

Santa Clara Valley Transportation Authority  
Lauren Ledbetter



# Watershed Management Initiative Land Use Subgroup

Lauren Ledbetter, Senior Transportation Planner  
Santa Clara Valley Transportation Authority  
January 19, 2022

# Trails are an essential part of our transportation network.



Photos: VTA, Lauren Ledbetter

But there are challenges from a transportation perspective.



Photos: Richard Masoner



*Solutions that move you*

# What is success from a transportation perspective?



Photo: Lauren Ledbetter



Photo: Richard Masoner

Silicon Valley Bicycle Coalition  
Shiloh Ballard

# Land Use Subgroup, January 2022



## **Mission**

*Our purpose is to create a healthy community, environment, and economy through bicycling for people who live, work, or play in San Mateo and Santa Clara Counties.*

## **Vision**

*We envision a community that values, includes, and encourages bicycling for all purposes for all people.*

# Transportation and Climate Change

Burning fossil fuels like gasoline and diesel releases carbon dioxide, a greenhouse gas, into the atmosphere. The buildup of carbon dioxide (CO<sub>2</sub>) and other greenhouse gases like methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), and hydrofluorocarbons (HFCs) is causing the Earth's atmosphere to warm, resulting in changes to the climate we are already starting to see today.

Greenhouse gas (GHG) emissions from transportation account for about 29 percent of total U.S. greenhouse gas emissions, making it the largest contributor of U.S. GHG emissions. Between 1990 and 2019, GHG emissions in the transportation sector increased more in absolute terms than any other sector.



# I would ride if...

	Friends	Incentive	Doctor	Safety	Classes
All respondents	43	41	46	59	21
Bicycle in an average week	72	63	75	84	31
Men	45	43	48	58	16
Women	40	37	43	62	25
Works < 2 miles away	49	49	42	51	29
2-5 miles	43	43	42	67	19
Over 5 miles	44	44	44	70	15
Never ride	21	17	34	39	15

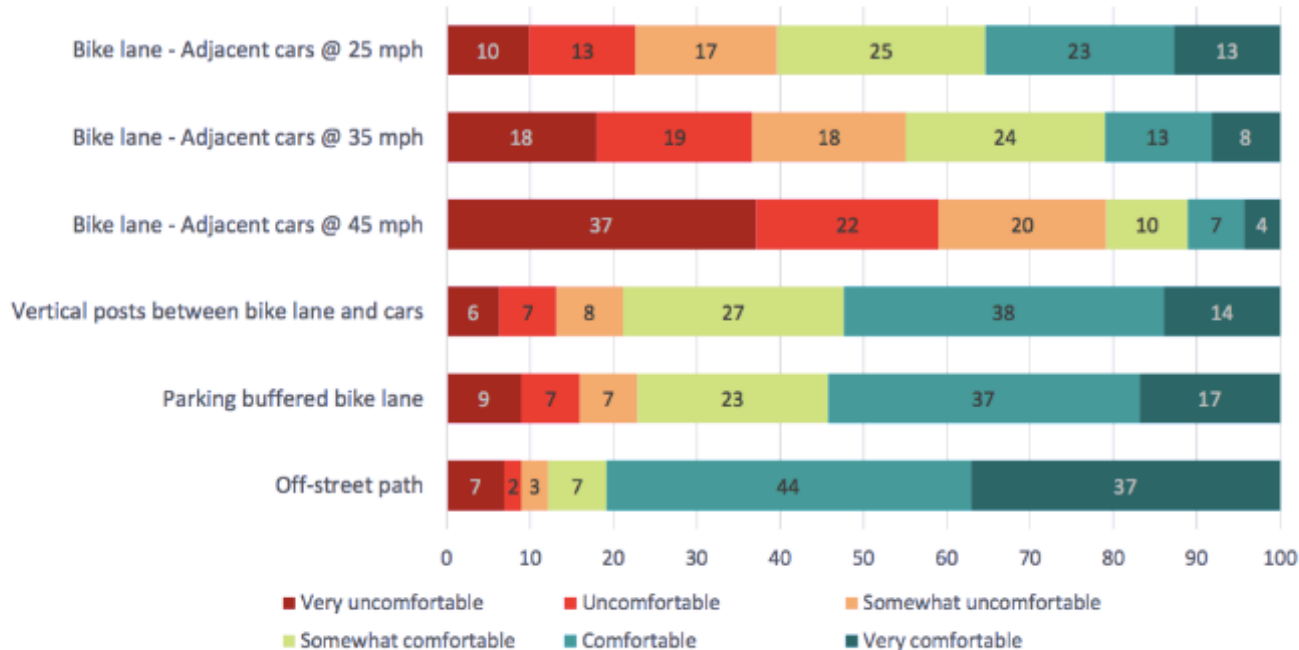
Safe bike routes is the key to getting folks to ride. Classes, not so much.

