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Integrating transportation, ecology, and sea level rise adaptation into a more resilient SR 37

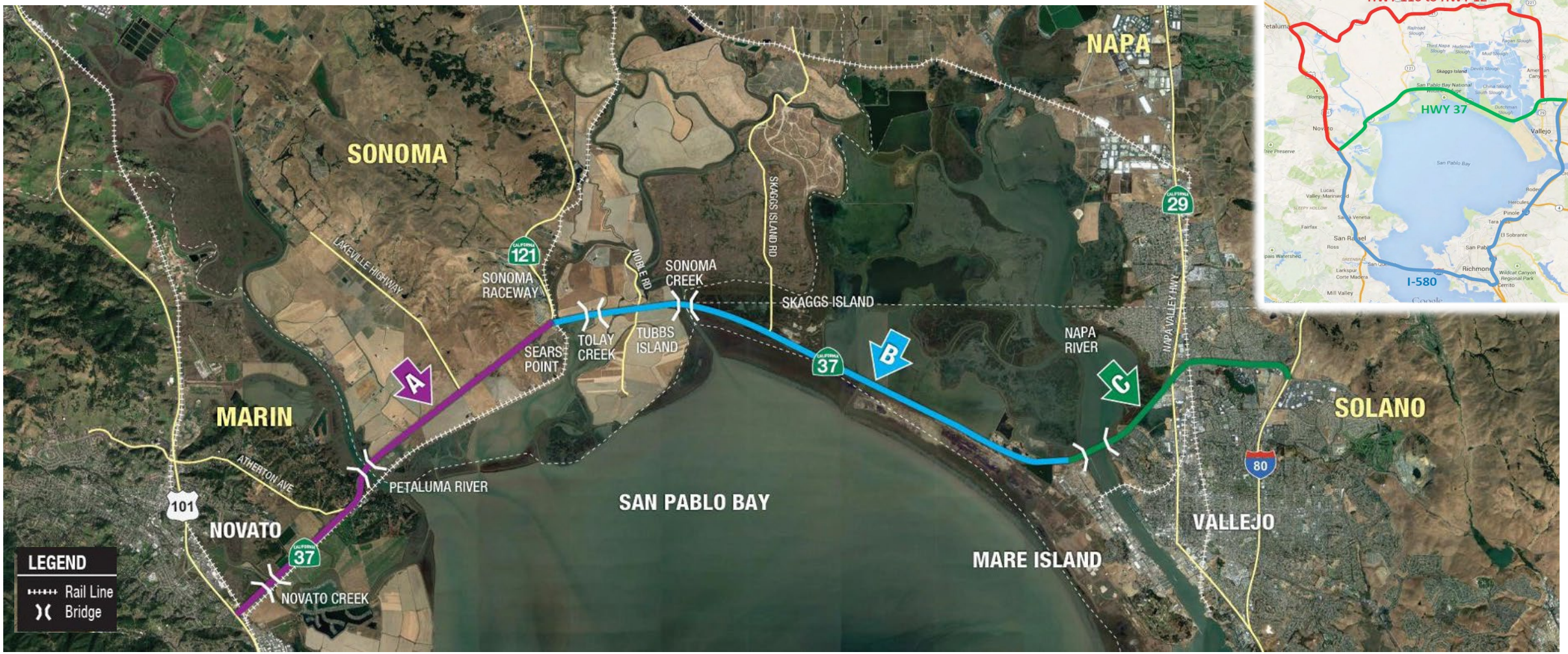
March 5, 2020 - BCDC

Image: San Pablo Bay National Wildlife Refuge, USFWS

SR 37 Policy Committee

- Comprised of elected officials from 4 North Bay Counties:
  - David Rabbitt, Sonoma County Board of Supervisors; Jake Mackenzie, MTC Commissioner; **Susan Gorin, Sonoma County Board of Supervisors**
  - Alfredo Pedroza, MTC Commissioner; Bella Ramos, Napa County Board of Supervisors; Leon Garcia, Mayor of American Canyon
  - Damon Connolly, MTC Commissioner; Judy Arnold, Marin County Board of Supervisors; Stephanie Moulton-Peters, Councilmember, City of Mill Valley
  - Bob Sampayan, Mayor of the City of Vallejo; **Jim Spering, MTC Commissioner**; Erin Hannigan, Solano County Board of Supervisors
- Public Forum for Public Outreach/Input

