



Upper Gallinas Creek Conceptual Design Alternatives

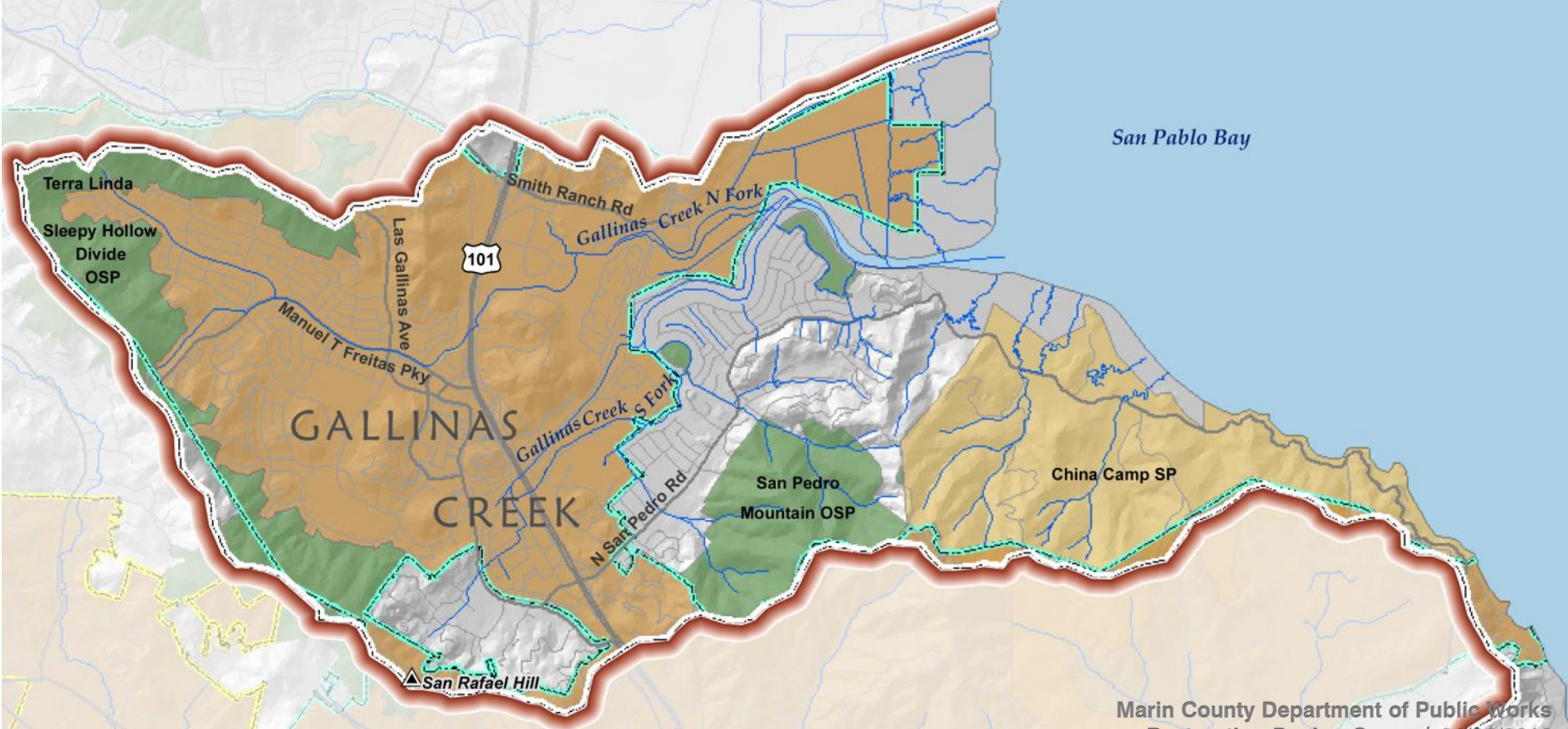
# **GALLINAS WATERSHED PROGRAM COMMUNITY MEETING**

# Goal of the project

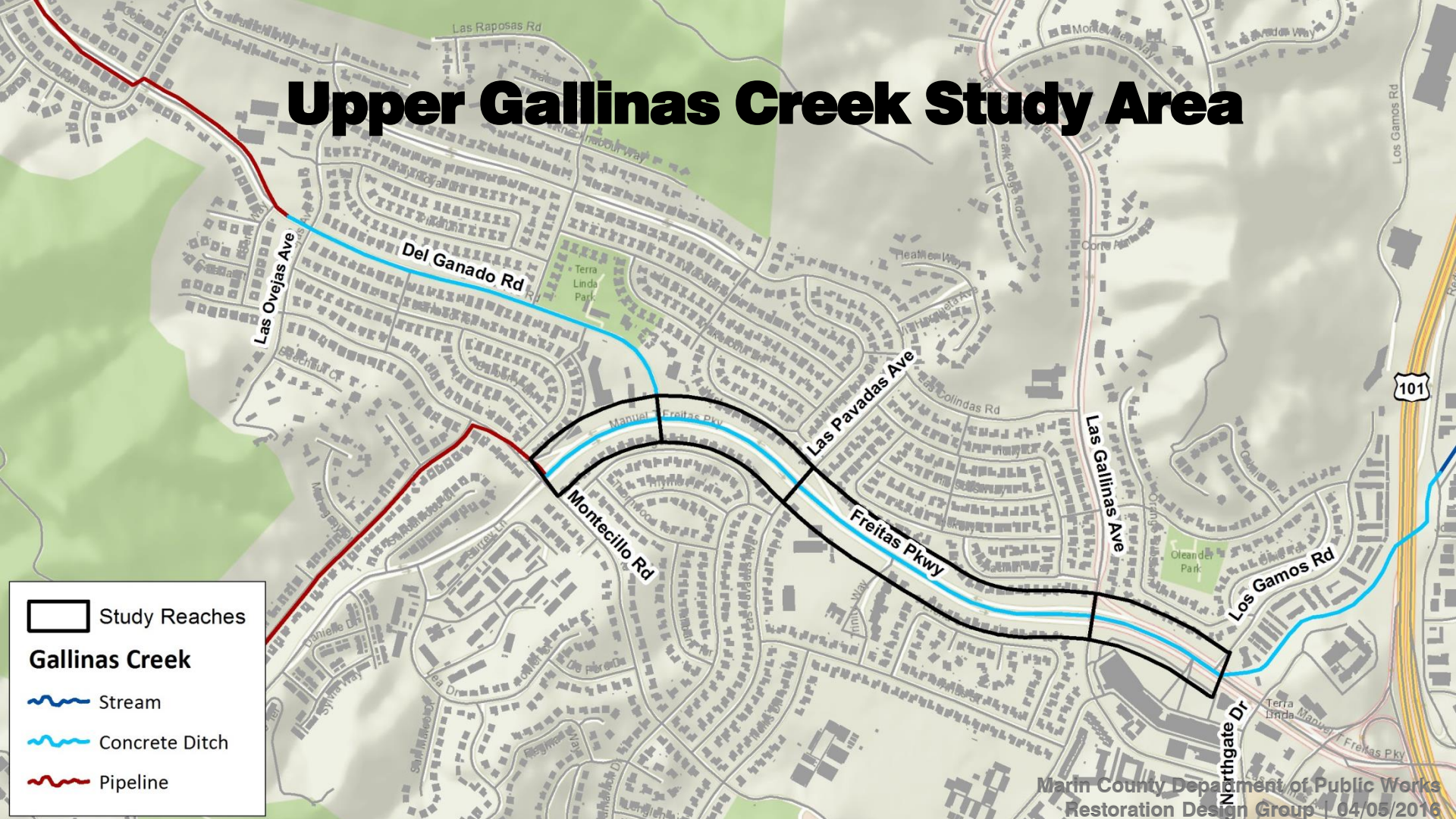
- Help the community, City, and County develop a preferred alternative for Gallinas Creek along Freitas Parkway
- Visualize alternatives that address the site issues