# Most would be uncomfortable cycling next to moderate-high speed traffic, much more comfortable on protected facilities

40% of respondents would be comfortable cycling next to 25 mph traffic, drops to 11% with 45 mph traffic

Supermajority would be comfortable riding on an off-street bike path

Comfort riding on various types of bike facilities



- Realistic Solution: Create trail-like feel with your streets.
- Slow down cars, create buffers, barriers

Two Successes: 1. Tame the bureaucracies 2. Question the balance



# Facility comfort by group...

	Comfortable or Very Comfortable (%)					
	Conventional bike lane, adjacent traffic at...			Bike lane w/ vertical posts	Parking- buffered bike lane	Off-street path
	25 mph	35 mph	45 mph			
All respondents	35	21	11	52	54	81
Bicycle in an average week	58	39	19	79	70	86
Men	44	27	14	56	62	84
Women	27	15	8	48	45	78
18 to 34	39	19	8	72	65	90
35 to 49	38	21	11	46	51	82
50 to 64	33	25	14	46	53	76
65 or older	26	18	11	38	43	72

**People who currently bike (unsurprisingly) more comfortable everywhere**

**Men, younger age groups more comfortable everywhere**



[Bikesiliconvalley.org](http://Bikesiliconvalley.org)

Thank you!

Shiloh Ballard, Executive Director

City of San Jose  
Liz Sewell

# City of San Jose

## CLASS I TRAILS

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### Requirements

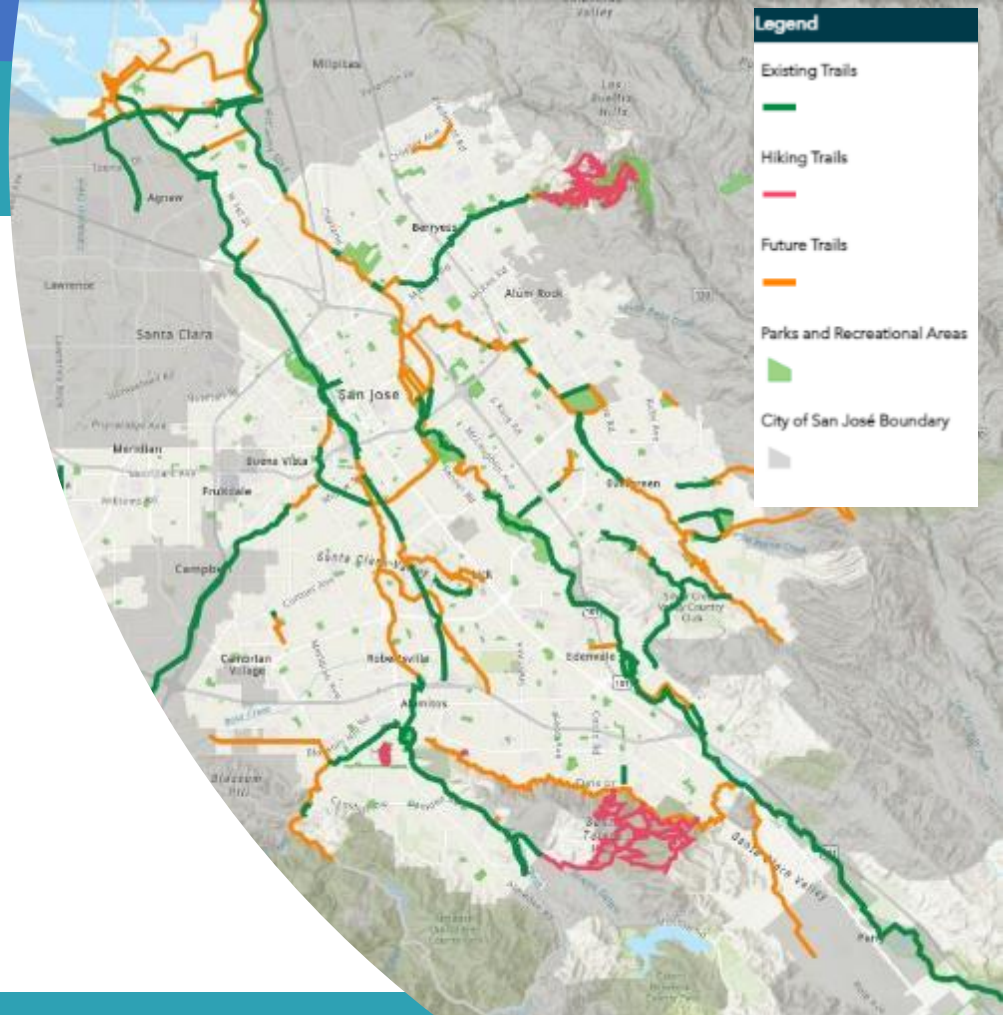
- 12' wide paved, w/ gravel shoulders
- Approx. 12' gravel surface (Interim)
- Entirely off-street
- Linkage to on-street Bikeways

