

Flooding Phenomenon Design Brief

Context and Need: You are a team of engineers working with marsh scientists, State Parks, and the local community to redesign the low sections of N. San Pedro Road that bisect the tidal marsh. Everyone agrees that the road should be changed and they are looking for design solutions that meet all of their needs. The new design needs to meet the following criteria now and in the future (your choice of until 2050 or 2100):

- (1) Improve protection and resilience of the marsh and the endangered species that live there.
- (2) Allow community members who live in San Rafael's Peacock Gap and Santa Venetia Neighborhoods to continue to be able to travel through the Park as an alternate evacuation route and preferably as a daily commute option.
- (3) Allow visitors to the Park to continue to be able to access the trails, picnic areas, and beach.

Challenge: Sketch or describe a redesigned road that meets all of the criteria above. Only the two low lying sections of the road need to be redesigned, but your solution can encompass more of the road if desired. You can also create two different designs for the two different low lying sections. You will be presenting your idea to other groups and it will be shared with the actual collaborative working group leadership.

Resources:

Paper

Markers

State Park Map

Satellite photo with low sections of road indicated