# Gallinas Creek Watershed



# Upper Gallinas Creek Study Area



Las Ovejas Ave

Del Ganado Rd

Terra Linda Park

Las Pavadas Ave

Montecillo Rd

Freitas Pkwy

Las Gallinas Ave

Los Gamos Rd

Northgate Dr

101

Study Reaches

Gallinas Creek

Stream

Concrete Ditch

Pipeline

# Site Issues



Aging infrastructure



Maintenance burden

# Site Issues



Limited habitat



Poor water quality

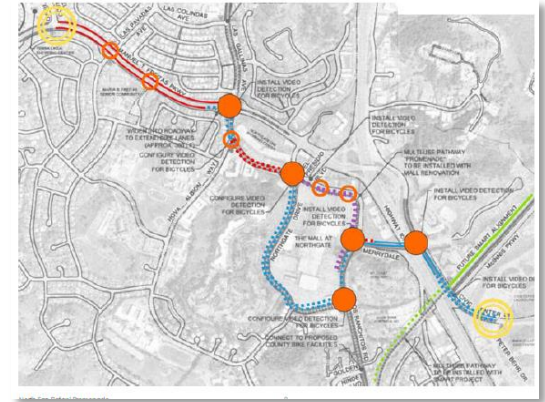
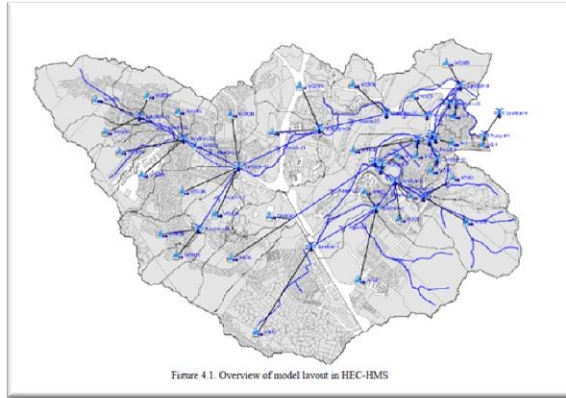
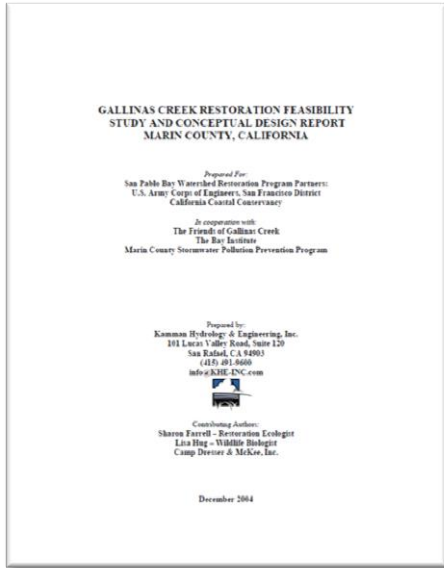
# Site Issues



Limited pedestrian and bicycle facilities

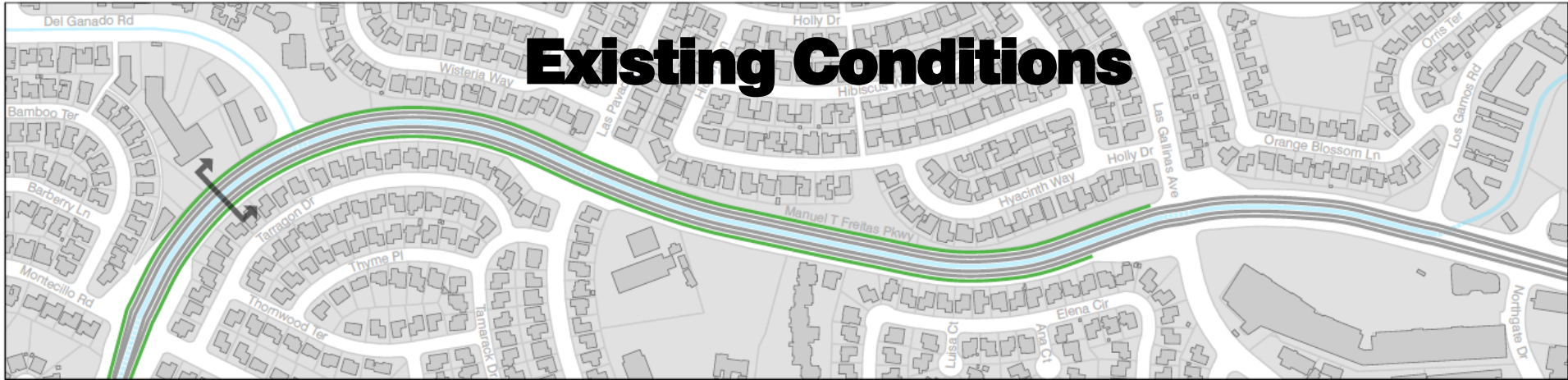
# Past Studies

- Gallinas Creek Restoration Feasibility Study (KHE 2004)
- Hydrologic, Hydraulic and Coastal Report (ACOE 2013)
- North San Rafael Promenade Concept Plan (RHAA 2008)

