

Adapting to sea level rise in San Rafael

Adaptación a la subida del nivel del mar en San Rafael

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An aerial photograph of San Rafael, California, featuring a large shopping center with a parking lot and a marina. The image is overlaid with a semi-transparent blue filter. In the background, there are green hills and a prominent mountain peak under a clear sky.

Agenda

1. Overview of the issue & context of flooding in San Rafael
2. Review of the Request For Proposals
3. Q & A



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1. Why is San Rafael
vulnerable to flooding?

¿ Por que hay un riesgo de
inundaciones en San Rafael?

the land is low

la tierra está baja



low ground
terreno bajo

high ground
terreno alto



low ground
terreno bajo

high ground
terreno alto



San Rafael High School

Canal

Building land

Construcción de terreno

Canal

San Rafael
High School



Building over wetlands
Construyendo sobre humedales

San Rafael
High School

Canal Alliance

A 1961 aerial view by Rudolf Barton looking at the site of the San Francisco Bay Aiport (courtesy of Kevin Walsh).

The shore is just above the water
La orilla está justo por encima del agua



the land is getting lower

la tierra se está hundiendo

Former wetlands have subsided ~2 feet
Los humedales anteriores se han hundido ~2 pies

It is expected to subside another 2-4 feet in 30-70 years
Se espera que se hunda otros 2-4 pies en 30-70 años

