

The graphic features a green silhouette of a mountain range in the upper half. Below the mountains is a blue gradient representing the ocean, with several horizontal wavy lines at the bottom. The text 'Marin County' is in a bold, black, sans-serif font on the left side of the mountain. 'Sea Level Rise' is written in a large, blue, hand-drawn script font across the middle of the image, overlapping the mountain and the ocean.

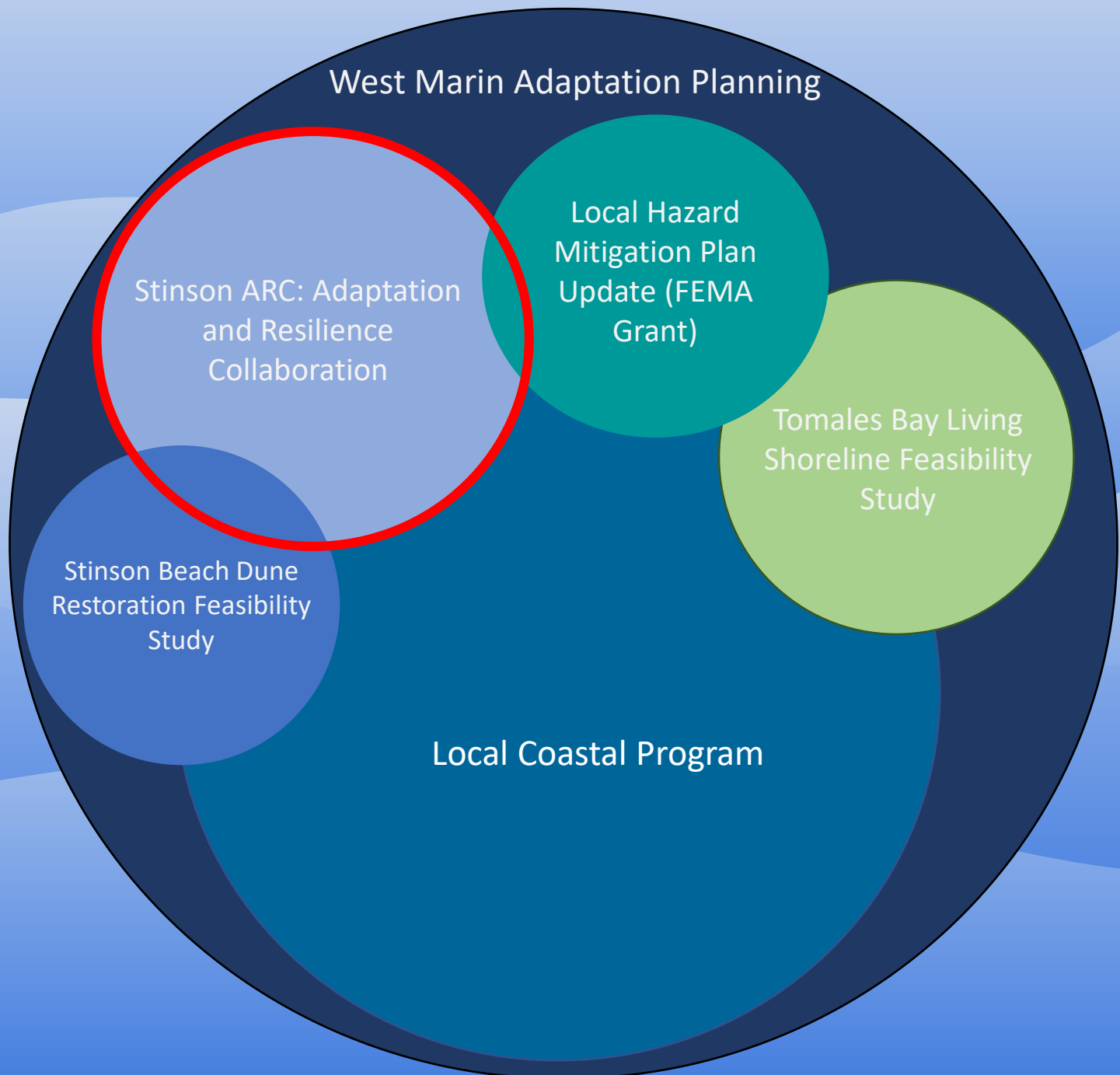
Marin County

Sea Level Rise

## **Stinson Beach ARC**

Adaptation and Resilience Collaboration

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# How did we get here?