HIGHWAY 37: REGIONALLY SIGNIFICANT 21-MILE EAST-WEST CORRIDOR



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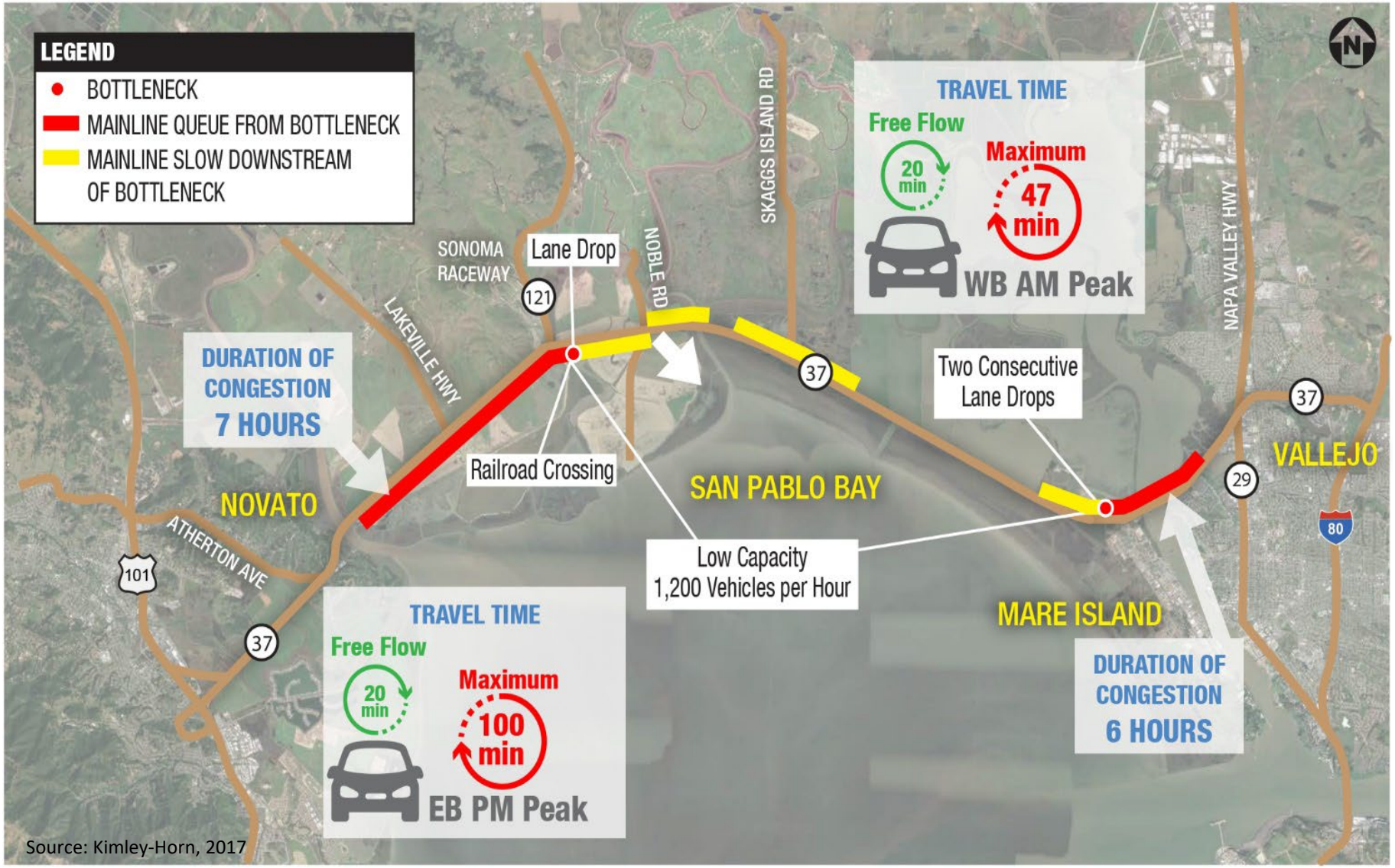
100 MINUTES TO TRAVEL HOME EVERY DAY



Source: Kimley-Horn, 2017

- **6 Hours** of Congestion During Weekday AM Commute (27 min. westbound delay)
- **7 Hours** of Congestion During Weekday PM Commute (80 min. eastbound delay)
- **Weekend** Congestion Throughout Most of the Day
- **No Transit** Services

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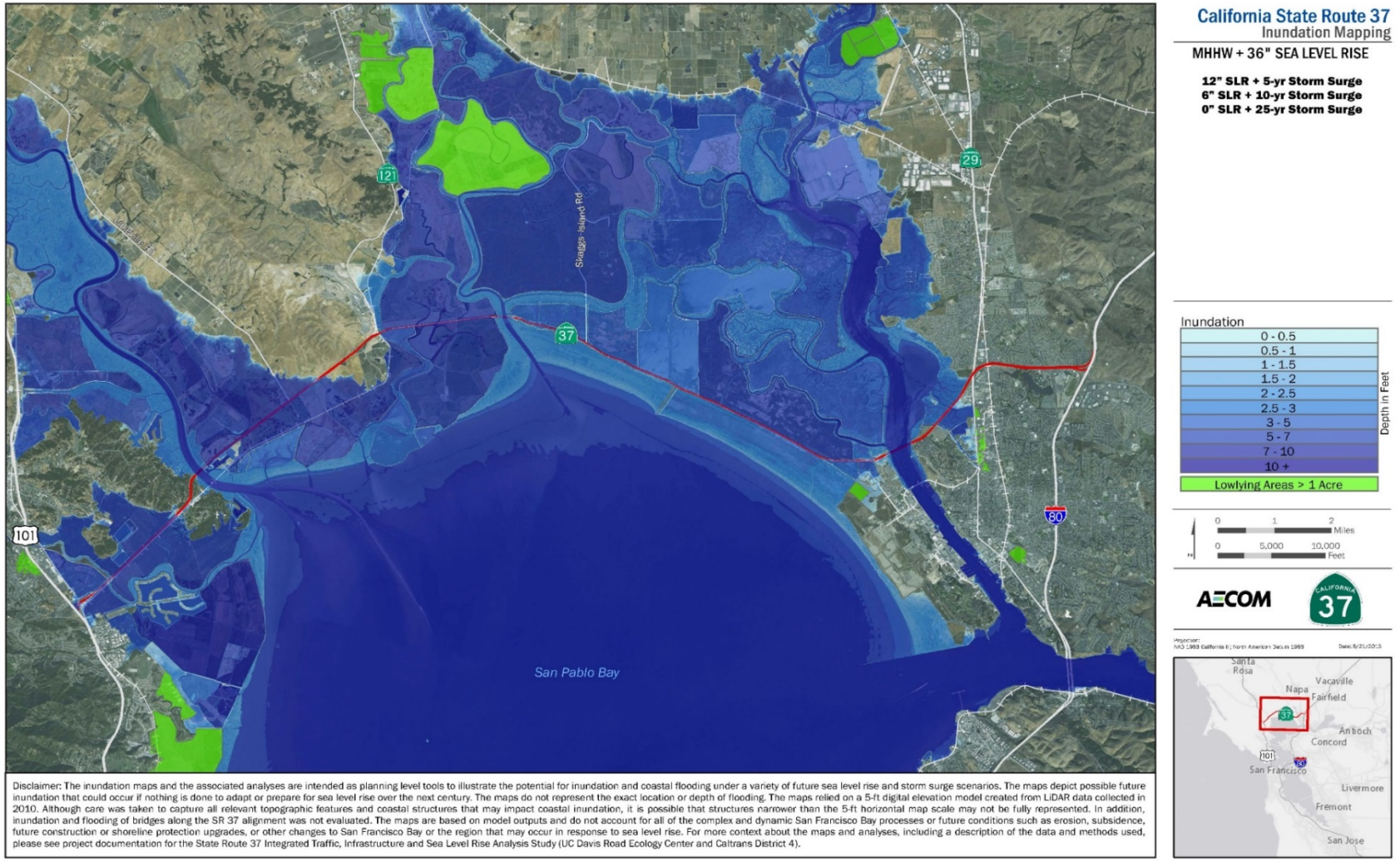
30 YEARS FROM TODAY SEA LEVEL RISE WILL INUNDATE SR 37