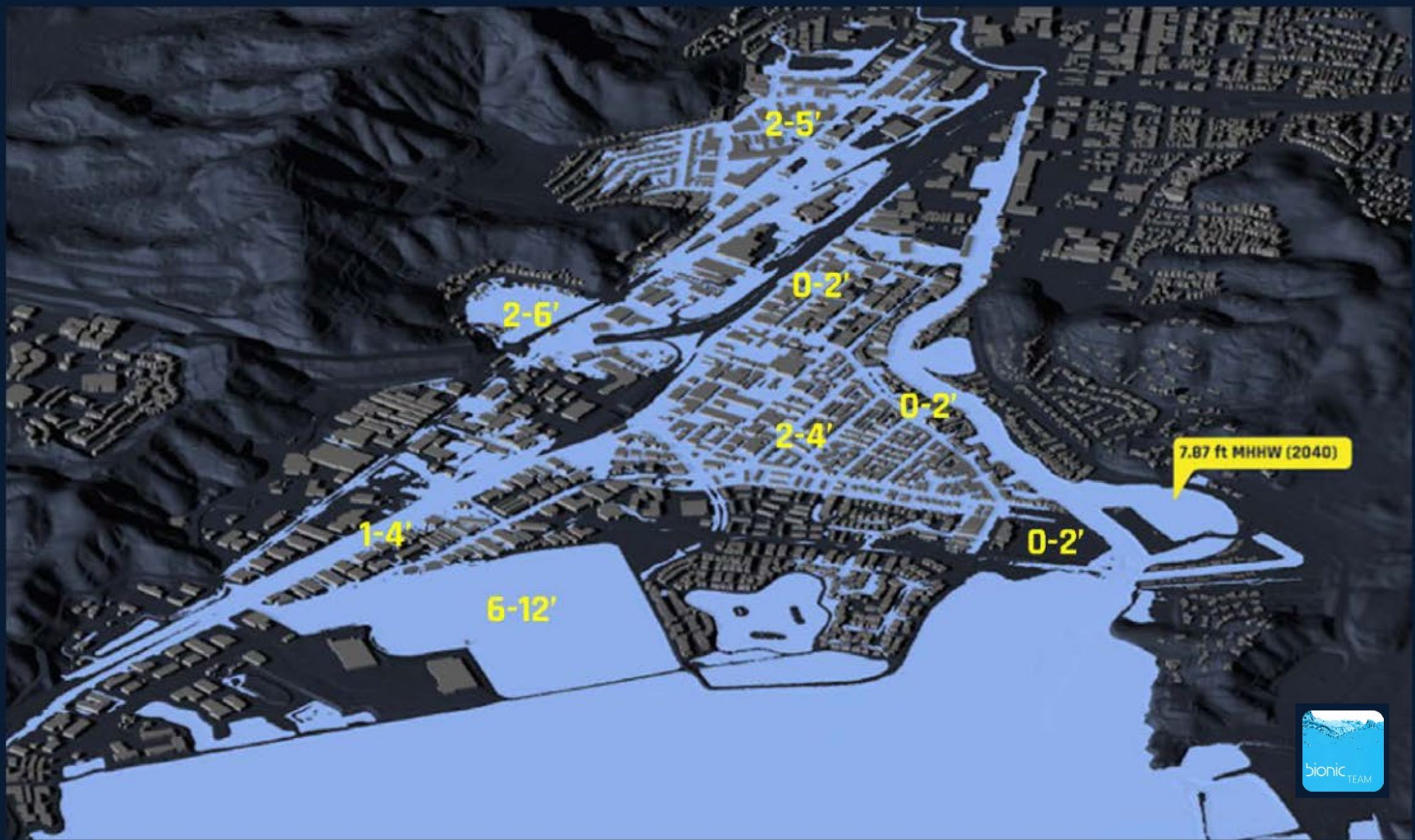




TRD OFF
ROAD
TOYOTA RACING DEVELOPMENT

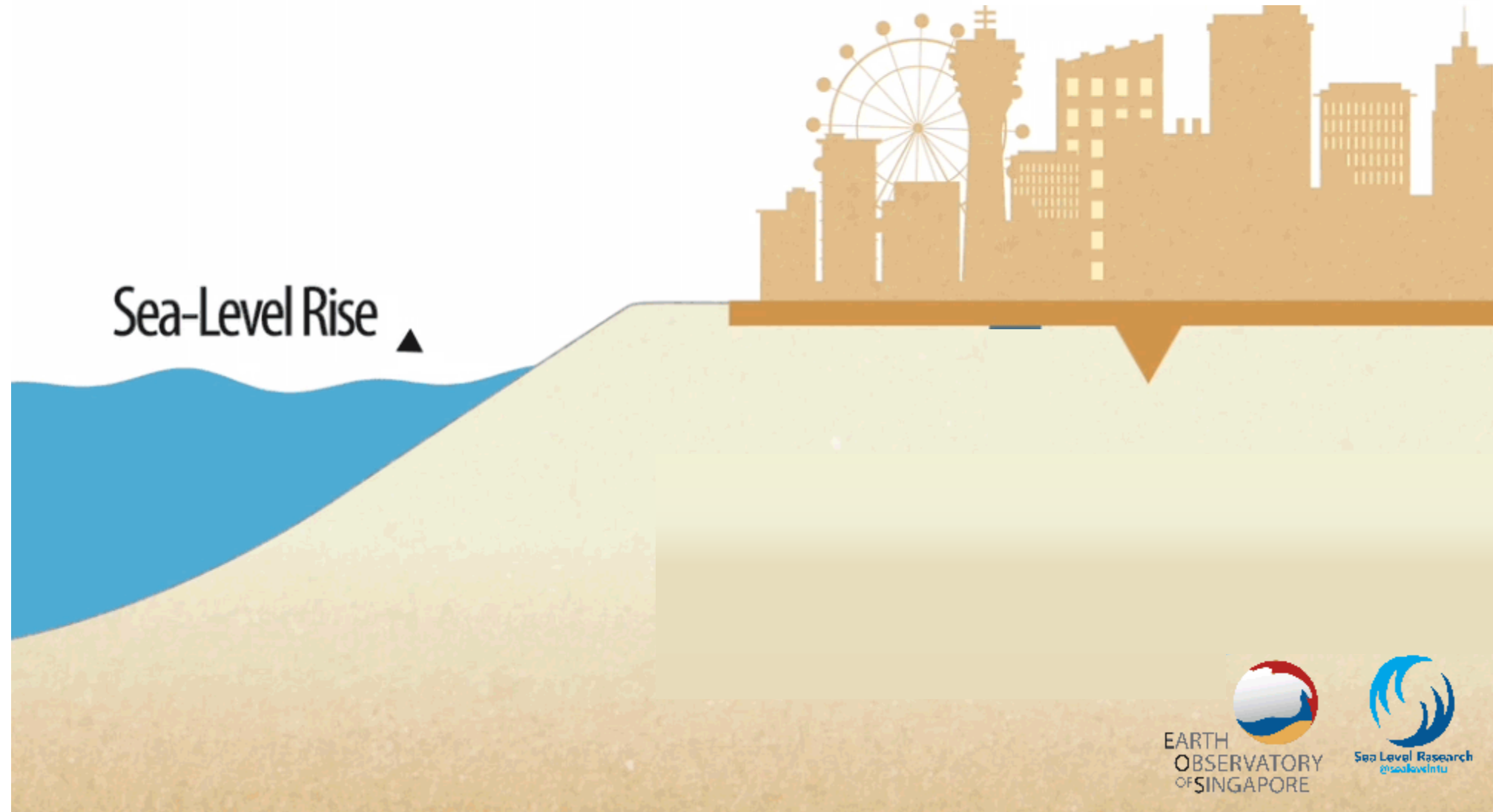
Most of East San Rafael is
lower than today's high tides