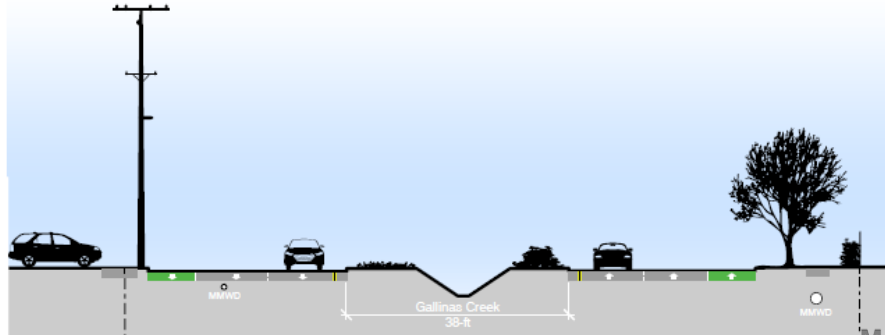




# Existing Conditions

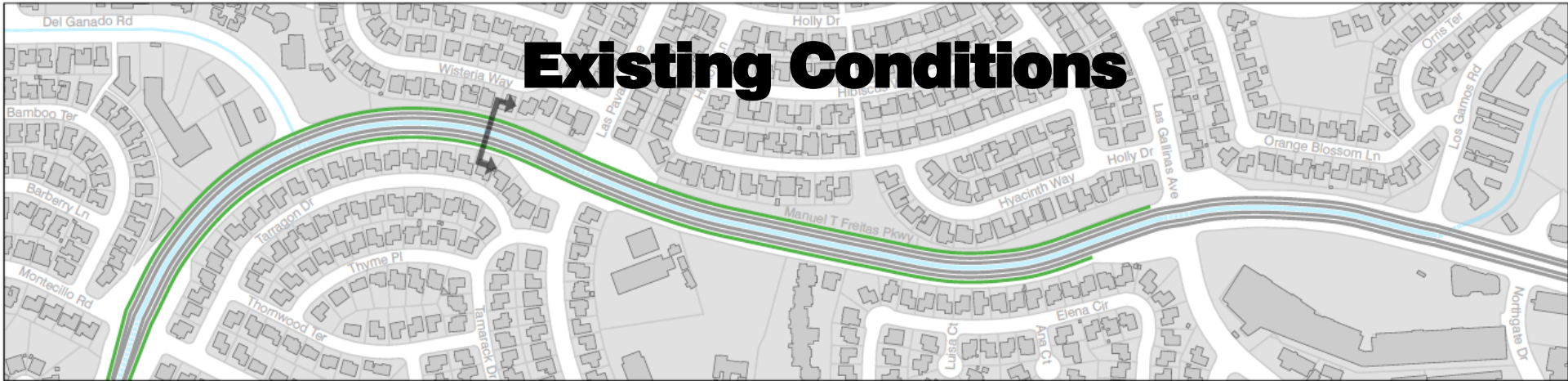


- Manuel T Freitas Pkwy Lanes**
  - Travel Lane
  - Class II Bike Lane
- Gallinas Creek**
  - Open Channel
  - Culvert



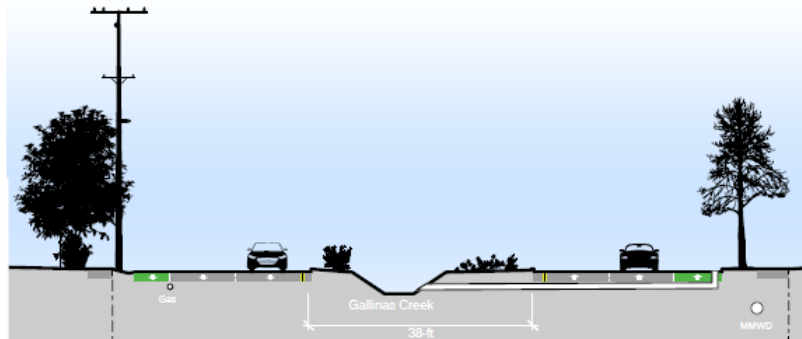
Montecillo to Del Ganado

# Existing Conditions



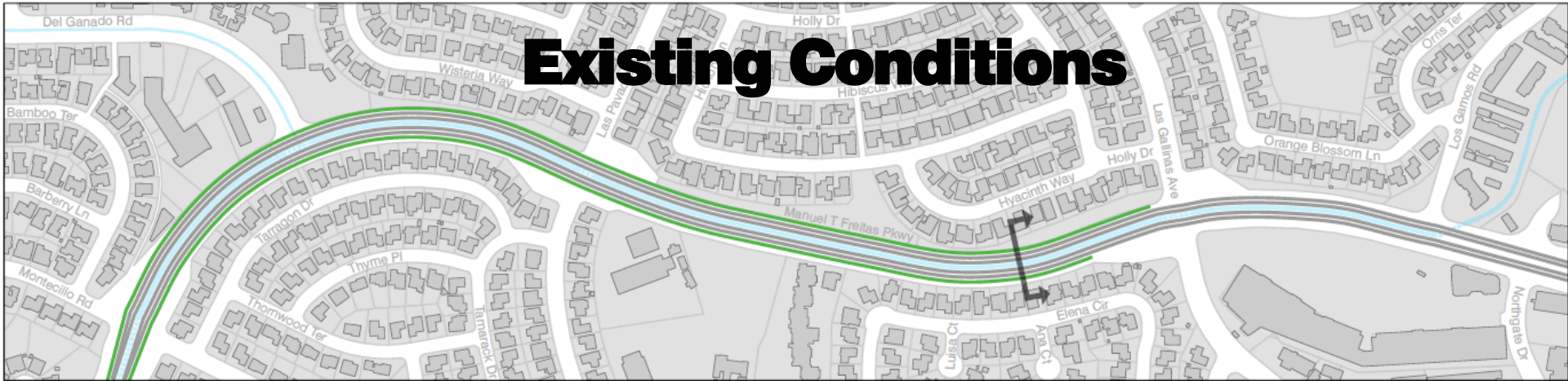
**Manuel T Freitas Pkwy Lanes**  
Travel Lane  
Class II Bike Lane