2000

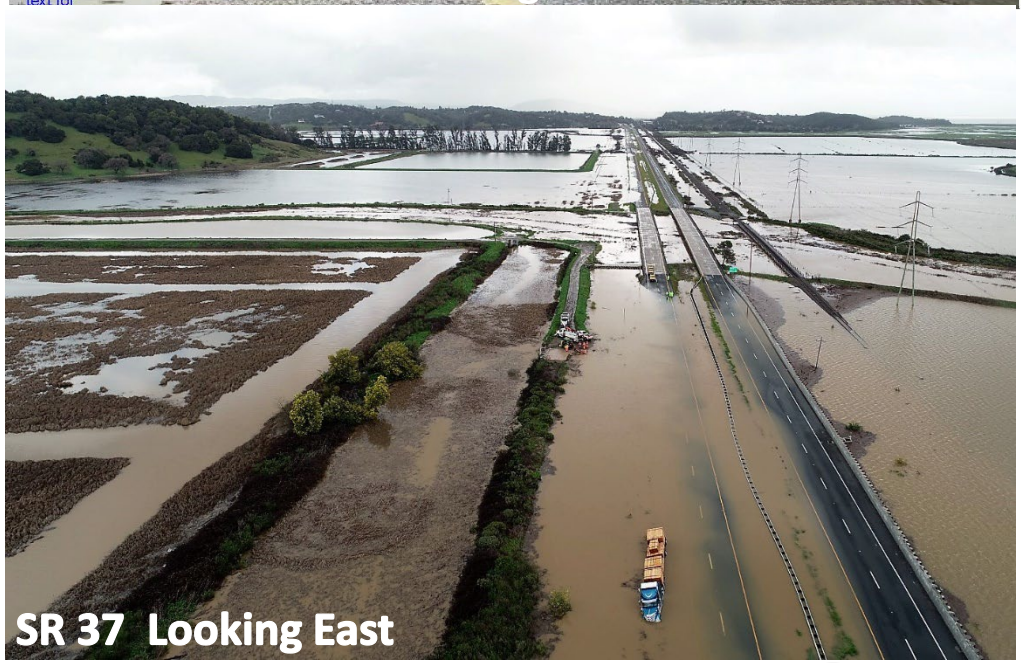
2050

2100

2100+

Source: UC Davis, AECOM, 2015

2019 FLOODING



ACRES OF WETLANDS AND BAYLANDS & STATE AND FEDERALLY PROTECTED SPECIES

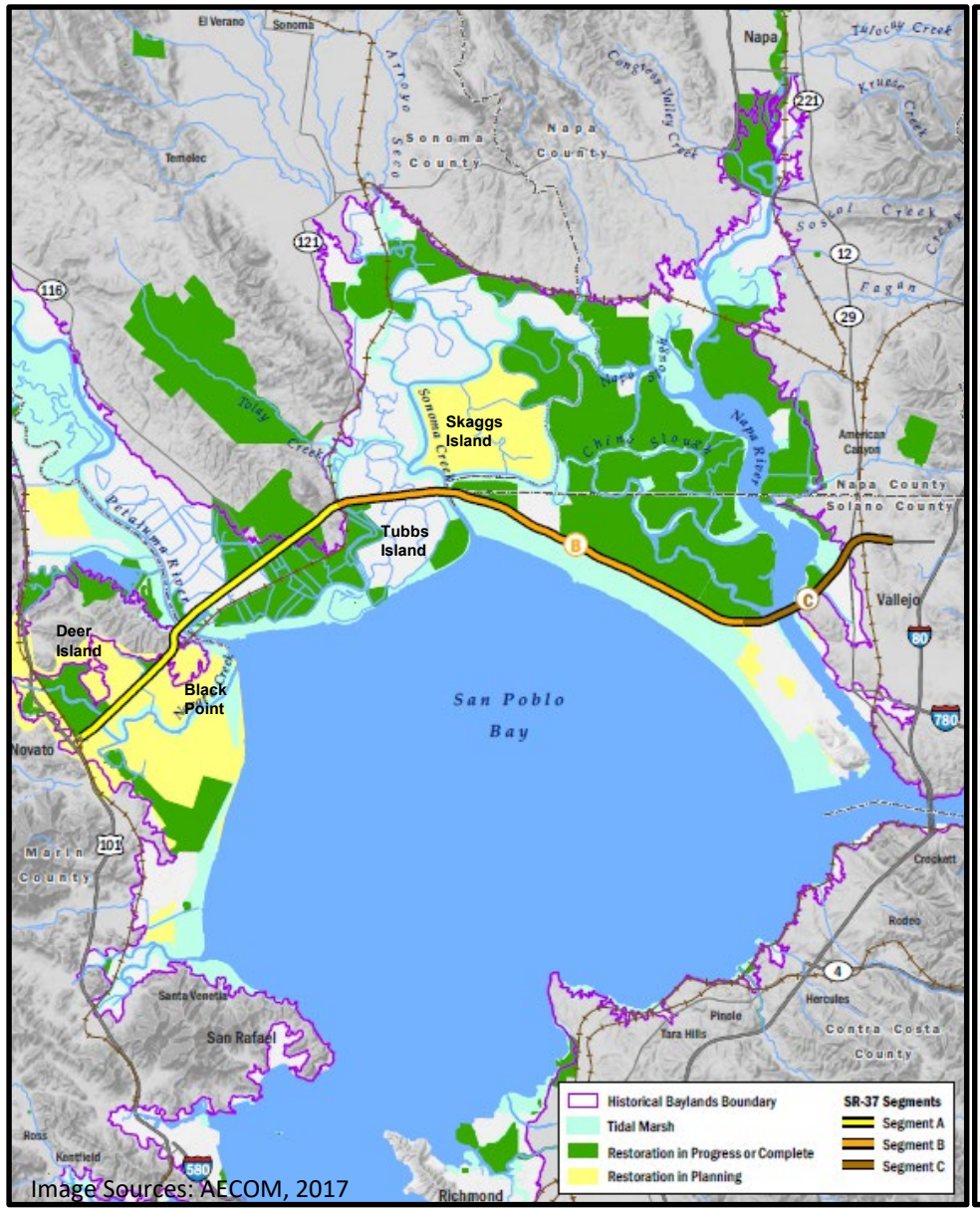
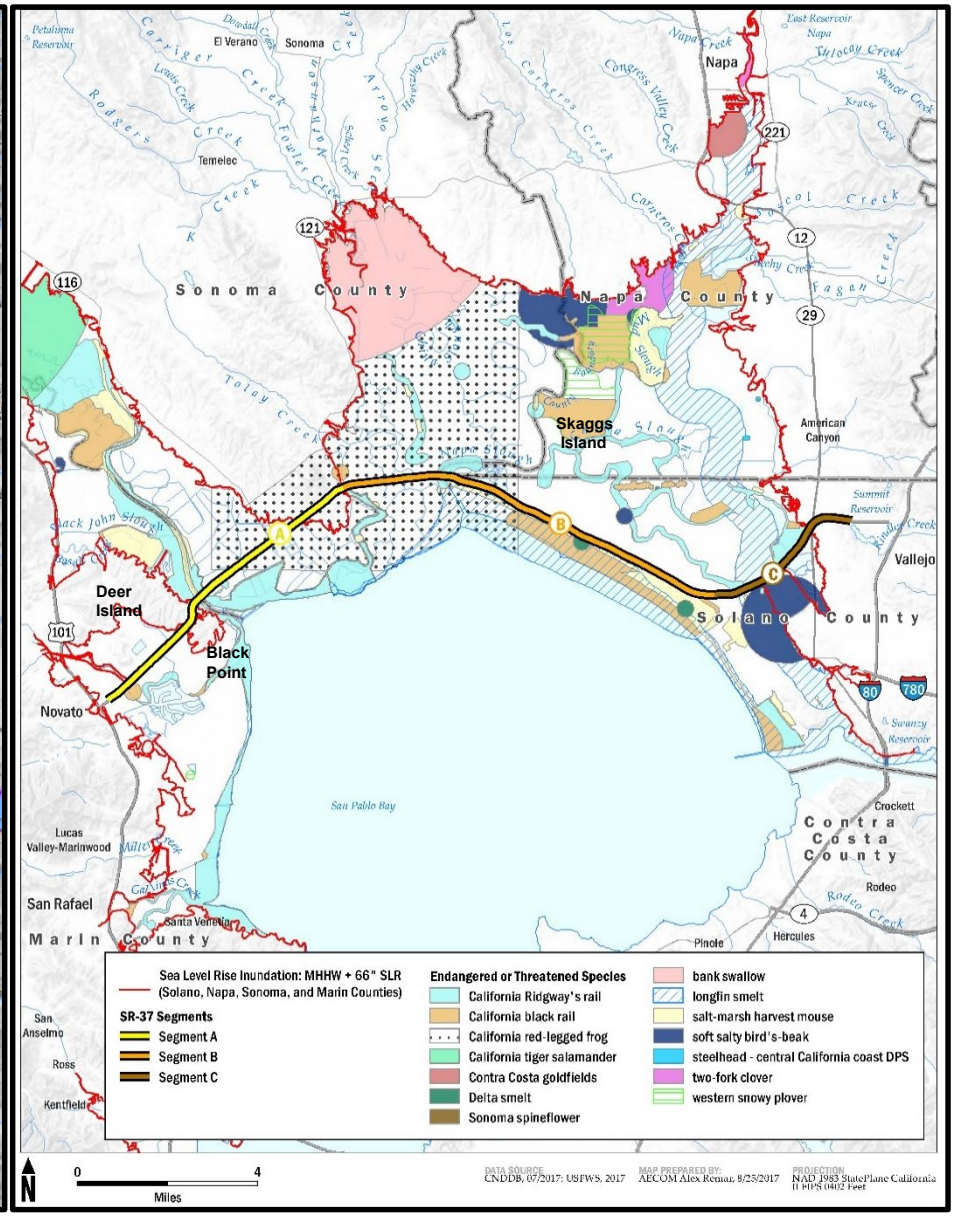


Image Sources: AECOM, 2017



- State and Federally-Protected Species:
  - Salt Marsh Harvest Mouse
  - CA Ridgway's Rail
  - CA Black Rail
  - San Pablo Song Sparrow
  - Red Legged Frog
  - Green Sturgeon
  - Longfin Smelt
  - Steelhead
  - Chinook Salmon

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9 SPECIAL-STATUS SPECIES, PACIFIC FLYWAY AND MANY ACRES OF WETLANDS AND BAYLANDS

