami-Dade, Monroe, and Palm Beach Counties

Leadership & Decision-Making Structure

Four staff members, one from each member county, oversees the operations and development of the Regional Climate Action Plan.

Staffing & Operational Resources

2 staff members from the Institute for Sustainable Communities provide administrative support to the Compact and are

Purpose, Roles, and Responsibilities

- The Southeast Florida Regional CCC is a multi-county partnership that advises jurisdictions to reduce GHG emissions, implement adaptation strategies, and build climate resilience.
- Resilient 305, a partnership between Miami-Dade County, City of Miami, and City of Miami Beach, provided a strategy document which Southeast Florida Regional CCC could utilize to implement strategies.
- Provides guidance on the creation of consolidated county policy platforms, including coordinated advocacy to guide and influence all levels of government.

Formation History and Process

- In 2009, an interlocal agreement was signed by each member county's Board of County Commissioners.
- This agreement has been re-signed every three years and provides the cost-share agreement to fund the Compact's operations.

Projects or Programs Underway or Completed

- Develops tools (i.e., *Compact Climate Assessment Tool*), and SLR projections for county and municipal use. (Underway)
- Develops the Priority Climate Action Plan (PCAP) in preparation for Climate Pollution Reduction Grant (CPRG) Program. This includes guidance on the development of equitable solutions to greenhouse gas emissions reductions. (Underway)
- The Regional CCC has developed three successive Regional Climate Action Plan to date, quantifying multi-county climate action objectives and strategies. (Complete)

Relevance

- The Compact is a multi-jurisdictional partnership that pursues funding and coordinates activities.
- It provides funding to support staffing and facilitates relations with member agencies.

ResilientCoasts Initiative (Est. 2009)

Governance Type

Initiative

Location

Massachusetts

Scale

Statewide

Member Agencies

Cities along Massachusetts coastline participating in ResilientCoasts Plan

Leadership & Decision-Making Structure

Massachusetts Office of Coastal Zone Management oversees the initiative.

Staffing & Operational Resources

The Office of Coastal Zone Management has hired a Chief Coastal Resilience Officer to oversee coastal zone management work in the development of a new Massachusetts ResilientCoasts Plan.

Purpose, Roles, and Responsibilities

- Led by the Massachusetts Office of Coastal Zone Management, the ResilientCoasts Initiative intends to identify regulatory, policy, and funding mechanisms to develop focused long-term solutions to sea level rise and coastal flooding through the ResilientCoasts Plan.

Formation History and Process

- Formation began in 2023, the ResilientCoasts Initiative is currently conducting community engagement to define its coordinating authority over the ResilientCoasts Plan.

Projects or Programs Underway or Completed

The Massachusetts ResilientCoasts Plan, which is a priority action within the ResilientMass Plan, is underway and intends to ensure the state is prepared to withstand and recover from natural hazards.

Relevance

- The ResilientCoasts Initiative is an internal project within the Office of Coastal Zone Management and does not have legislative authority.
- Community engagement is central to the ResilientCoasts Initiative, with a variety of formats for stakeholder participation spaced throughout the project timeline. This includes an external task force with representation from communities and an internal working group of representatives from state agencies and offices.
- Both equity and environmental justice have been identified as key goals for the ResilientCoasts Initiative.

Lessons Learned

While it is a new initiative, its “top-down” state approach offers the potential for unilateral efforts impacts the entire coastline, as opposed to more scattered approaches.

Other Case Studies

San Diego Regional Climate Collaborative

1. Network of cities, nonprofits, and universities; over 15 “leading members” and 25 “supporting members.”
2. Supports regional climate efforts; communicate efforts to local, state and national leaders, peers and funding institutions; builds capacity within San Diego public agencies.
3. Developed the San Diego Region Coastal Resilience Roadmap and oversees Californians For All College Corps Fellows, preparing university students for careers in climate.

Coastal Protection and Restoration Authority of State of Louisiana

1. Lone state entity with authority to articulate a clear statement of priorities and focus development and implementation efforts to achieve comprehensive coastal protection for Louisiana.
2. Prior to 2005, coastal issues were handled by a myriad of local and state governmental entities. After Hurricanes Katrina and Rita, the federal government instructed Louisiana to establish a single state authority.

Resilience Authority of Charles County, Maryland

1. Incorporated as a nonprofit organization that, as a “government instrumentality,” is operated for the public purpose of responding to the impacts of climate change in communities across Charles County and the State. First of its kind in Maryland.
2. Strong emphasis on equity and social vulnerability throughout planning and projects.
3. Empowered to finance, manage, acquire, own, convey, and support resilience infrastructure projects, including its Urban Tree Canopy program.