La mayor parte del Este de San
Rafael está más bajo que las
mareas altas de hoy



the land is getting lower

la tierra se está hundiendo



What keeps the water from
getting in right now?

¿Qué impide que entre el agua
en este momento?





KARATE

NO





DANGER

AUTHORIZED PERSONNEL ONLY
NO SMOKING
CONFINED SPACE AREA
HIGH VOLTAGE #2
THIS EQUIPMENT
STARTS AUTOMATICALLY

AMERICAN

HUMPHREY
SAN FRANCISCO, CA

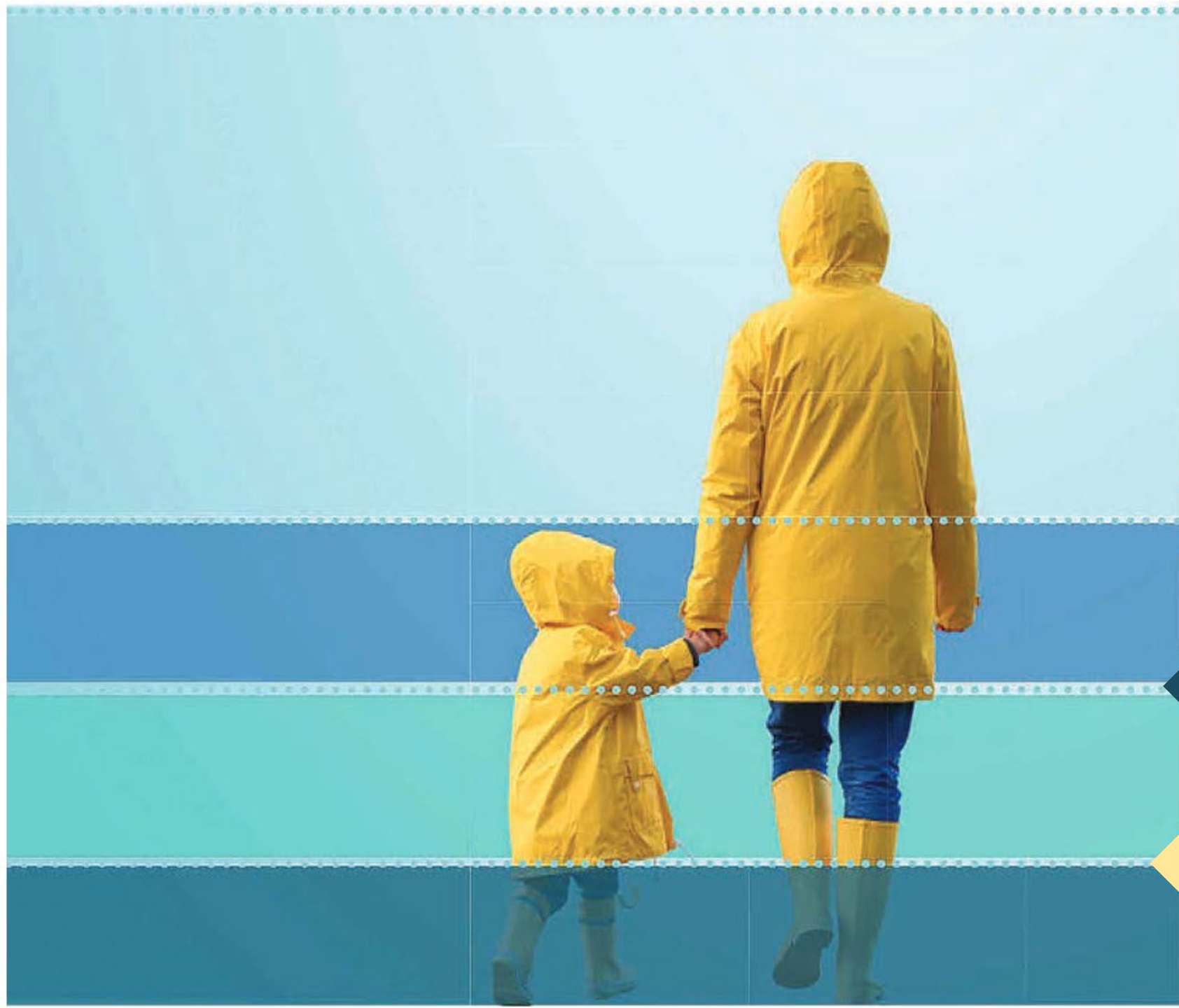
the water is getting higher

la Bahía está subiendo

El nivel del mar ya ha subido 8 pulgadas

Sea level has risen 8"





Water will be
1 foot higher
in 20-40 years

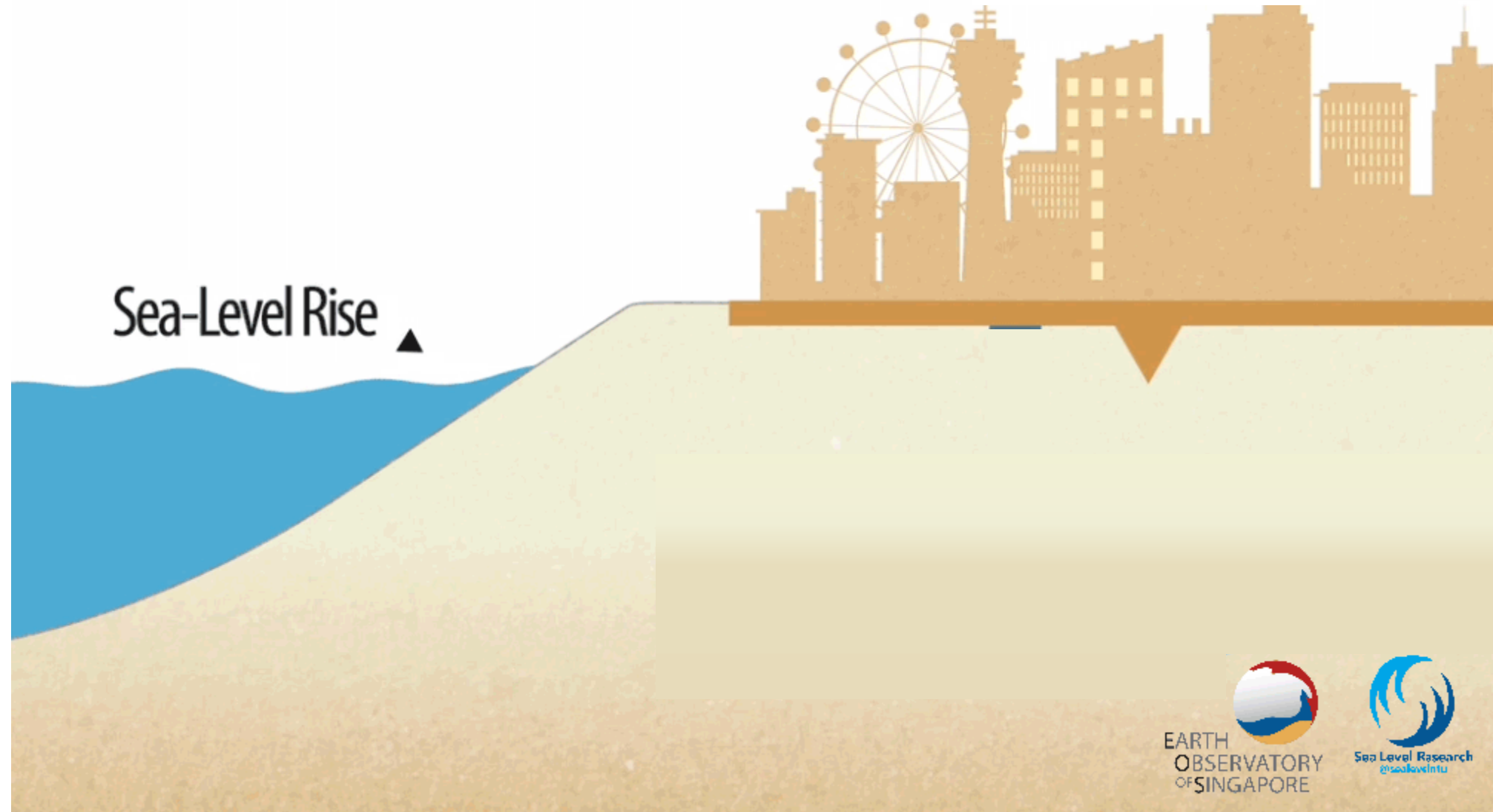
El agua estará
1 pie más alto
en 20-40 años