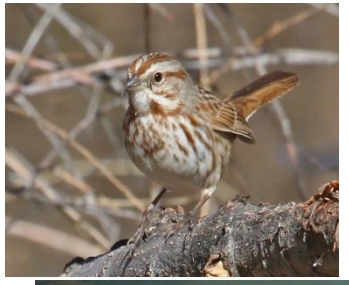

Image Sources: Various 2018

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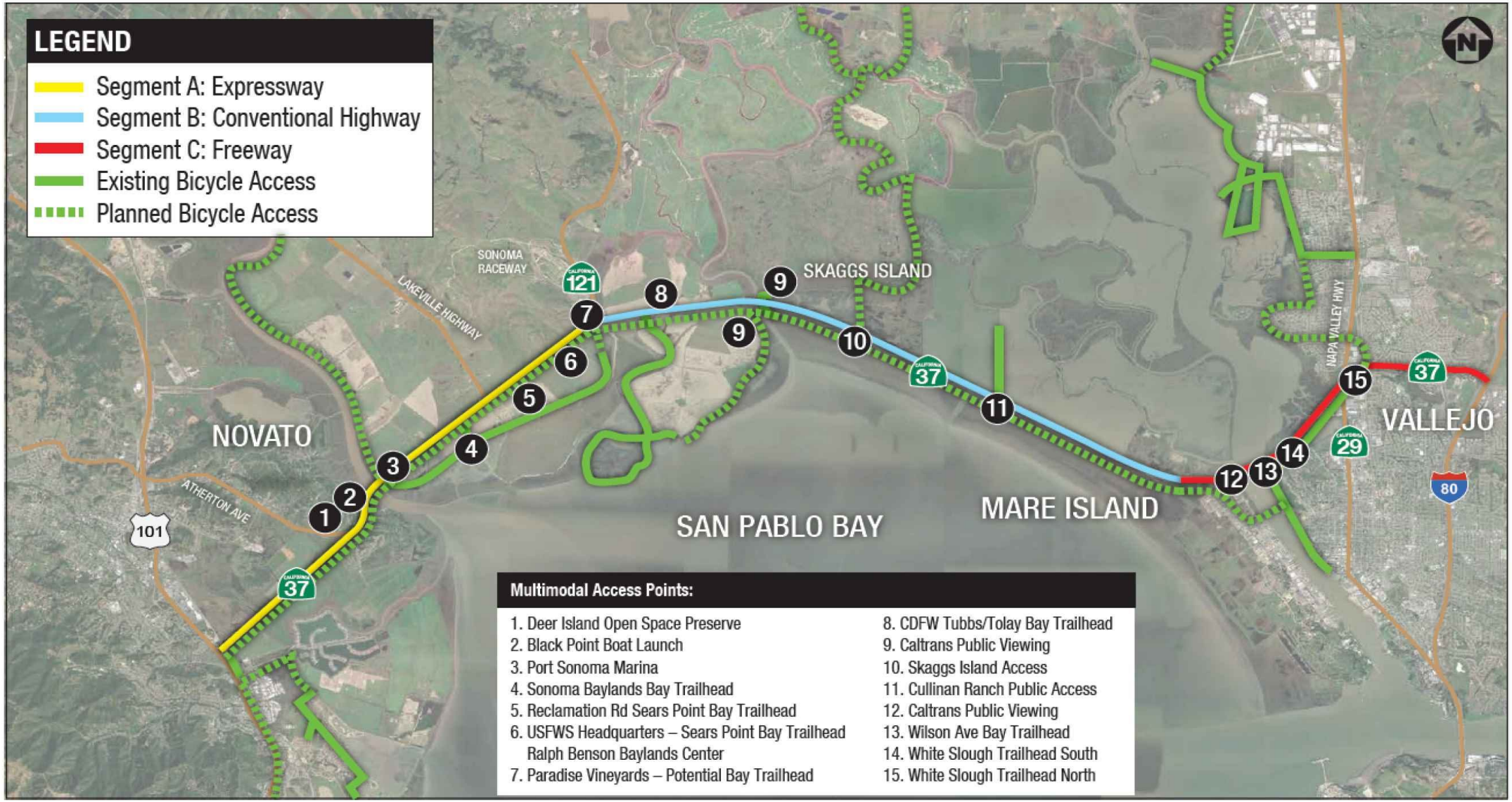
BICYCLE AND PEDESTRIAN ACCESS



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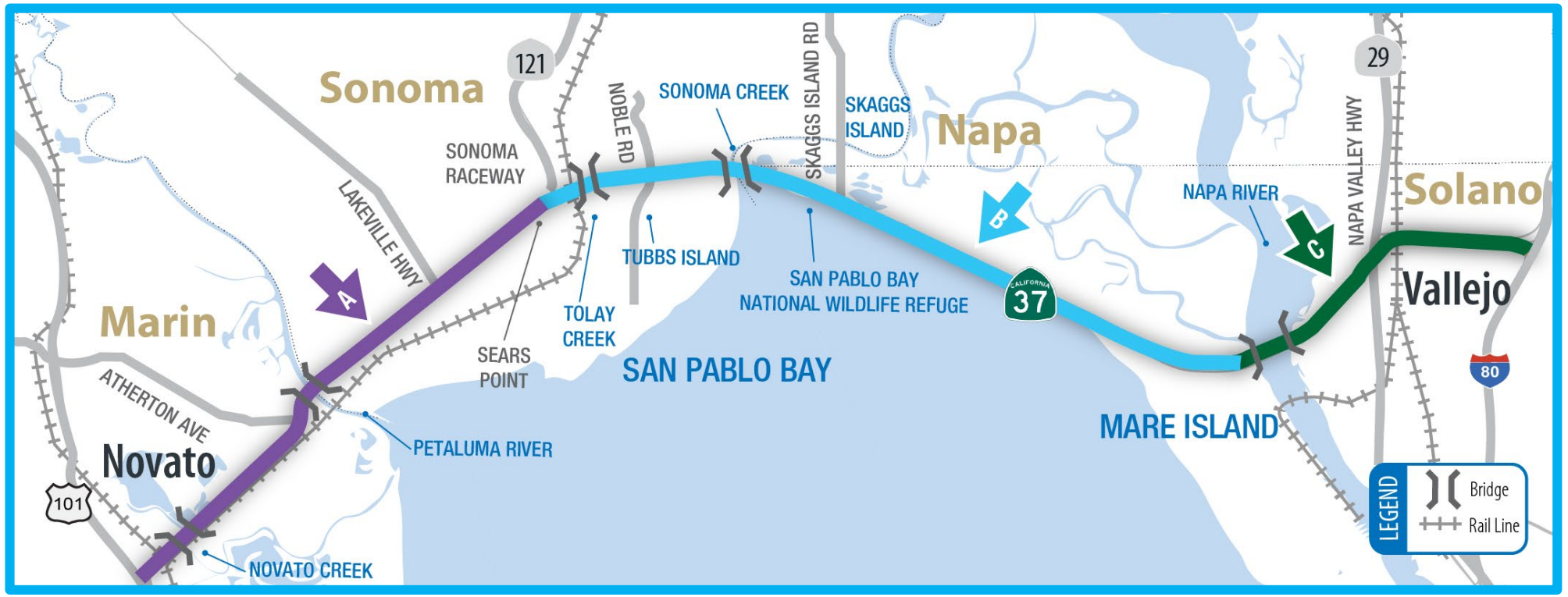
OUR VISION → MULTI-MODAL AND MULTI-BENEFIT PROJECTS