**Gallinas Creek**  
Open Channel  
Culvert

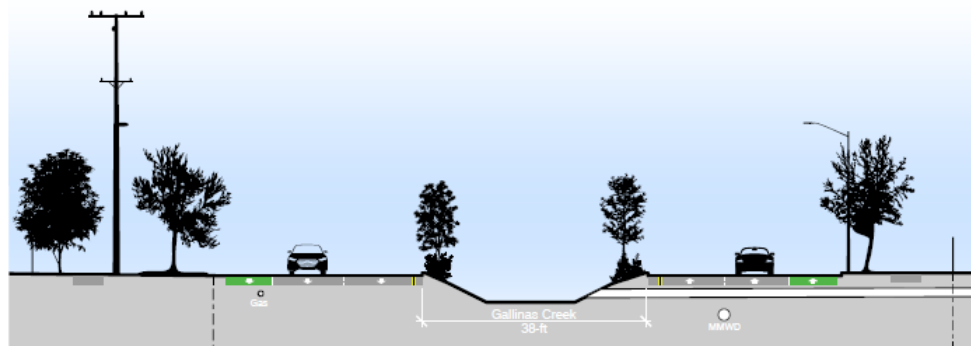


Del Ganado to Las Pavadas

# Existing Conditions



- Manual T Freitas Pkwy Lanes
  - Travel Lane
  - Class II Bike Lane
- Gallinas Creek
  - Open Channel
  - Culvert



Las Pavadas to Las Gallinas

# Existing Conditions

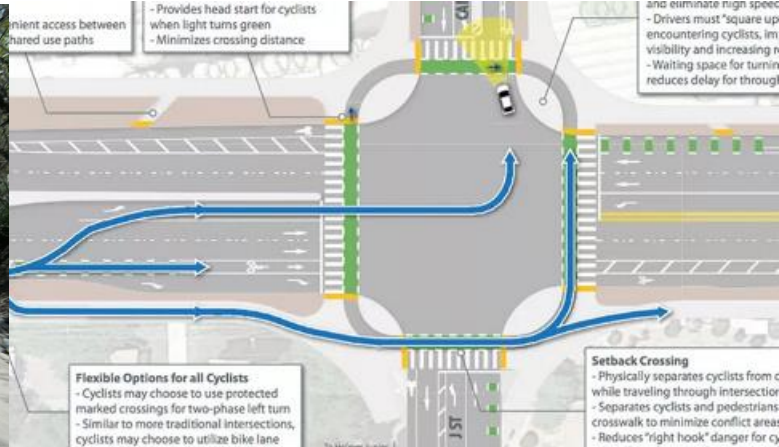


- Manuel T Freitas Pkwy Lanes**
  - Travel Lane
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Las Gallinas to Northgate Drive