## Marin Ocean Coast Sea Level Rise Vulnerability Assessment

Collaboration: Sea-Level Marin Adaptation Response Team  
Marin County Community Development Agency  
May 2016 | Marin County, CA | marinslr.org



## Marin Ocean Coast Sea Level Rise Adaptation Report

Marin County Community Development Agency  
February 2018



### 6.1) Community PATCHs (Plans for Adaptation to Coastal Hazards)

As next steps to move adaptation options outlined in this report forward, community-scale plans could be undertaken for each of West Marin's seven communities. Plans would focus on adapting infrastructure of community wide importance to coastal hazards. Plans would identify funding mechanism, and implementation opportunities. These Plans for Adaptation to Coastal Hazards (PATCHs) would be for specified timeframes based on best available SLR and storm projections and trigger points at which flooding becomes chronic. PATCHs would be conducted in conjunction with partners such as DPW or Caltrans. A proposed process to develop PATCHs is as follows:

1. Using the C-SMART Vulnerability Assessment, identify vulnerable infrastructure assets of community wide importance.
2. With the use of CoSMOS, determine flooding frequency, intensity, and duration for the identified assets under different future scenarios.
3. Survey community members to determine trigger points for vulnerable infrastructure—the frequency, intensity, and duration points at which flooding becomes chronic, causing public inconveniences that may include frequent road closures, overwhelmed storm drains, and compromised infrastructure.
4. Use the most recent adopted state policy to link the trigger points to specific time frame s (e.g., 2030, 2050).
5. In conjunction with community members and asset managers, initiate PATCHs around the identified time frame (the planning horizon) with the objective of PATCH implementation prior to chronic flooding occurring.
6. Develop adaptation alternatives for evaluation (e.g., elevation, relocation, and alignment). Populate matrices with information including costs, impacts, and benefits. The matrices would guide the determination of a preferred alternative based on maximizing public benefits while minimizing costs and negative impacts.
7. Collaborate with partners such as DPW or Caltrans to implement the preferred alternative through a capital-improvement program.



# Project Goals

- Undertake a community-scale adaptation planning process to create the foundation for developing a long-term implementable adaptation plan addressing critical infrastructure, natural resources and community assets and risks in the Stinson Beach area
- Include radical engagement of the community throughout planning process
- Integrate specific time and place-based adaptation measures into strategic pathways that identify sequencing and transition points for near, medium, and long-term measures, with focus and detail on near- and medium-term adaptation measures



# Community and Stakeholder Involvement

- Community driven and owned
- Coastal Communities Working Group (CCWG)
- Southwest Marin Adaptation and Resilience Team (SMART)
  - **YOU!**
- West Marin Advisory Group (WMAG)