Sea Level Rise

Ecological Restoration & Conservation

Multimodal Corridor

Access to Baylands

Equity

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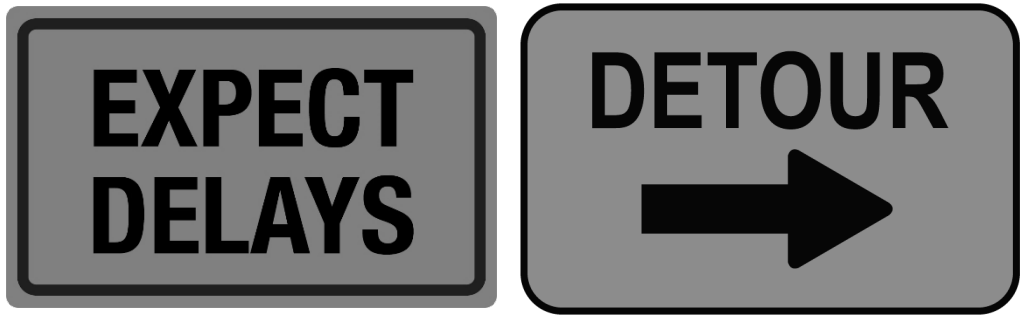
BREAK THE PROJECT DELIVERY PARADIGM



Inter-Agency Consultation

Interim and Ultimate Fixes

Integrate,
Don't Mitigate

Early Outreach

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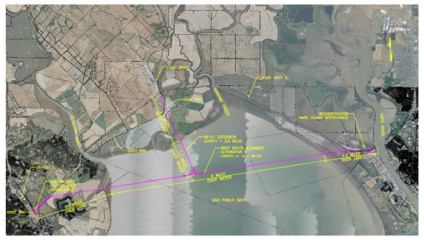
SEGMENT B ULTIMATE SLR ADAPTATION PROJECT – ALTERNATIVES ASSESSMENT SUMMARY

Alternatives	1. Current Alignment Hybrid Existing	2. Current Alignment Causeway	3. Northern Alignment	4. Southern Alignment1 (Shoreline)	5. Southern Alignment 2 (San Pablo Bay)
					
Key Takeaways	• Lowest travel times for Segment B, no increase in daily VMT • Less right of way (ROW) acquisition • Similar GHG emissions compared to existing • Hybrid results in greater biological resources and hydrology impacts • Minimizes impacts to existing land uses • Favored by focus groups		• Longest travel times, increase in daily VMT • Highest ROW acquisition • Avoids coastal areas, but transects more habitats • Potential impacts to cultural resources • Potential to induce growth • Decreases public access • Disliked by focus groups	• Impacts similar to Hybrid Existing and Causeway Existing • Impacts primarily offshore habitats • Decreases public access • Disliked by focus groups	• Lowest travel times for entire corridor • Results in induced demand • High right of way acquisition • Impacts offshore habitats • Potential land use conflicts • Decreases public access • Mixed results from focus groups
ROW Acquisition (acres)	163	113	428	147	264
Total Cost (2018$)	$2.4B	$2.9B	$3.3B	$2.9B	$3.3B

INTERIM FLOOD PROTECTION IMPROVEMENTS: US 101 – SR 121

Roadway & Bank Protection

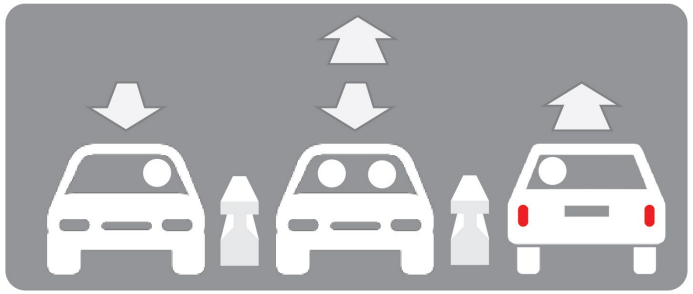
Drainage Improvement

Raising Pavement Elevation

INTERIM CONGESTION RELIEF PROJECT: SR 121 TO MARE ISLAND

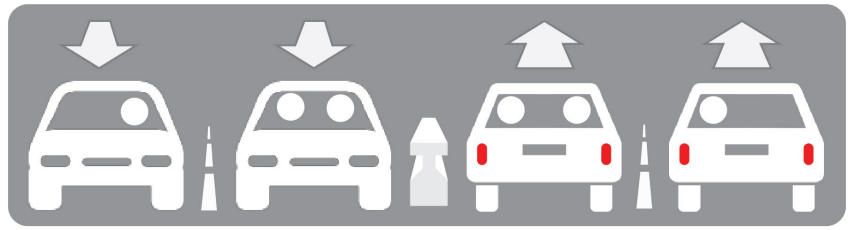
Existing 2-Lane Segment B

Option 1: 3-Lane Contra-Flow with Moveable Median Barriers



Golden Gate Bridge Example

Option 2: 4-Lane Highway (requires mitigation for bike access)