# Considerations for Concepts



Complete Streets - safe, convenient and effective circulation for all

# Considerations for Concepts



Park space



Promenade



Tamara Lackey

Safe routes to school

Community needs and desires

# Considerations for Concepts



Flood risk reduction

# Considerations for Concepts



Creek health and stormwater quality

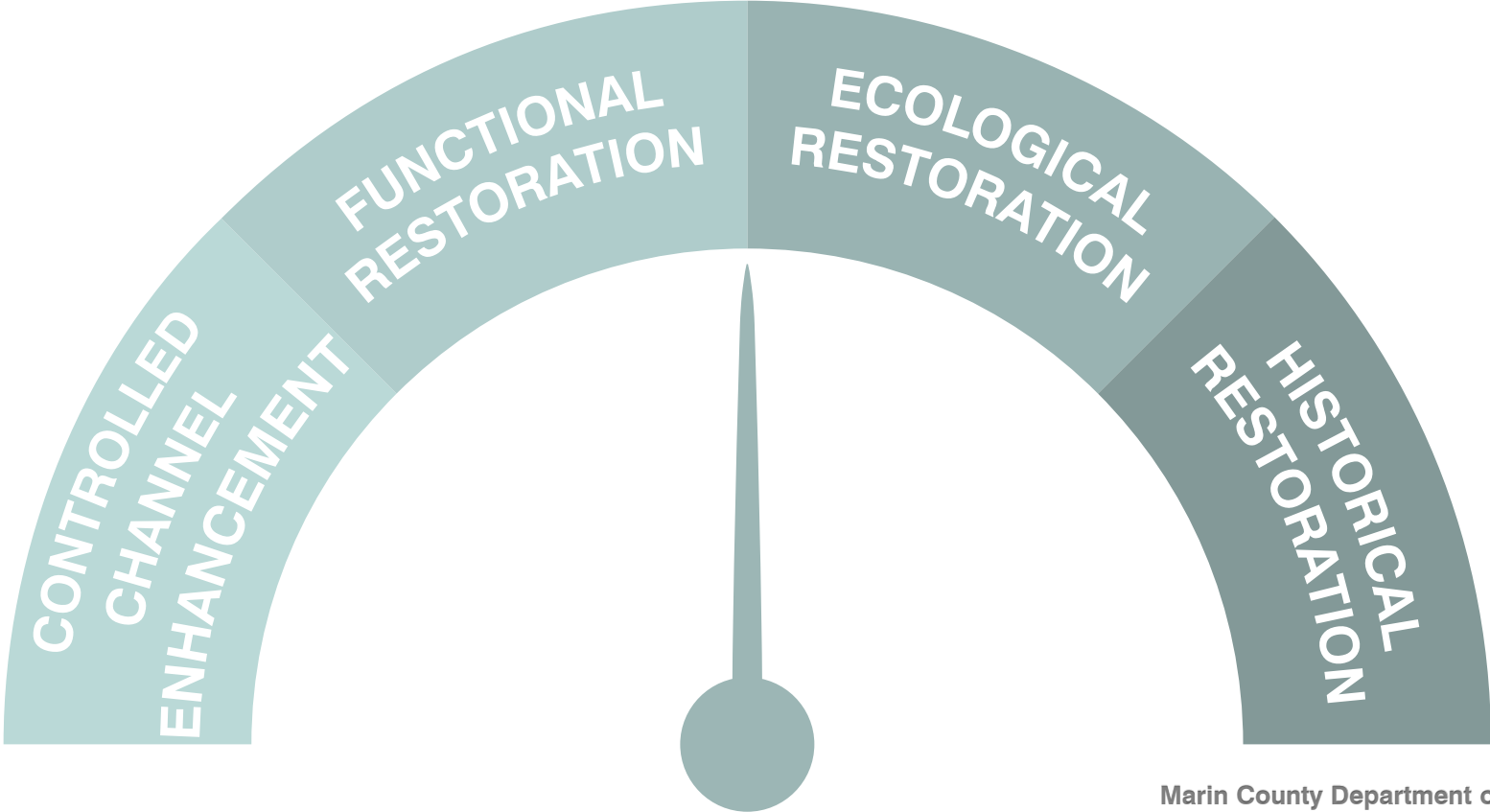


# Considerations for Concepts



Maintenance

# Levels of Restoration





**Alternate A** Restore in Place - *Controlled Channel Enhancement*



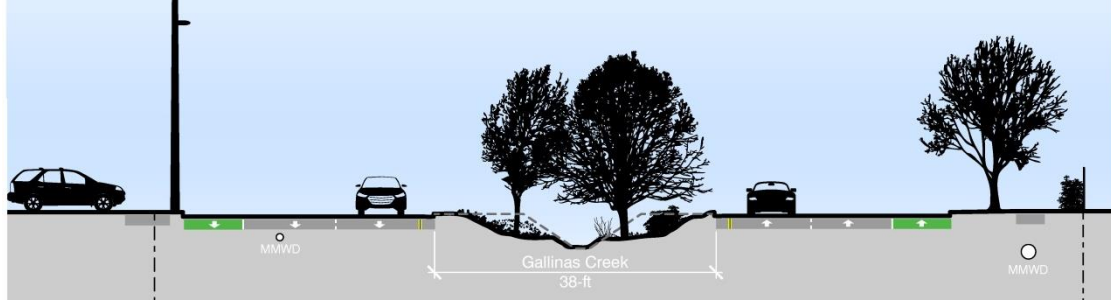
**Alternate B** Restore with Greenway and High-Flow Bypass - *Functional Restoration*