← FUTURE | FUTURO

← TODAY | HOY

the land is getting lower

la tierra se está hundiendo





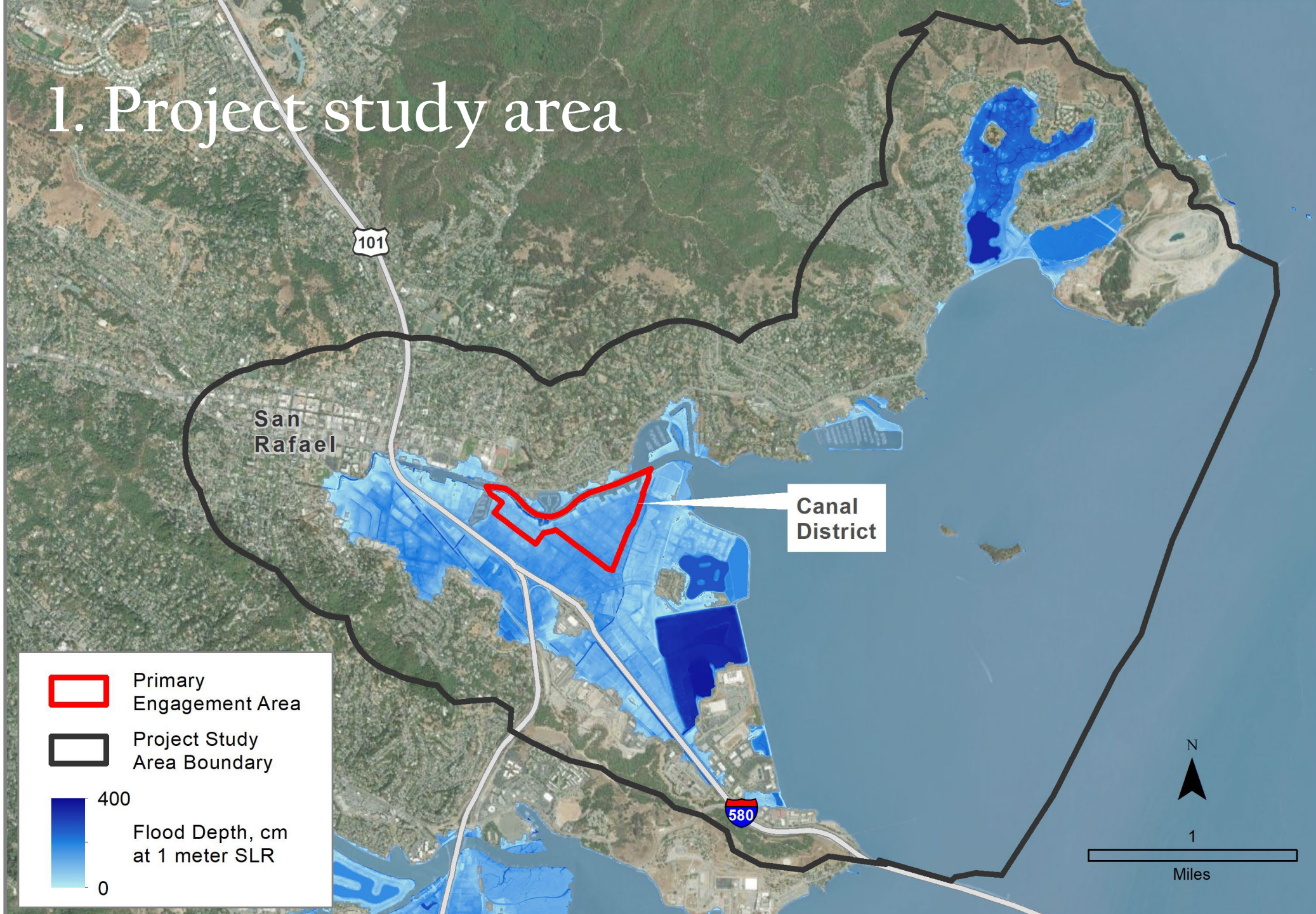
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1. Project Overview