Richmond-San Rafael Bridge Example

Cost Range: $100M to $150M

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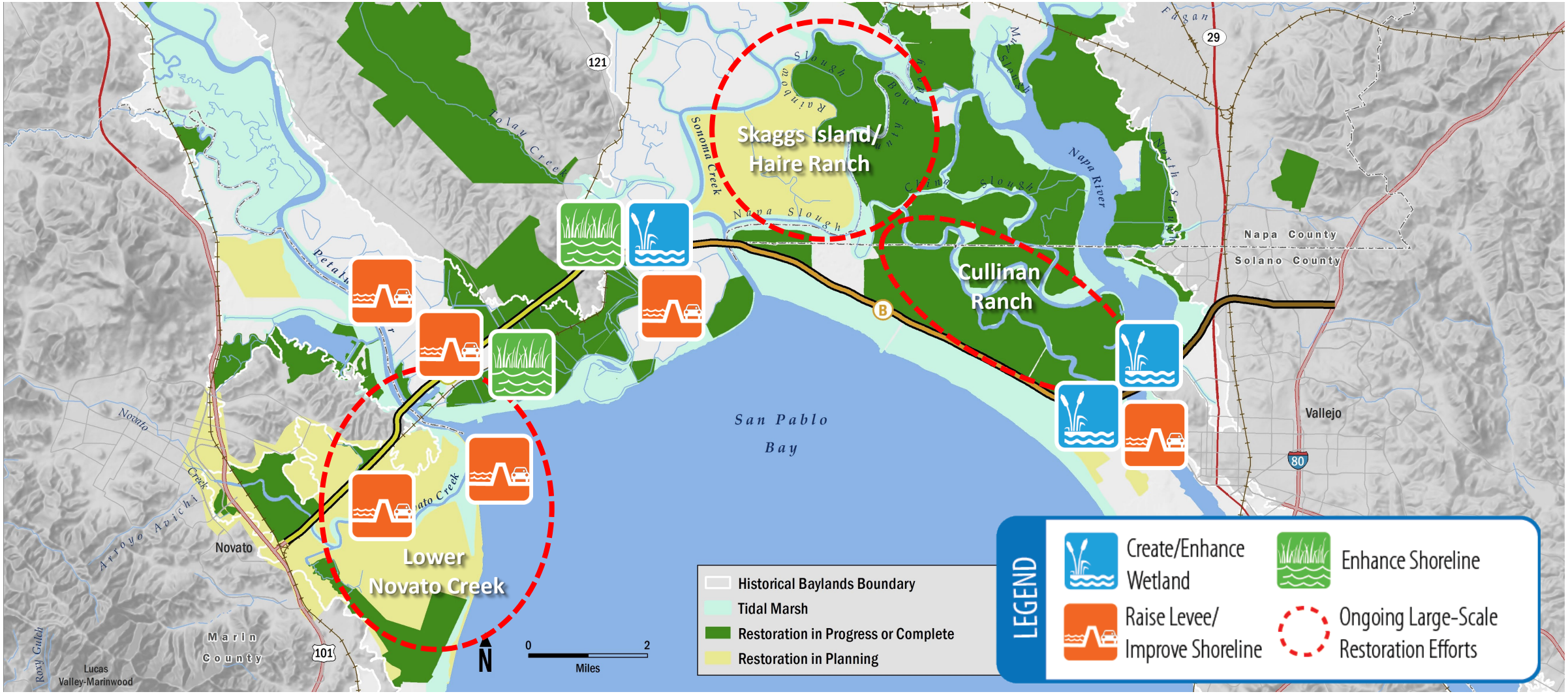
RECONNECT HYDROLOGY AND ECOLOGY THROUGH A FORWARD-LOOKING HIGHWAY DESIGN