Appendix V

Engagement Activities

Delivering a better world



List of Engagement Inputs

Steering Committee

Purpose

The Steering Committee was established to guide stakeholder engagement, review governance structure alternatives, provide jurisdictional and community perspectives, and help shape recommendations for a future countywide sea level rise collaboration framework.

Committee Membership

- Stephanie Moulton-Peters, Marin County Supervisor (District 3)
- Dennis Rodoni, Marin County Supervisor (District 4)
- Kevin Burke, City of Belvedere
- Alice Fredericks, Town of Tiburon
- Max Perrey, City of Mill Valley
- Maika Llorens Gulati, City of San Rafael
- Eli Beckman, Town of Corte Madera
- Pat Eklund, City of Novato
- Joan Cox, City of Sausalito
- Stephanie Andre, City of Larkspur
- Andrew Alexander Green, Bolinas Community Public Utility District
- George Clyde, Marin Resource Conservation District

Kickoff Meeting (Fall 2024)

- Project overview
- Committee purpose, role, and expectations
- Defining “governance”
- Stakeholder engagement strategy

Transition to BayWAVE (Spring 2025)

- Beginning in Spring 2025, Steering Committee discussions were integrated into BayWAVE meetings to leverage existing countywide coordination structures, broaden participation, and align discussions with ongoing regional sea level rise planning efforts.

March Steering Committee / BayWAVE Meeting

- Overview of engagement and findings
- Proposed governance authority alternatives and tradeoffs
- Criteria for assessing governance structures
- Discussion of decision-making approaches
- SB 272 considerations

One-on-One Discussions

- Governance authority preferences
- Coordination and implementation challenges
- Opportunities for countywide collaboration and implementation support

BayWAVE

Purpose

The project team presented and coordinated through BayWAVE meetings throughout the study process.

Presented project updates and solicited feedback at **10 BayWAVE meetings** between **March 2024 and May 2025**.

Key topics included:

- Project introduction and overview of study objectives
- Introduction of committee and coordination structure concepts
- Overview of project progress, findings, and next steps
- Formal introduction and discussion of the proposed Steering Committee structure
- Discussions related to countywide coordination, governance authority alternatives, funding strategies, and implementation challenges

Meetings:

- Mar. 27, Apr. 24, Jul. 24, Aug. 1, Aug. 28, Sept. 25, Oct. 21 (2024);
- Jan. 22, Apr. 23, and May 28 (2025)

List of Engagement Inputs

Large Format Focus Groups

- **Marin Wildfire Prevention Authority (MWPA)** (October 2024)
- **Special Districts Association** (November 2024)
- **Marin Climate and Energy Partnership (MCEP)** (January 2025)
- **West Marin — Northern, Central, and Southern Meetings** (January 2025)
 - Large-format community meetings were held across West Marin's three subregions, convening a broad cross-section of community members, utility district representatives, community organizations, and local stakeholders from Bolinas, Stinson Beach, Inverness, Point Reyes Station, Marshall, Tomales, and Dillon Beach
- **Local and Regional Transportation Agencies** (February 2025)
 - Transportation Authority of Marin (TAM), Caltrans District 4, Sonoma-Marín Area Rail Transit (SMART), Marin Transit, Golden Gate Bridge Highway and Transportation District (GGBHTD)
- **Novato OLU** (May 2025)
 - Bel Marin Keys Community Services District, Flood Zone 1, Sustainable Novato
- **San Rafael OLU** (May 2025)
 - Canal Alliance, Friends of China Camp, Multicultural Center of Marin, ResilientShore, San Rafael Sea Level Rise Steering Committee, Santa Venetia Neighborhood Association, Marinwood Community Services District, Flood Zone 6 (San Rafael Meadows), Flood Zone 7 (Santa Venetia), NHA Advisors, San Francisco Estuary Institute
- **Corte Madera OLU** (May 2025)
 - Corte Madera Climate Action Committee, Friends of Corte Madera Creek, Mariner Cove Neighborhood Association, San Quentin Village Association, Flood Zone 9 (Ross Valley)
- **Richardson Bay OLU** (May 2025)
 - Center for Sea Rise Solutions, Logan Link Home, Hagstrom Law, Dorman Associates, Tam Valley Sea Level Rise Task Force, Tam Design Review Board, Tam Valley Community Services District, Marin City Neighborhood Response Group, Marin City Stormwater Management Plan Task Force, Marin Climate Justice Collaborative, Marin City Community Services District, Flood Zone 3, Flood Zone 4 (Bel Aire, Strawberry, Tiburon), Port of SF, CMG Architects, SFSU Estuary Ocean Science Center, Marin City People's Plan, Mill Valley StreamKeepers, Sausalito Floating Homes Association, Sausalito Galilee Harbor, Strawberry Community, Sperry Capital, Richardson Bay Sanitary District, Strawberry Design Review Board