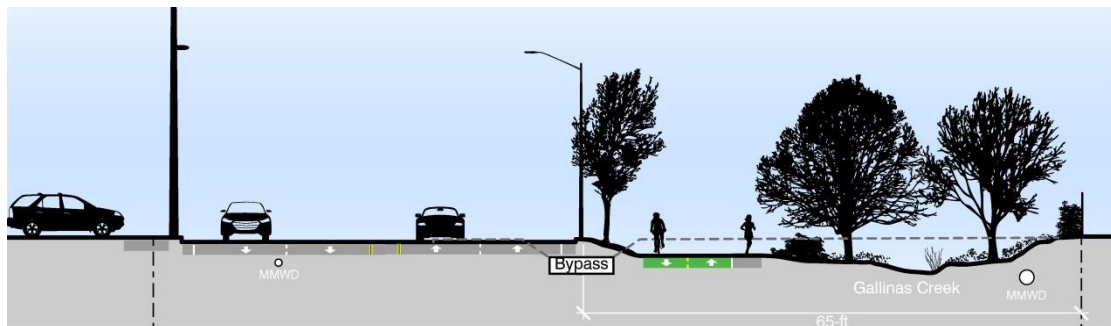
**Alternate C** Full Restoration with Enhanced Greenway - *Ecological Restoration*



**Alternate A**  
Restore in Place



**Alternate B**  
Restore with  
Greenway and  
High-Flow  
Bypass

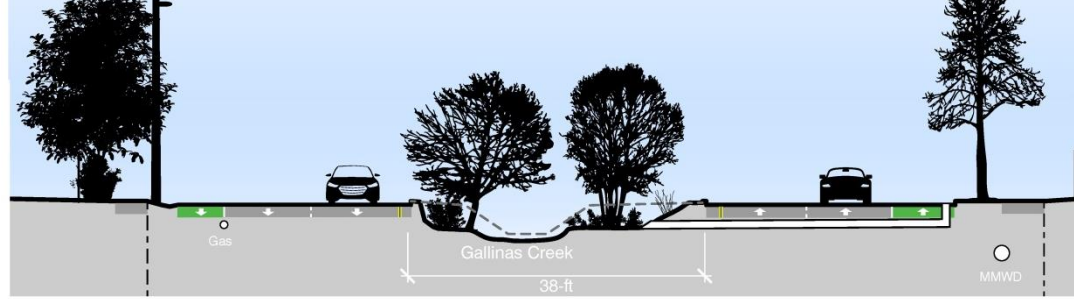


**Alternate C**  
Full Restoration  
with Enhanced  
Greenway

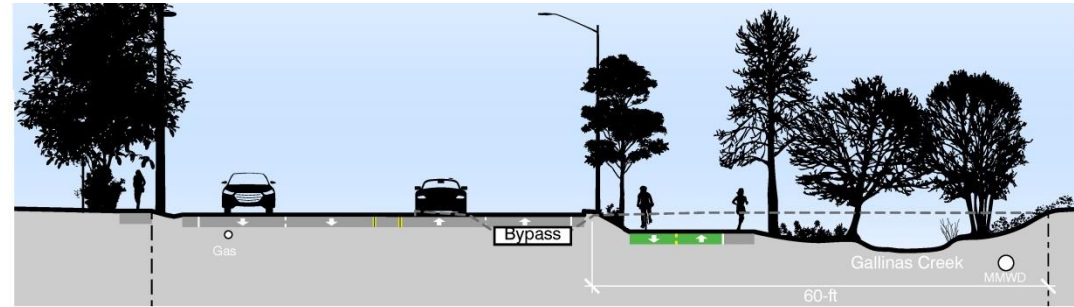




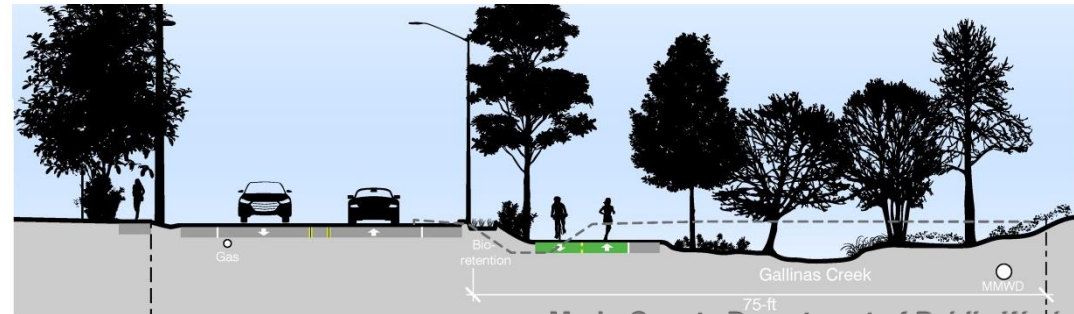
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Restore in Place



