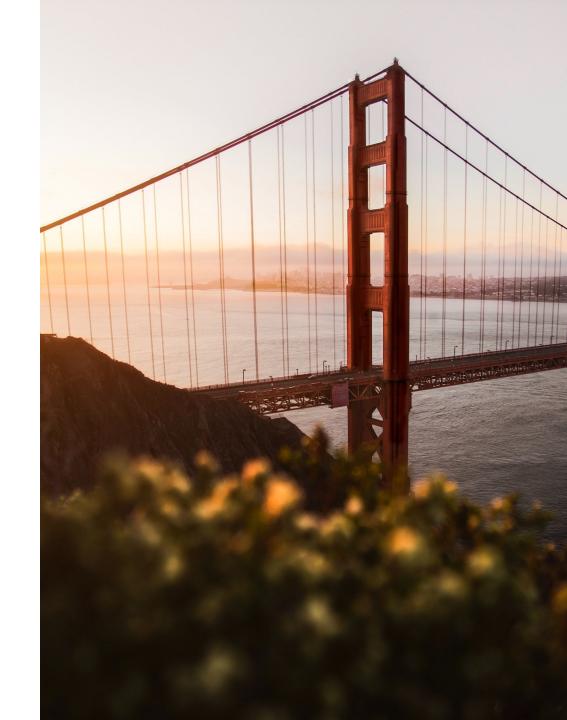
## PLANNING STRATEGIES



## **MODERATOR**













**September 30, 2022** 

## Bay Planning Coalition Fall Summit

San Mateo County Flood and Sea Level Rise Resiliency District

Len Materman, CEO





San Mateo County is the most vulnerable CA county to the first 3 feet of sea level rise in terms of:

- population, incl. underrepresented population
- Chinater changenes and sontaminated aileinge the C well-population address.





State legislation established OneShoreline on January 1, 2020 as the first

impacts of climate change. Our mandate relates to flooding, SLR, coastal erosion, stormwater, water supply, recreation, and the environment.

OneShoreline takes a holistic approach to:

**THREATS** 

**GEOGRAPHY** 

**OBJECTIVES** 

OneShoreline aims to set an example with resilience planning that is:

- cross-jurisdictional and positions all communities for success
- cross-sector (governments, CBOs, and businesses)
- cross-disciplinary (land use, housing, transportation, water, energy, etc.)

#### Key ingredients to long-term resilience:

1. Local leadership eager to use authorities to maximize opportunities for long-term resilience and minimize the need to retrofit later







2. A cross-jurisdictional effort, like OneShoreline's Millbrae and Burlingame Shoreline Area Protection & Enhancement Project, to guide - and integrate developments into - an aligned regional solution.



3. Opportunities for new waterfront developments to contribute to site-specific and regional resilience







Currently, developers and agency staff consult with

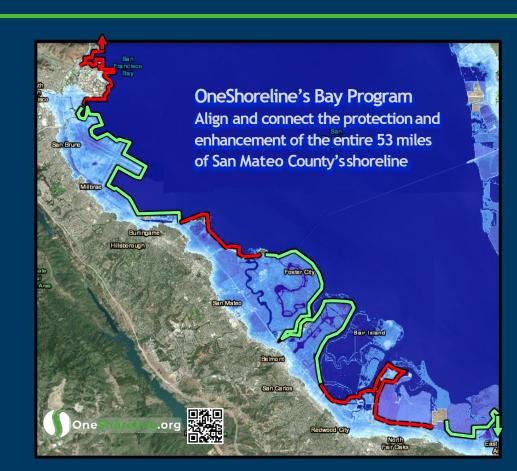
OneShoreline on projects in Burlingame, San Carlos, South SF, Redwood City, Belmont, and East Palo Alto.

OneShoreline Planning Guidance Policy - a standardized, evolving resource for cities and the County to account for climate-driven future conditions in their planning documents, processes, and approvals.

