CHARG Forward Forum:
“Implementing For One Bay”
October 3rd, 2019
Welcome

Melanie Richardson, Valley Water
Daniel Woldesenbet, Alameda County
Keynote Address

“Facilitating Climate Adaptation to Elevate the Bay’s Resiliency”
Therese McMillan, MTC
Ramping up the Technical Approach for Solutions to Sea Level Rise

- **Jessica Fain** - “ART Bay Area: Asset Vulnerabilities and Next Steps”
- **Kristina Hill** - "Groundwater Could Generate More Flooding Than Seawater. Are We Ready?"
- **Matt Brennan** – “What Model Should I Use? A Technical Comparison”
- **Rohin Saleh** - “Climate Adaptation Alternatives for the SF Bay”
- **Roger Leventhal** - “10 Challenges to Implementation in 10 Minutes”
<table>
<thead>
<tr>
<th>Topic</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Topic 1. Develop communication materials and tools to make the case for regional SLR adaptation.</strong></td>
<td>Results will increase stakeholder and public understanding of a regional approach to SLR adaptation. Value: will bring more support and funding for regional approaches to SLR, enabling the region to speak with one voice, which will ultimately create sustaining solutions.</td>
</tr>
<tr>
<td><strong>Topic 2. Review available Bay area vulnerability assessments and identify strategic gaps.</strong></td>
<td>Results will identify key issues that are not receiving adequate attention in San Francisco Bay SLR vulnerability assessments. Value: Ensure SLR adaptation investments address the most critical vulnerabilities, are effective and sustainable.</td>
</tr>
<tr>
<td><strong>Topic 3. Identify and document the current and planned urbanized shoreline edge of San Francisco Bay</strong></td>
<td>Results will provide accurate shoreline boundaries for use in modeling and in adaptation planning. Value: Increased transparency on modeling inputs and assumptions, avoiding future disruptions when modeling results are questioned, and ensuring more accuracy and uniformity across the region.</td>
</tr>
<tr>
<td><strong>Topic 4. Compare models suitable for sea level rise analysis in San Francisco Bay</strong></td>
<td>Results will allow floodplain managers to more quickly select models and compare between models for vulnerability and adaptation planning for more efficient use of resources. Value: Enables flood managers to provide more value to constituents by being more conversant on various models and results, and making more informed and cost-effective recommendations to decision-makers.</td>
</tr>
<tr>
<td>Topic</td>
<td>Purpose</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Topic 5. Model Bay water levels for SLR and Bay floodplain management scenarios</td>
<td>Results will quantify the change in Bay water levels for simplified adaptation scenarios (e.g., minimum and maximum floodplain connections). Value: Bookend the potential magnitude of redirected flood effects, provide a basis for equitable distribution of risk, demonstrate the benefits of regional coordination.</td>
</tr>
<tr>
<td>Topic 6. Analyze combined Bay and fluvial flooding for existing conditions and future scenarios.</td>
<td>Results will identify the frequency of occurrence for water levels at the mouths of creeks and upstream considering SLR and more intense precipitation. Value: Inform asset vulnerability and adaptation at creek mouths, outfalls, and upstream floodplains; e.g., demonstrate how flood control facilities will be affected and may require upgrades.</td>
</tr>
<tr>
<td>Topic 7. Identify threshold water levels along the San Francisco Bay shoreline where flood protection requires subregional and regional coordination.</td>
<td>Results will raise awareness of the need for multi-jurisdiction coordination for effective flood protection with SLR. Value: identify the water level at which neighboring or regional jurisdictions must coordinate on flood protection and adaptation.</td>
</tr>
<tr>
<td>Topic</td>
<td>Purpose</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Long-Term Priorities</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Topic 8. Perform a literature review and develop case studies of SLR adaptation around the world in regions with conditions similar to San Francisco Bay.</strong>*</td>
<td>Results will provide insight and lessons learned on adaptation strategies used in areas similar to San Francisco Bay. Value: Ensures cutting edge and effective solutions will be considered in development of future regional adaptation plans.</td>
</tr>
<tr>
<td><strong>Topic 9. Perform a preliminary evaluation of regional SLR adaptation strategies</strong></td>
<td>Results will provide the building blocks and tools for a regional approach to SLR adaptation. Value: identifies needs, gaps, and advances a One Bay approach.</td>
</tr>
</tbody>
</table>
Technical Priorities Road Map

Problem Definition ➔ Data Collection ➔ Model Selection & Development ➔ Analysis

NEAR-TERM

TOPIC 1. Communication Tools & Resources

TOPIC 4. Model Comparison

TOPIC 7A. Preliminary Target Elevations

TOPIC 7B. Refined Target Elevations

These tools and resources are integrated throughout...

Show Consequences of Business as Usual

TOPIC 2. Vulnerability Assessment Gap Analysis

TOPIC 3. Identify Urbanized Shoreline Edge

TOPIC 6A. Alameda County Tidal/Fluvial Pilot Study

IMPLEMENTATION

TOPIC 9. Regional SLR Adaptation Strategies

LONG-TERM

TOPIC 5. Model SLR & Floodplain Management Scenarios

TOPIC 6B. Regional Tidal/Fluvial Study

MEDIUM-TERM
Ramping up the Technical Approach for Solutions to Sea Level Rise

• Jessica Fain - “ART Bay Area: Asset Vulnerabilities and Next Steps”
• Kristina Hill - "Groundwater Could Generate More Flooding Than Seawater. Are We Ready?"
• Matt Brennan – “What Model Should I Use? A Technical Comparison”
• Rohin Saleh - “Climate Adaptation Alternatives for the SF Bay”
• Roger Leventhal - “10 Challenges to Implementation in 10 Minutes”
Lunch CHARG-up Announcements
Mapping Our Sea Level Rise Response
Policymakers: Turning Policy Into Action

• **Dr. Bill Quirk**, Assemblymember District 20
• **Senator Bob Wieckowski**, Senate District 10
• **Karen Holman**, Midpeninsula Open Space District, Board Vice President
• **Brian Perkins**, District Director for Congresswoman Jackie Speier, 14th District
Next Steps to CHARG Forward