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Restore with  
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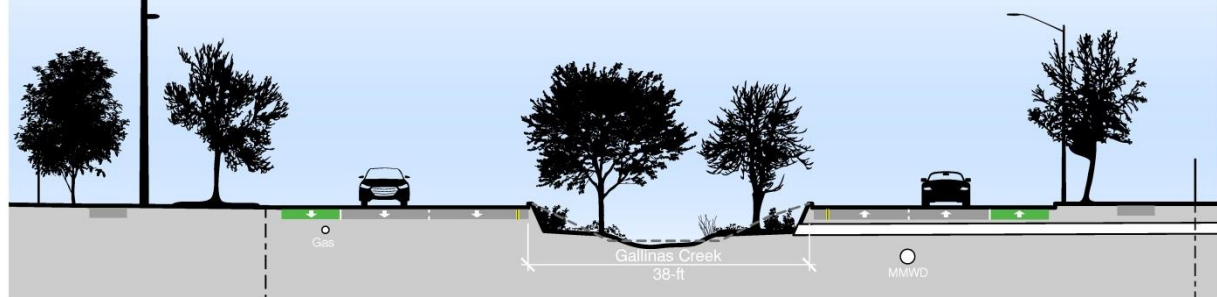


**Alternate C**  
Full Restoration  
with Enhanced  
Greenway

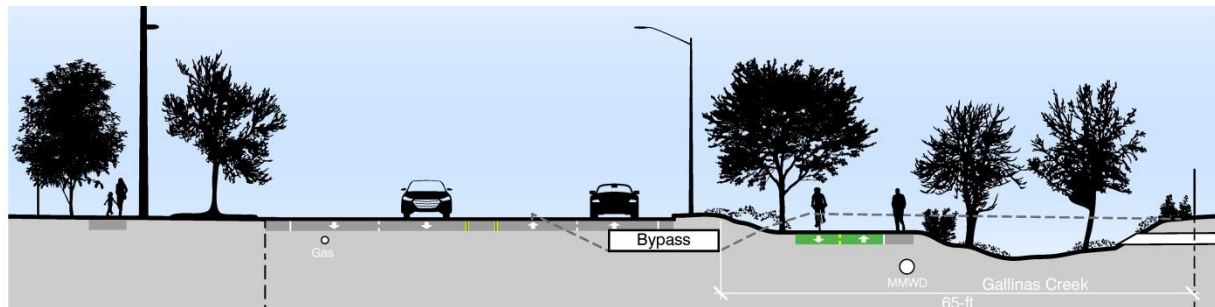




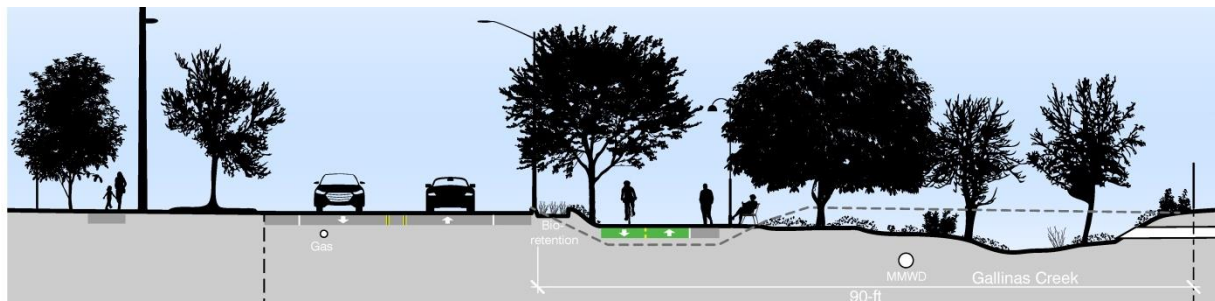
**Alternate A**  
Restore in Place



**Alternate B**  
Restore with  
Greenway and  
High-Flow  
Bypass



**Alternate C**  
Full Restoration  
with Enhanced  
Greenway



Las Pavadas to Las Gallinas



## Ranking of Alternatives

	Alternate A	Alternate B	Alternate C
<i>Complete Streets</i>	★	★★★	★★★
<i>Park Space</i>	☆	★	★★
<i>Promenade</i>	★	★★	★★★
<i>Safe Routes to School</i>	☆	★★★	★★★
<i>Flood Risk Reduction</i>	☆	★★	★★★
<i>Habitat Improvement</i>	★	★★	★★★
<i>Water Quality Benefit</i>	★	★★	★★★
<i>Maintenance Reduction</i>	★	★★	★★★
<i>Permitting Ease</i>	★	★★	★★★
<i>Grant Fund Availability</i>	☆	★★	★★
<i>Community Support</i>	?	?	?
<i>Cost</i>	\$	\$\$	\$\$\$

Marginal to no improvement	☆
Limited improvement	★
Moderate improvement	★★
Most improvement	★★★



# Next Steps

- Develop a preferred alternative with feedback from the community, City and County
- Identify funding
- Complete hydraulic and traffic studies
- Refine design to meet multiple project objectives