Focus Groups

- **Southern Marin Kickoff Roadshow** (June 2024)
- **Marin City Stormwater Committee** (June 2024)
- **Marin County Health and Human Services** (August 2024)
- **Flood Zone 4 Advisory Board** (October 2024)
- **Marin Planning Directors Meeting** (November 2024)
- **Eastshore Planning Group** (November 2024)
- **Marin Managers Association** (January 2025)
- **TAM** (January 2025)
- **MCEP Staff-level Engagement** (January 2025)
- **Special Districts — Las Gallinas** (January 2025)
- **Special Districts — West Marin** (January 2025)
- **Marin Managers Association** (March 2025)
- **West Marin Flood Control Advisory Board** (April 2025)
- **Flood Zone 1 Advisory Board** (April 2025)
- **San Francisco Estuary Institute** (May 2025)

List of Engagement Inputs

Additional Engagement

One-on-One Discussions

- **Canal Alliance** (*May 2024 - May 2025*)
- **Marin Multicultural Center** (*August 2024 - May 2025*)
- **North Marin Community Services** (*November 2024 - May 2025*)
- **West Marin Collaborative** (*September 2024 - May 2025*)
- **West Marin Fund** (*June 2024 - May 2025*)
- **Marin City / Marin Climate Justice Collaborative** (*June 2024 - May 2025*)
- **Marin Community Foundation** (*August 2024 - May 2025*)
- **Marin Conservation League** (*November 2024 - May 2025*)
- **MarinCAN** (*January 2025*)

Meetings / Presentations

- San Rafael Sea Level Rise Collaborative
- Pt. San Pedro Road Coalition Quarterly Meeting
- San Rafael's Community Assembly Preparing for SLR
- Bolinas Community Public Utility District Board Meeting
- Marin City Stormwater Committee
- BCDC Elected Officials Task Force
- Save The Bay Day

Prior stakeholder engagement efforts reviewed:

- Bolinas Civic Group: Bolinas Sea Level Rise Initiative (2024)
- BARHII equity and emergency preparedness resources (2020–2024)
- Corte Madera: Shoreline Adaptation Engagement Effort (2024)
- Marin Community Foundation: Advancing Climate Justice through Community Empowerment (2024)
- Multicultural Center of Marin: Community Outreach Partners Needs Assessment (2019)
- Marin Health & Human Services: Community Resiliency Teams and Climate and Health (2024)
- Sausalito Shoreline Adaptation - Community Survey (2024)
- Housing, Safety, Parking, and Quality of Life for Latinos in San Rafael (2018–2020)
- Shore Up Marin: Recommendations to Policy Makers (2013-14)
- Sonoma County Operational Area Emergency Operations Plan (2022)
- Transportation Authority of Marin: Sea Level Rise Adaptation Planning for Marin County's Transportation System (2024)

Summary of Survey Results

Pre-meeting surveys were developed and shared with some stakeholder groups prior to engagement to gather targeted inputs and inform discussions. A public survey was posted on MarinSLR.org and shared as part of community focused engagement activities to gather broad community perspectives. The purpose of the surveys was to develop a baseline understanding of challenges, opportunities, and prioritization of SLR issues and governance.

Public Survey

Should stakeholders plan for SLR together?

90% Think that communities and agencies should work together to plan for SLR

Which assets are you most concerned about?

65% Roads and transportation infrastructure

64% Sewer and drainage systems

47% Residential Properties

Stakeholder Pre-meeting Survey

At what scale should SLR adaptation occur?

#1 Countywide – include bay and coast sides of the County

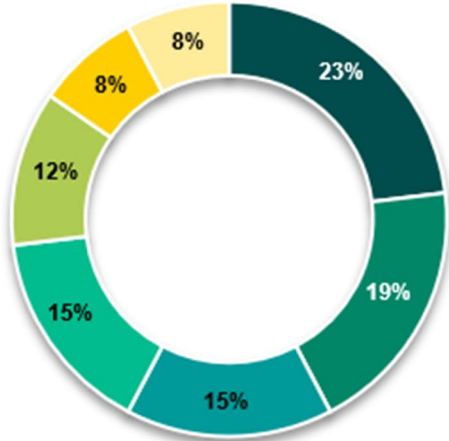
When asked to rank the assets that their most concerned about, respondents identified the following as their top priority

57% Protecting Transportation Networks

43% Protecting Utilities

29% Protecting privately-owned parcels and buildings

What is the biggest barrier to SLR adaptation?



- Coordinating with state, federal, and/or regional agencies
- Capital resources (eg: funding)
- People resources
- Coordinating with other local agencies
- Technical data
- Community engagement
- Regional guidance and support