### Stats

- 2001: 20 miles
- 2020: 63 miles
- Future: 100 miles +

### Lead

- Trail Manager: Liz Sewell

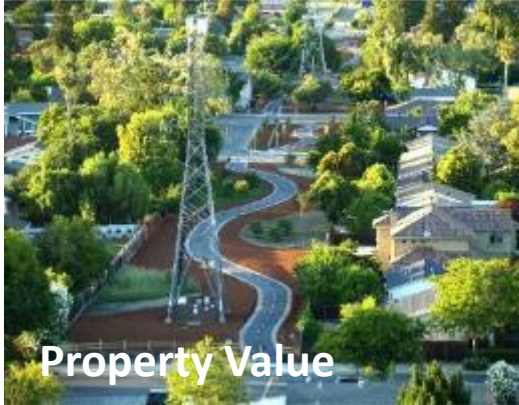




Economic Development



Tourism



Property Value



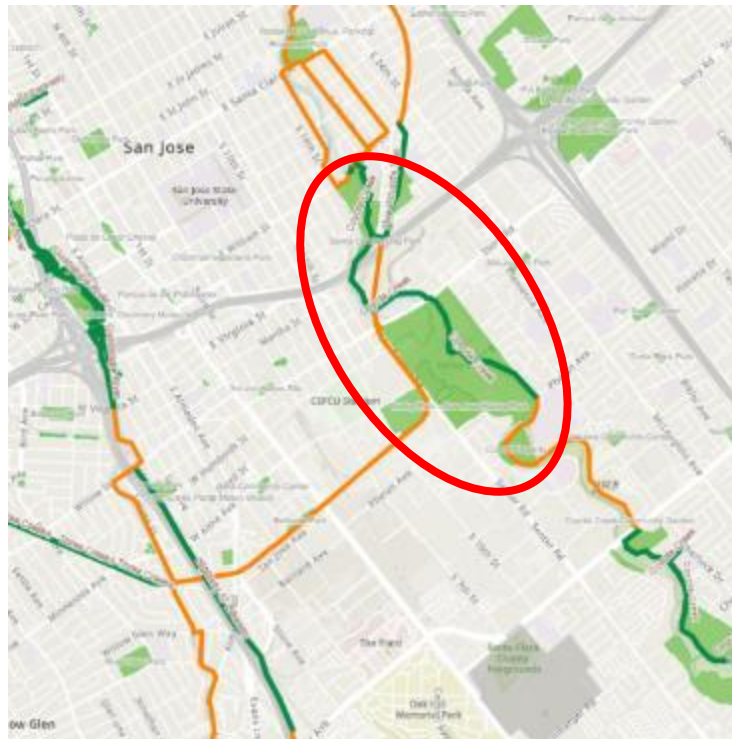
Active Transportation





# Coyote Creek Trail

William to Story



# Trail Safety Plan Pilot Draft Calendar

January '22

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

February '22

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28				

March '22

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

May '22

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

June '22

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

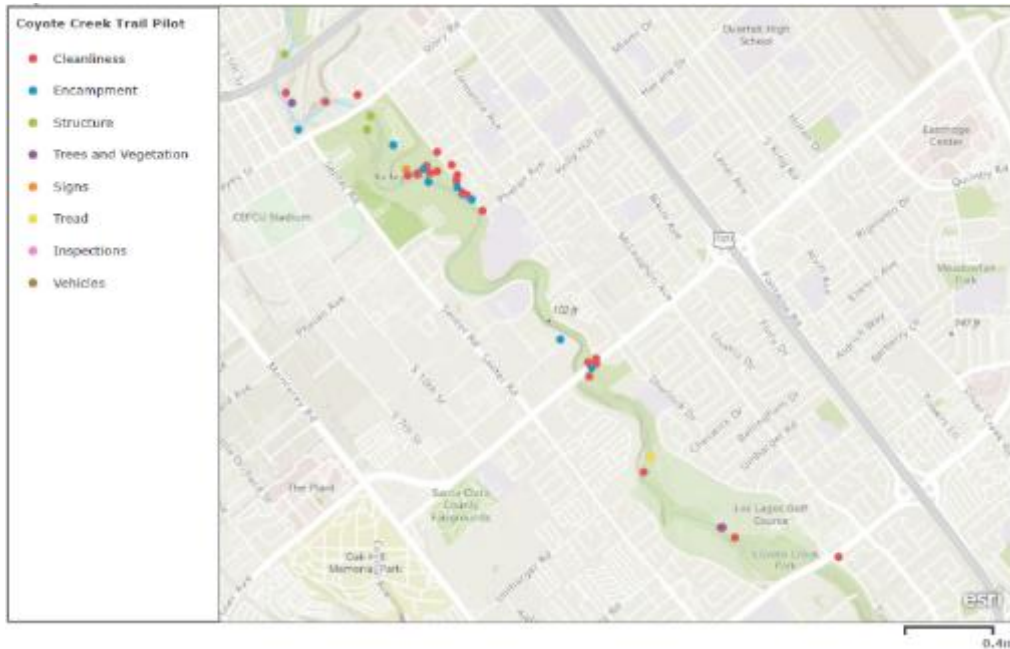
July '22

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

**Legend**

Contractors	City Staff
<span style="border: 1px solid yellow; padding: 2px;"> </span> SJCC	<span style="border: 1px solid green; padding: 2px;"> </span> Rangers OT

Organizations	Inspections
<span style="border: 1px solid red; padding: 2px;"> </span> KCCB	<span style="border: 1px solid blue; padding: 2px;"> </span> Ranger
