AMBAG
Board of Directors Meeting
June 10, 2020
Item #1: Call to Order
Item #2: Roll Call
Item #3: Oral Communications from the Public on Items Not on the Agenda
Item #4: Oral Communications from the Board on Items Not on the Agenda
Item #5A: Executive/Finance Committee

Recommended Action: Information
Item #5B: Monterey Bay National Marine Sanctuary (MBNMS) Advisory Council (SAC) Meeting

Recommended Action: Direct
Item #6: Executive Director’s Report

Recommended Action: Information
Item #7: Consent Agenda (Items #7A-7G)

Recommended Action: Approve
Item #8: Items Removed from Consent Calendar for Discussion and Possible Action
Item #9A: Draft Approach for the Allocation of Regional Early Action Planning Funding

Recommended Action: Approve
Draft Approach for the Allocation of Regional Housing Planning Funding

Heather Adamson, AICP
Director of Planning, AMBAG

June 10, 2020
Background

- On January 31, 2020, AMBAG presented a draft REAP fund suballocation approach in cooperation with our regional COG partners to the Central Coast Housing Working Group (CCHWG).
- CCHWG directed AMBAG to proceed developing the funding approach.
- CCHWG approved the regional REAP approach at its April 24, 2020 meeting.
- AMBAG Board of Directors discussed draft REAP approach at is May 13, 2020 meeting.
Approach for Allocating Regional Housing Funding

Three percent of the funds ($237,939) will be allocated to the fiscal agent to administer the grant for the Central Coast from 2020-2024:

- Housing planning best practices toolkit
- Outreach and education
- Coordination and compliance with HCD
- Financial oversight and auditing
- Invoicing and reporting
- Contract management
Approach for Allocating Regional Housing Funding

- $7,693,372 will be allocated to the four COGs
- Amounts allocated are based on the proportion of each COG’s population within the Central Coast megaregion to maintain geographic equity
- COGs may use some funds to develop an improved methodology for 6th Cycle RHNA

<table>
<thead>
<tr>
<th>COG</th>
<th>Allocation</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMBAG</td>
<td>$3,651,516</td>
</tr>
<tr>
<td>SBtCOG</td>
<td>$315,812</td>
</tr>
<tr>
<td>SLOCOG</td>
<td>$1,421,465</td>
</tr>
<tr>
<td>SBCAG</td>
<td>$2,304,579</td>
</tr>
<tr>
<td>TOTAL</td>
<td>$7,693,372</td>
</tr>
</tbody>
</table>
Approach for Allocating Regional Housing Funding

- COGs allocate remaining funding to jurisdictions or other subregional entities for housing planning
- COGs may suballocate funds to their jurisdictions using geographic equity or other processes at their discretion
AMBAG

- AMBAG’s proposed approach is to allocate $3,300,000 to the local jurisdictions within Monterey and Santa Cruz Counties according to jurisdiction size, consistent with thresholds in HCD’s LEAP program.

- Remaining funds ($351,516) would be used to prepare the 6th Cycle RHNA methodology and allocation updates and other regional planning activities.

- Discussed with Planning Directors and there is general support for this approach.

- SBtCOG are discussing its approach with its three jurisdictions.
Monterey and Santa Cruz Counties Local Jurisdictions

- Maximum grant amounts to be set as follows, according to 2019 population estimates:

<table>
<thead>
<tr>
<th>Jurisdiction Size*</th>
<th>Max Award</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 20,000 =</td>
<td>$65,000</td>
</tr>
<tr>
<td>20,000 - 59,999 =</td>
<td>$165,000</td>
</tr>
<tr>
<td>60,000 - 99,999 =</td>
<td>$300,000</td>
</tr>
<tr>
<td>100,000 - 199,999 =</td>
<td>$530,000</td>
</tr>
</tbody>
</table>

*Same population thresholds as the HCD LEAP program.
Example Eligible Uses of REAP Funds