- Sea level rise adaptation planning services
- Total budget \$520,000 (12-18 months)
 - Two parts representing two complimentary grant sources
- City overseeing the consultants, but project team includes partners
- Proposals due September 21st

1. Project study area



 Primary Engagement Area

 Project Study Area Boundary

 400
Flood Depth, cm
at 1 meter SLR
0

Canal District

N

1

Miles

2. Contract award process

- Proposals due at noon on September 21st
- Submit them via email
- Between now & then all questions should be sent in writing via email
- Intending to select a team/firm early October

3. Proposals

- Qualifications
- Project approach
- Schedule
- Budget
- Optional short video

Evaluation Criteria

An aerial photograph of a city, likely San Jose, California, showing a dense urban area with numerous buildings, parking lots, and a river. In the background, there are large, forested mountains under a clear sky. The image is overlaid with a semi-transparent blue filter.

- Organizational experience (20 points)

Evaluation Criteria

- Equitable adaptation & community engagement experience & qualifications (30 points)

Evaluation Criteria

An aerial photograph of a city, likely San Jose, California, showing a large shopping center with a parking lot, a river, and mountains in the background. The image is overlaid with a semi-transparent blue filter.

- Iterative & responsive planning approach (10 points)

Evaluation Criteria

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- Technical rigor (10 points)

Evaluation Criteria

An aerial photograph of a city, likely San Jose, California, featuring a large river (San Jose River) winding through the center. The city is surrounded by dense green hills and mountains in the background. The image is overlaid with a semi-transparent blue filter.

- Communication & visualization skills (10 points)

Evaluation Criteria

An aerial photograph of a city, likely San Jose, California, showing a large river (San Jose River) winding through the urban landscape. The city is surrounded by dense green hills and mountains in the background. The image is overlaid with a semi-transparent blue filter.

- Innovative approach to adaptation planning (5 points)

Evaluation Criteria

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- Proposal quality (10 points)

Evaluation Criteria

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- Workforce development (5 points)

Scope of Work

- Flexibility to recommend appropriate level of effort
- Refine the scope during negotiations w/ selected team/firm
- Some activities public facing

Scope of Work – Part A

- A.1: Summarize & confirm vulnerability info with a “briefing book”
- A.2a Identify, analyze & present feasible adaptation approaches
- A.2b Present feasible adaptation approaches to elicit feedback
- A.3a: Refine & analyze approaches based on community input
- A.3b: Summarize
- A.4b: Conceptual design of one adaptation measure

Scope of Work – Part B

- B.1.1: Improve physical science data
- B.2.1: Detailed vulnerability assessment of critical facilities
- B.2.2: Integrate community concerns into the vulnerability assessment of critical community facilities
- B.3: Prioritizing adaptation actions in concert w/ community
- B.4.1: Final community engagement
- B. 4.2: Final recommendations



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