	<span style="border: 1px solid blue; padding: 2px;"> </span> Ranger/Maint/Trail Mgr



Santa Clara Valley Audubon Society  
Shani Kleinhaus



**Shani Kleinhaus, Ph.D.**

**Environmental Advocate, Santa Clara Valley Audubon Society,  
Advocate@SCVAS.org**

**SCVAS Mission: promote the enjoyment, understanding, and protection of birds and other wildlife by engaging people of all ages in birding, education, and conservation.**



# Riparian Ecosystems and Biodiversity

- Riparian ecosystems are critical to birds and wildlife - almost all animals depend on them during their life cycle.
- Trail use is harmful to riparian ecosystems and wildlife. Many species avoid or decrease their activity (especially breeding) in areas where human activity, pets, fast moving mobility devices, and noise are present.
- Lighting is detrimental to all ecosystems and species. Interferes with daily and seasonal behaviors of plants and animals, breaks ecological synchronies.

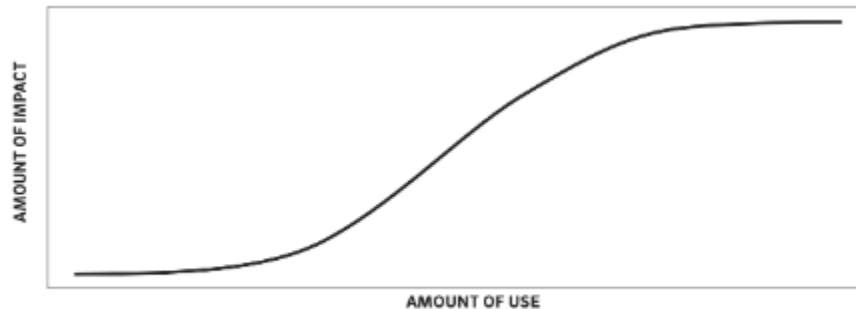


Figure 1. The sigmoidal use-impact curve shows the relationship between amount of recreation use and the intensity of environmental impact (Cole, 2019).