• Infrastructure planning to support new housing and new residents
• Technical assistance in improving housing permitting processes, tracking systems and planning tools
• Feasibility studies to identify the best housing sites
• Establishing housing trust funds for affordable housing
• Temporary staffing or consultants for housing planning activities
• 6th Cycle Housing Elements
• Other actions which accelerate housing production
Next Steps

• Each of the four COG will finalize funding approach
• AMBAG working to execute agreement for REAP funding
• Draft REAP application for suballocation to Central Coast local jurisdictions is under development
• Funding expected to be available beginning Summer 2020
Recommendation

• It is recommended that the Board of Directors approve the allocation approach for the AMBAG Regional Early Action Housing Planning (REAP) Funding
Questions
Item #9B: Central Coast Highway 1 Climate Resiliency Study

Recommended Action: Information
Central Coast Highway 1 Climate Resiliency Study

Heather Adamson, AICP
Director of Planning, AMBAG

June 10, 2020
Study Overview & Goals

- Funded by Caltrans SB 1 Adaptation Planning Grant & State Rail funds, with local match
- Develop a transportation corridor concept & sea level rise adaptation approaches that:
  - Improve transportation safety & efficiency
  - Promote healthy coastal habitats
  - Provide economic security & benefits to the community
Steering Committee

- AMBAG
- Caltrans
- The Nature Conservancy
- Environmental Science Associates
- TAMC
- Center for the Blue Economy
- County of Monterey
- Ocean Protection Council

- California Coastal Commission
- Elkhorn Slough Foundation
- Elkhorn Slough National Estuarine Research Reserve
- U.S. Fish & Wildlife
- Central Coast Wetlands Group
- Coastal Conservancy
- Moss Landing Harbor District
Outreach & Community Engagement

- Public workshops
  - August 2019
  - February 2020
- Stakeholder meetings
- Presentations
Study Timeline

- Identify Existing Conditions
  - November 2018 – April 2019

- Develop Adaptation Concepts & Scenarios
  - May 2019 – September 2019

- Evaluation of Adaptation Scenarios & Benefit-Cost Analysis
  - September 2019 – April 2020

- Outreach and Community Engagement

- Outreach and Community Engagement

- Acceptance of Final Study Report
  - August 2020
No Action Scenario

- Flood projections show inundation of the Moss Landing Harbor, Highway 1, rail corridor and adjacent areas
- Without action, we will lose ~50% of marsh and mudflat
- Without action, transportation infrastructure will be severely impacted

**TABLE 1. FLOODING THRESHOLDS FOR REACH 1-4**

<table>
<thead>
<tr>
<th>REACH</th>
<th>MINIMUM EL (FT NAVD)</th>
<th>COASTAL STORM THRESHOLD</th>
<th>FLUVIAL STORM THRESHOLD</th>
<th>MONTHLY INUNDATION THRESHOLD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>7.6</td>
<td>TODAY</td>
<td>N/A</td>
<td>BY 2040</td>
</tr>
<tr>
<td>2</td>
<td>8.9</td>
<td>BY 2040*</td>
<td>N/A</td>
<td>BY 2060</td>
</tr>
<tr>
<td>3</td>
<td>8.8</td>
<td>BY 2030</td>
<td>BY 2060</td>
<td>BY 2060</td>
</tr>
<tr>
<td>4</td>
<td>9.0</td>
<td>BY 2040</td>
<td>BY 2060</td>
<td>BY 2070</td>
</tr>
</tbody>
</table>

*Determining assuming high sea level rise and climate change scenario

*The Coastal Resilience web [tool provides additional SLR and coastal hazard projections for the Monterey, CA region at](http://maps.coastalresilience.org/California/)
King Tide Flooding over Railway
Evaluation of Adaptation Scenarios

Ecology and Hydrology
- Sea Level Affecting Marsh Model (SLAMM)
- Delft3D Hydrodynamic Model

Transportation Analyses
- Regional Travel Demand Model & GIS Analysis
- VMT, Congested VMT, Delay, Collisions, Travel Time, Social Equity, Environmental Impact

Future Climate Modeling
- Coastal Resilience Monterey Bay
- State of CA Guidance

Benefit-Cost Analysis
- Center for the Blue Economy
**Hwy 1 – Two Lanes (C1)**

Highway 1 (2-lanes with operational and access improvements) alignment elevated on piles and/or fill where needed. Hourly rail service on single track railway and express transit on service on Highway 1.