- Buffer zones and easements along water for flood protection, recreation/access, and habitat
- Elevation & other standards for protection infrastructure and 1st floor of new developments
- Finance resilience and disclose climate-driven hazards in real estate transactions
- Stormwater capture & drainage, and groundwater rise

Overview of OneShoreline's draft guiding principles and objectives for our Bay shoreline area projects

- Key stakeholders share responsibility for multi-faceted, long-term protection aligned across jurisdictions
- Sustain the viability of key built, ecological, and recreational assets
- Enhance shoreline access and recreation
- Create habitats that can flourish in future conditions
- Work with nature, rather than against it, where possible

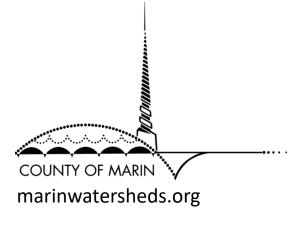


# Bay Planning Coalition Fall Conference CHARG Engineering SLR Update



Roger Leventhal, P.E.
Senior Engineer
Marin County Flood Control
CHARG Vice-Chair
rleventhal@marincounty.org

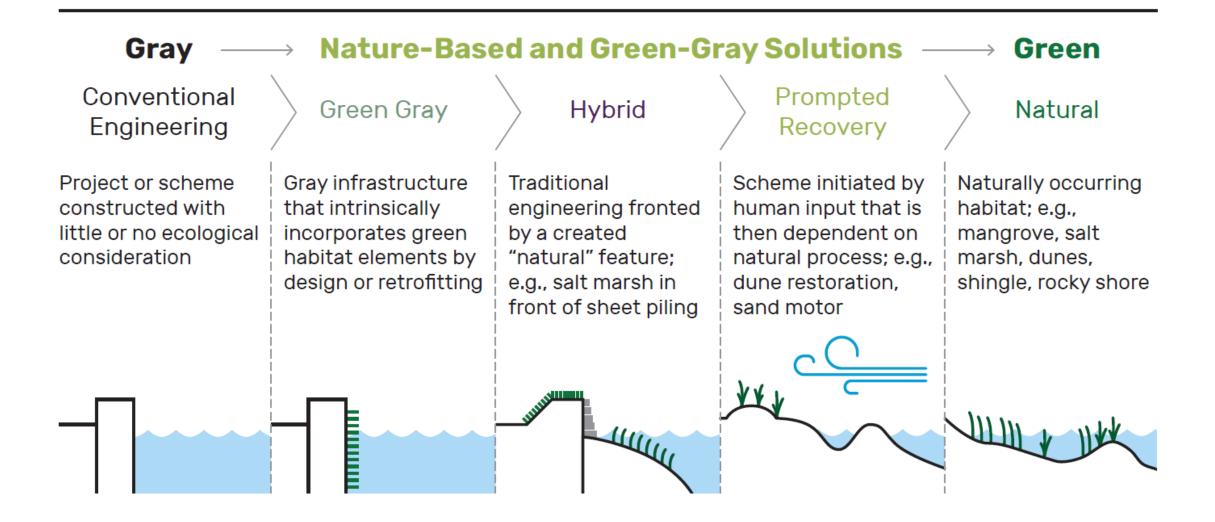
September 29, 2022



## Update Thoughts for Fall BPC Conference

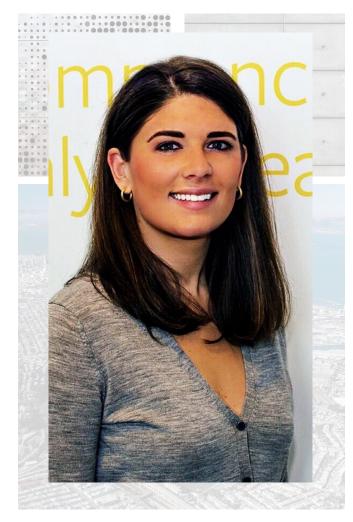
- Problem still not solved since Spring BPC conference
- Divide SLR projects into two types
  - Habitat first with flood protection as required for CEQA
  - Flood protection first using NbS to improve performance with habitat benefits
- CHARG focuses on protection of communities along the urban edge
  - Solutions require working with communities
- Funding is uncertain into the future
- Agree with Warner to develop a rational process for funding
- CHARG writing WPs to help planners and decision makers understand engineering realities (2023)
- EwN is taking front and center these days which is good but what does it mean...