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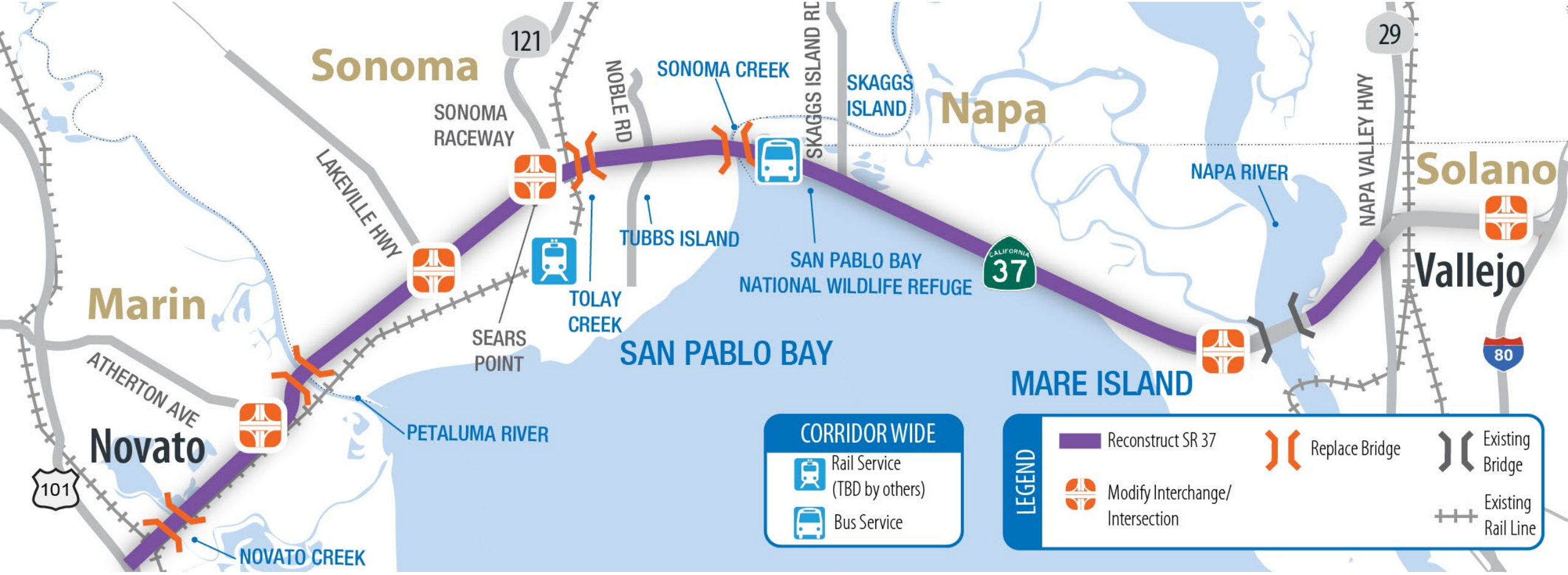
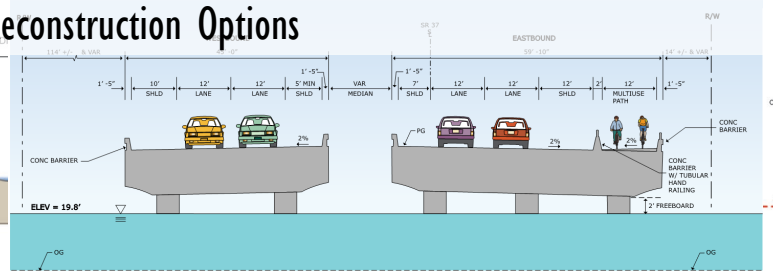
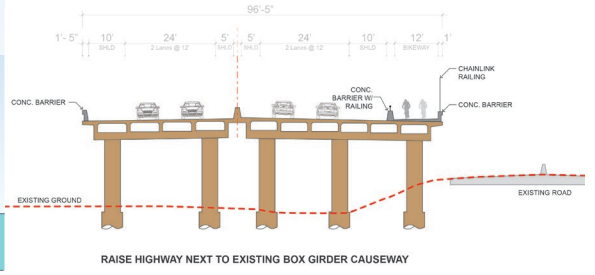
SR 37 CORRIDOR SEA LEVEL RISE ADAPTATION ULTIMATE PROJECT

TARGET DELIVERY IN 15 – 20 YEARS



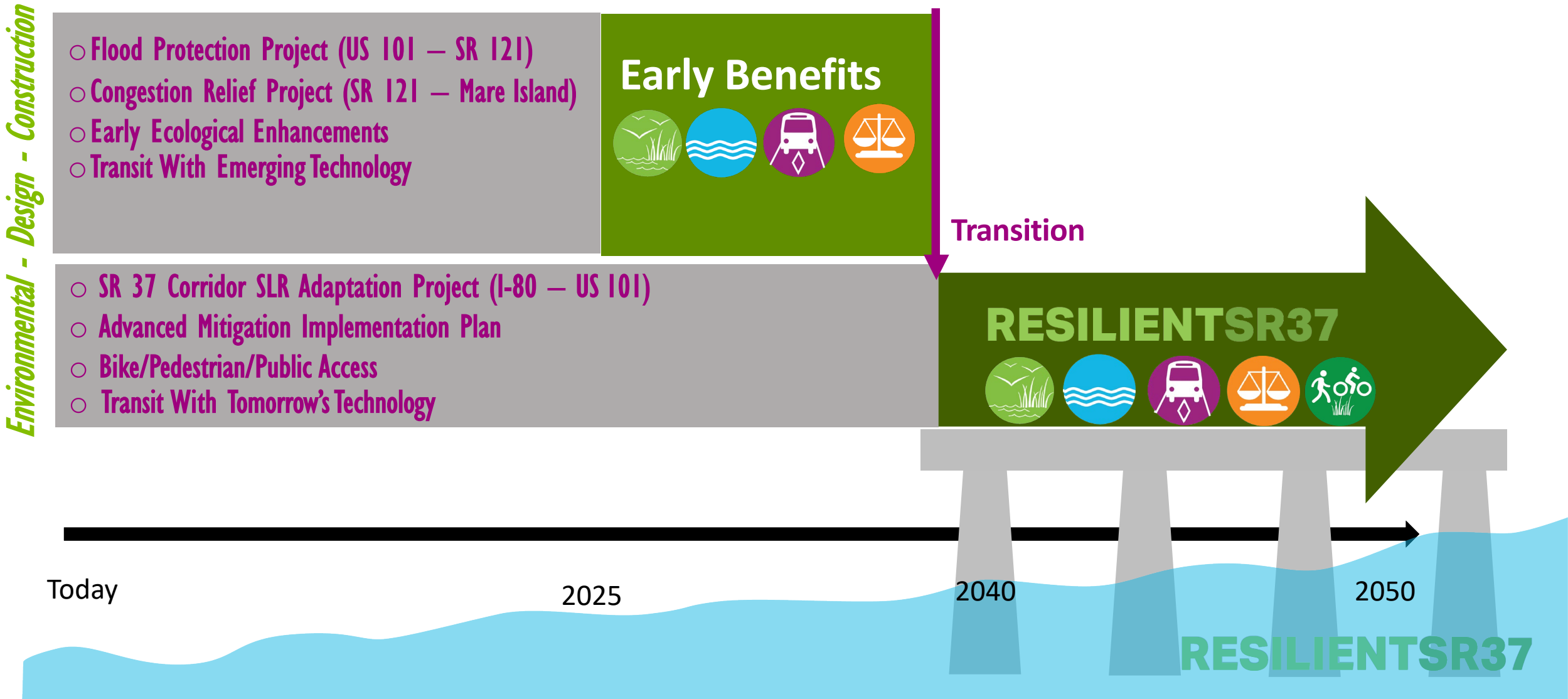
Reconstruction Options





RESILIENT SR 37 PROGRAM – PHASED IMPLEMENTATION

CONCURRENT PROJECT DEVELOPMENT. DELIVER EARLY COMMUNITY BENEFITS.



Questions?

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