**Alternate Corridor – Widen G12 (C2)**

Local access to Highway 1 only with (no elevation or operational improvements) with G-12 corridor widened to 4 lanes. Hourly rail service on railway on single track.

**Hwy 1 – Widen to Four Lanes (C3)**

Highway 1 (4-lanes with operational and access improvements) alignment elevated on piles and/or fill. Hourly rail service on railway on single track and bus rapid transit/express transit service on Highway 1.
Roadway Improvements and Adaptation Options

- Integrate solutions that enhance the resilience of the roadway and neighboring ecology.
- Highway to be elevated on piles or fill, depending on opportunities for improvement in ecology and habitat quality in specific reach and flood plain management:
  - Reaches 1 and 2 (North of Bridge): Elevate on piles to support increased tidal action and improved water quality or on fill with levee ecotone (gentle slope with vegetation) to facilitate habitat area.
  - Reaches 3 and 4: Elevate highway on piles to allow for more flexible floodplain management in the future.

![Diagram of roadway improvements and adaptation options](image-url)
Railway Improvements and Adaptation Actions

- Elevating the rail corridor on trestle
- The railway would be single track through the Slough
- Marsh restoration to support marsh habitat as sea level rises
- Existing railway embankment maintained to encourage sediment retention

Profile view of railway elevated on trestle (left) and existing embankment on fill (right). Example of railway elevated on trestle at Lake Pontchartrain in New Orleans, LA (below).

Proposed marsh restoration entails raising the marsh plain grade elevations to keep pace with rising water levels.

*Sea Level Rise Affecting Marshes Model*
Transportation Key Findings/Takeaways

- **4-lane Highway 1:**
  - Less vehicle and freight delay
  - Congestion relief & safety
  - Most multimodal trips
  - Negatively impacts natural resources & farmland

- **2-lane Highway 1:**
  - High congestion
  - Least multimodal trips

- **G12 corridor:**
  - Doesn’t serve disadvantaged communities
  - Negatively impacts natural resources & farmland
Habitat Key Findings/Takeaways

- No action/delays result in habitat loss (~85% of estuarine marsh)
- Benefits of restoration greater if occurs before habitat conversion (~2030s)
- Marsh restoration east of railway and ecotone creation at Highway 1 slow the rate of habitat loss
- Transportation adaptation one of several strategies needed maintain habitat in the face of sea level rise
Without restoration, estuarine marsh converts to mudflat habitat, becoming permanently submerged by 2100.

Restored areas persist until end of century, producing an additional 290 acres of estuarine marsh habitat at 2100.
Cost Benefit Analysis Key Findings

- No Action scenario: costs far exceed benefits
- Only 4-lane Highway 1/marsh restoration has benefits that exceed costs
- Traffic delay and safety costs of 2-lane Highway 1 or G12 widening result in negative net present value
- Benefits of reducing delays in 4-lane option offset the costs of marsh restoration
- Begin implementation by early 2040s to avoid negative impacts from sea level rise
Next Steps

○ Draft study report released for public comment
○ Comment period ends on June 11, 2020
○ Email comments to: hadamson@ambag.org
○ Finalize study report and present to AMBAG Board
○ Report acceptance and grant closeout in August
○ Developing a virtual reality experience to visualize sea level rise impacts, adaptation scenarios and study results (anticipated completion by September 2020)
Item #10: Adjournment