## EwN World - A Spectrum of Green



### Real World Issues with EwN

- Requires more space, often not available
- Unproven so design liability is higher. Cities can promote by accepting liability
- Money for construction easier to find then grant funds for maintenance which is often required for fully EwN projects
- Permitting costs may be higher due to regulatory concerns over impacts and need to "prove" there isnt. Modeling....\$\$\$\$
- Requires taking risks...the resulting project may be much better, resilient and provide multi-benefits for habitat and public amenities



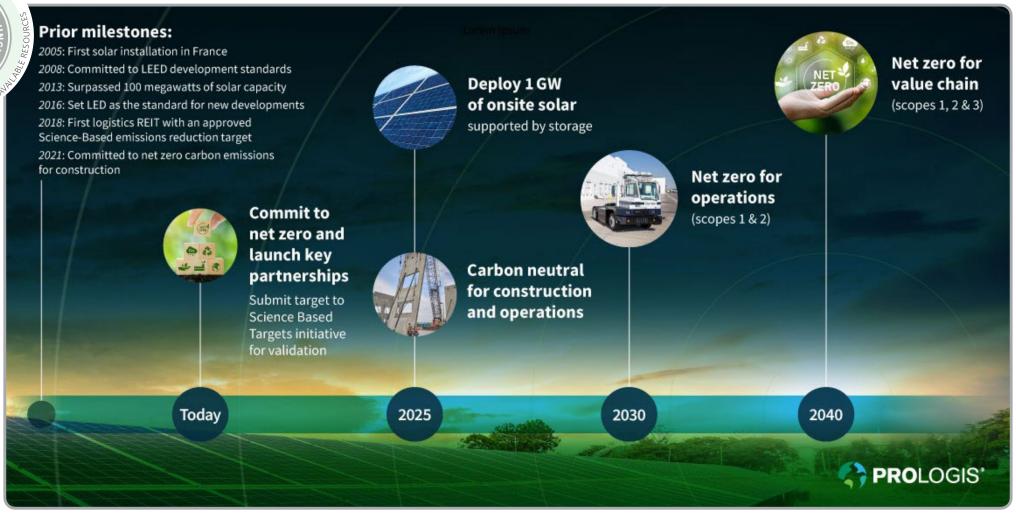




#### **SUSTAINABILITY AND LEED**

LEADING THE INDUSTRY IN SUSTAINABLE DESIGN







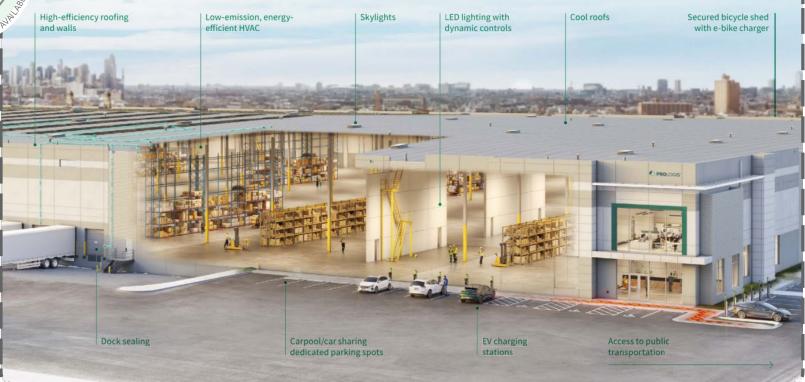


A Center for Production, Distribution and Repair

#### SUSTAINABILITY AND LEED

LEADING THE INDUSTRY IN SUSTAINABLE DESIGN





Primary sustainability goals:

#### **LEED Gold or higher**

#### **Key Strategies to include:**

Local materials

Low-emissions, energy efficient

equipment

**LED lighting and Controls** 

Daylighting as possible

EV charging

Carpooling | Car Share

Bicycle parking | showers & lockers

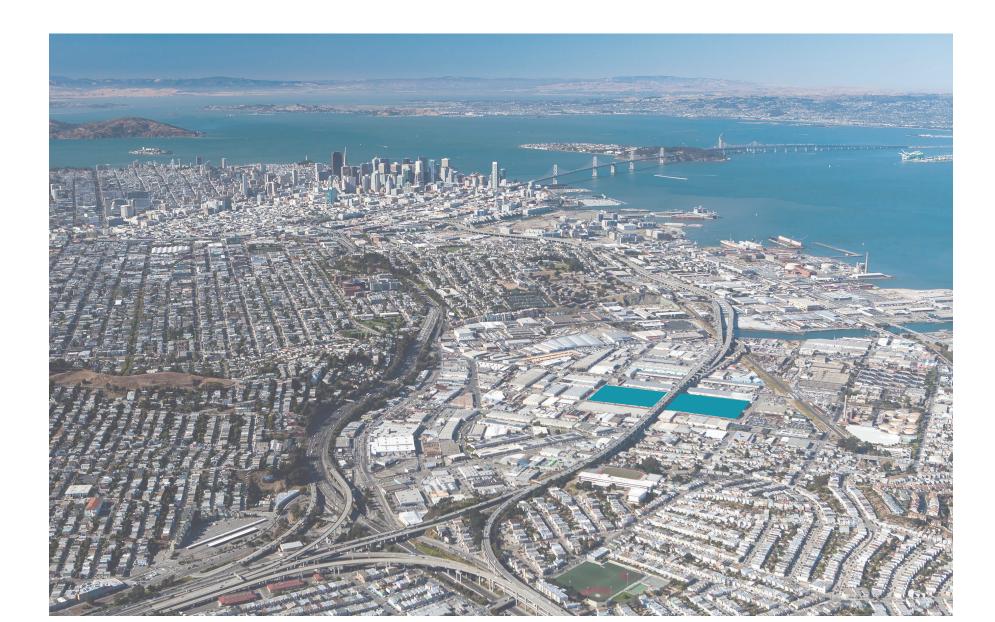
#### **Carbon neutral construction**

#### Key Strategies to include:

Reduce embedded Carbon in construction materials Efficient construction process Offsets



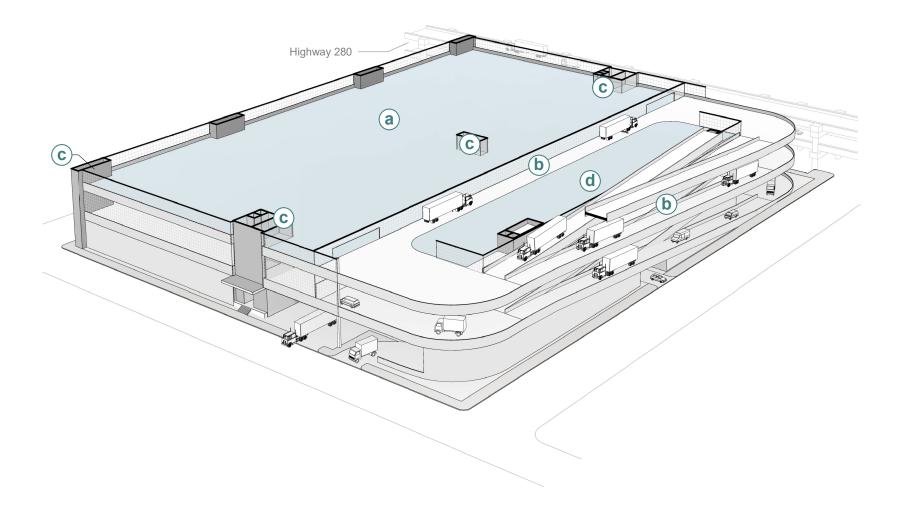


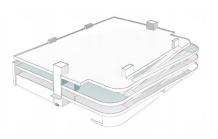






#### LEVEL 3





- a PDR
- D. Common Vehicle Circulation
- C. Elevator and Stairs
- **d**. Logistics Yard









#### **PROJECT OBJECTIVES**



#### **PDR JOBS**

Foster PDR job growth and support local businesses



#### **PDR + INNOVATION**

Develop first and best in class urban infill PDR space to address City's need



#### **COMMUNITY CONNECTION**

Develop long term collaborative community partnerships



#### **RESILIENCY**

Boost City's supply chain and disaster response through design and scale of facility



#### **SUSTAINABILITY**

Implement innovative sustainable features that bridge between design and operations