# Adaptation Pathways Approach

## Generic pathways framework for developing site-specific adaptation plans to sea-level rise for urban archetypes

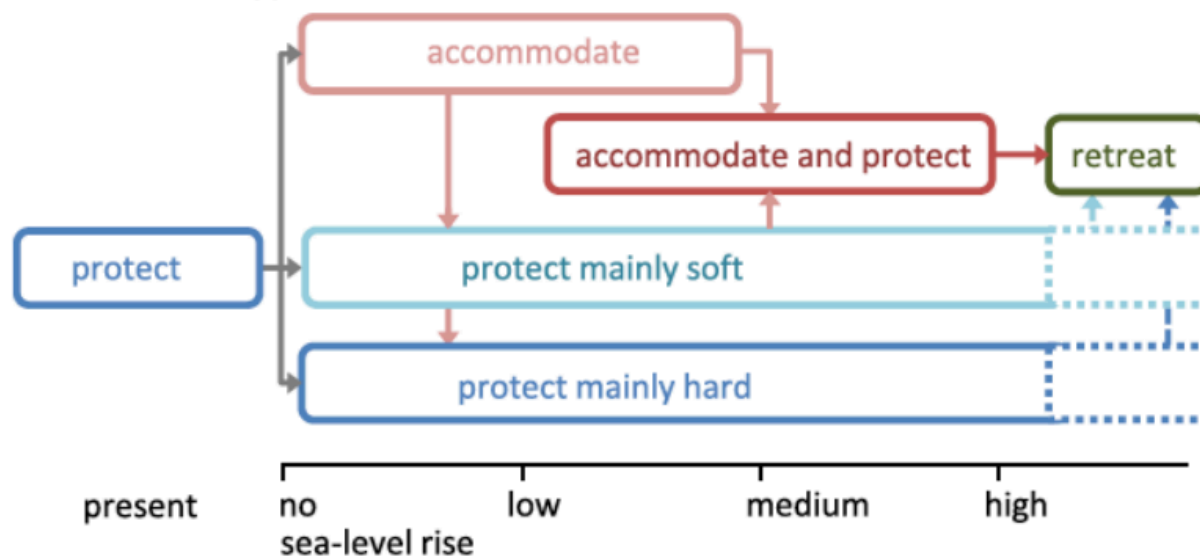
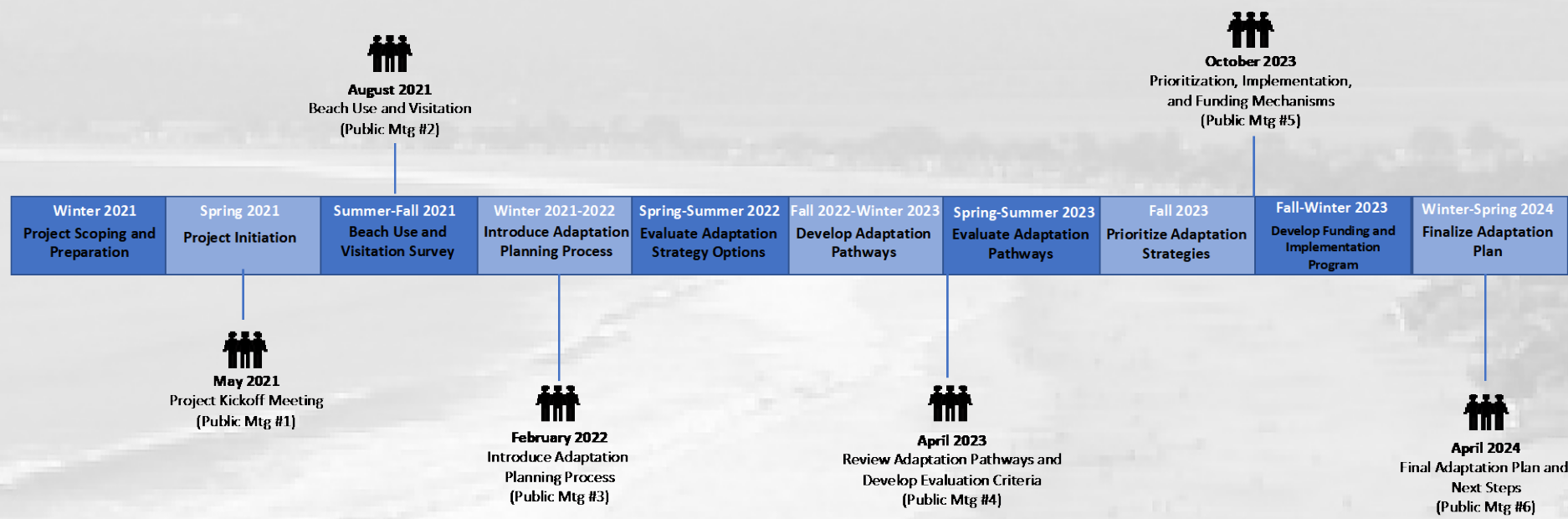


Figure 3 Generic pathways framework for developing site-specific adaptation plans to sea-level rise for urban archetypes. Dashed lines present uncertain or less likely pathways (Haasnoot et al 2019).



# Stinson Beach ARC: Adaptation and Resilience Collaboration





## Next Steps

- Grant execution requirements
- Preliminary outreach and engagement with stakeholder groups and public
- Develop and solicit RFPs for consultant services
- Project kick-off meeting Spring 2020
- Initiate update to Vulnerability Assessment for Stinson Beach Area
- Initiate Stinson Beach visitation and use survey



The logo features a green mountain range silhouette against a light blue sky. Below the mountains is a blue gradient representing water, with wavy lines at the bottom. The text 'Marin County' is in a bold, black, sans-serif font on the left. 'Sea Level Rise' is written in a large, blue, hand-drawn script font across the middle, overlapping the water area. A small yellow speech bubble icon is in the top left corner.

Marin County

Sea Level Rise

Thank You

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[MarinSLR.org](http://MarinSLR.org)