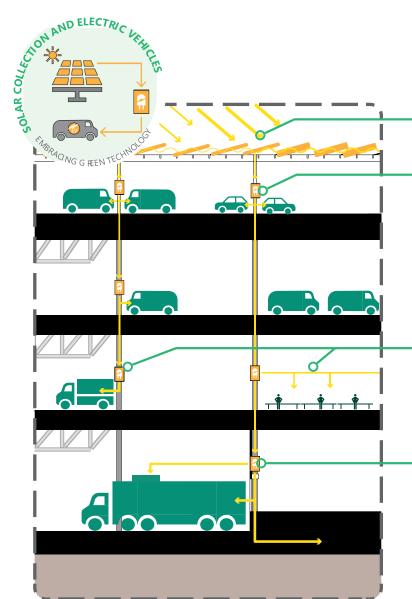
#### SAFE GREEN INFRASTRUCTURE

Develop green infrastructure and a safe and compelling streetscape



#### **SOLAR COLLECTION AND ELECTRIC VEHICLES**

EMBRACING GREEN TECHNOLOGY



Up to 3.2 megawatt solar array covering roughly 80% of the rooftop will collect and distribute substantial renewable energy

Electric vehicle charging infrastructure provided to facilitate movement of electric vehicles

Electric charging prevents indoor diesel idling; reducing emissions to the surrounding community and increasing air quality and cleanliness in workplace

Plug-ins for truck mounted refrigeration unit reduces

Plug in to recharge electric truck mounted refrigeration unit reduces emissions



Project's solar array projected to **generate** up to **5.6 million kilowatt hours** of solar energy a **year** 



**Committed to** significantly exceeding code minimums for **EV charging** and **solar array** coverage



Enough **clean energy** generated by solar array to **power over 600 homes annually** 





#### A Center for Production, Distribution and Repair

#### **SOLAR COLLECTION AND ELECTRIC VEHICLES**

**EMBRACING GREEN TECHNOLOGY** 







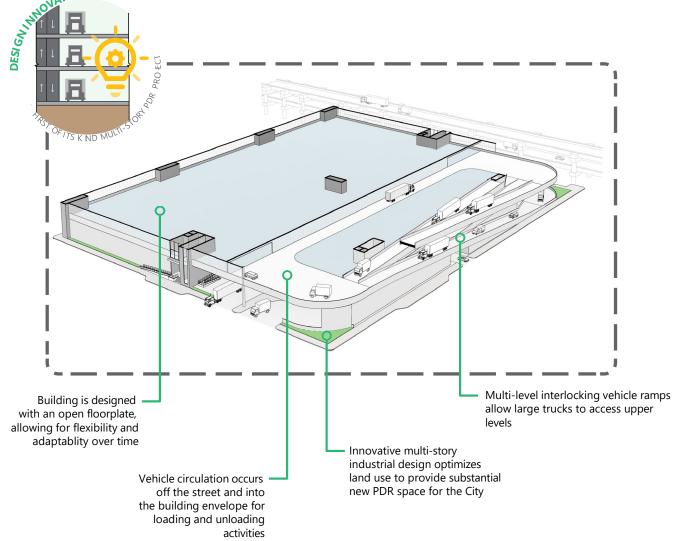




#### A Center for Production, Distribution and Repair

#### **DESIGN INNOVATION**

FIRST OF ITS KIND MULTI-STORY PDR PROJECT





Project **prioritizes PDR users** and fosters **meaningful growth** of a disappearing industry



Design **maximizes** the capacity of this **rare large PDR space** inside of the city



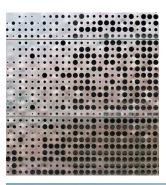
Brings **San Francisco** to the **forefront** of supporting an **innovative PDR future** 





FRANCISCO GATEWAY A Center for Production,

Production, Distribution and Repair





















## **Community-Based Adaptation – East Palo Alto**

- Institution/Infrastructure
  - Climate Change Community Teams
  - leadership
  - partnerships
- Capacity Building
- Meaningful Engagement
  - Climate Change Survey
  - Community Vulnerability Assessment
  - Adaptation Prioritization
  - Program Development



**CCCT Planning Workshop (July 2019)** 

## **Focus Groups**







"What kinds of projects should the community/ local government be working on to address environmental issues?"



### **Adaptation Projects**

- Pilot Rain Garden and Water Cistern Project (Prop 68)
- Resilience Hubs (Partnership with Fresh Approach)
- Coastal Restoration Project (Measure AA)
- Youth Climate Collective (Fostering Youth Leadership)
- Resilient Homes
- Environmental Justice Network (Pipeline Project with YUCA)
- Safer Bay Project (SFCJPA)
- Air Purifier Campaign (CRC&CCCTS)

#### Safer Bay Project - SFCJPA





## Reach out with any questions!

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Communities