# What does a successful creekside trail look like?

Stevens Creek Trail at Blackberry farm used the following best practices:

- Locate trails as far as possible from riparian vegetation
- Provide narrow, meandering trails for immersive access
- Provide access nodes rather than linear access
- Create a vegetated buffer where possible
- Include habitat restoration elements
- Use pervious substrate
- Avoid lighting
- Keep trails to only one side of a waterway



California Department of Fish and Wildlife  
Rob Stanley and Brenda Blinn

# Artificial Lighting and Wildlife in Riparian Corridors

Robert Stanley, California Department of Fish and Wildlife

Robert.Stanley@wildlife.ca.gov

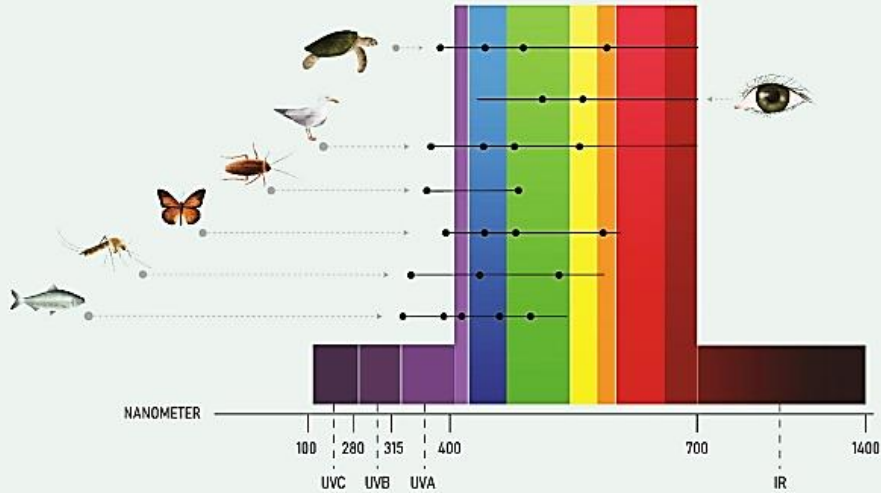
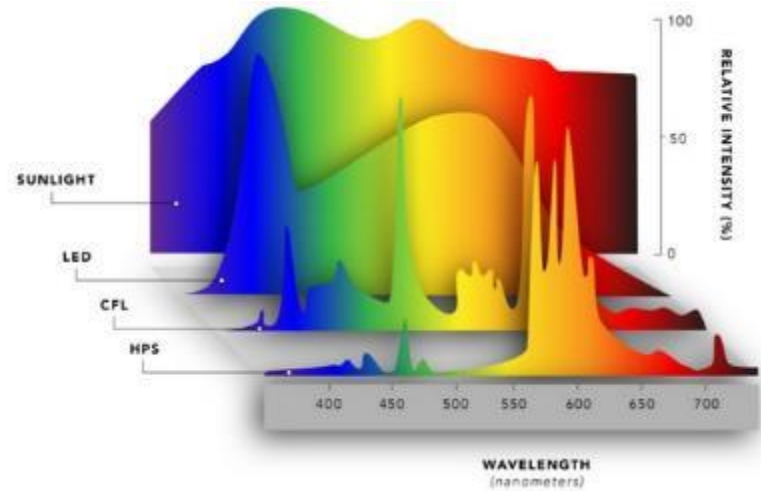
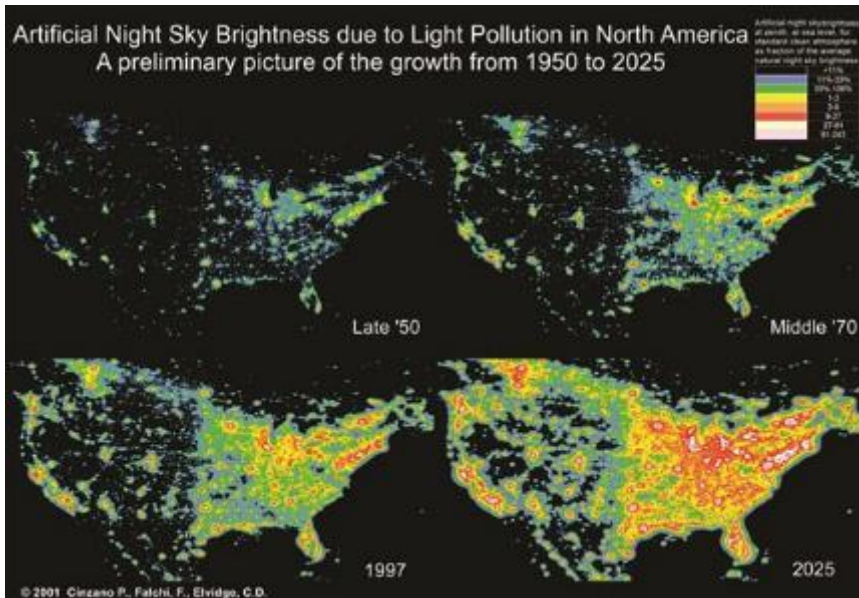


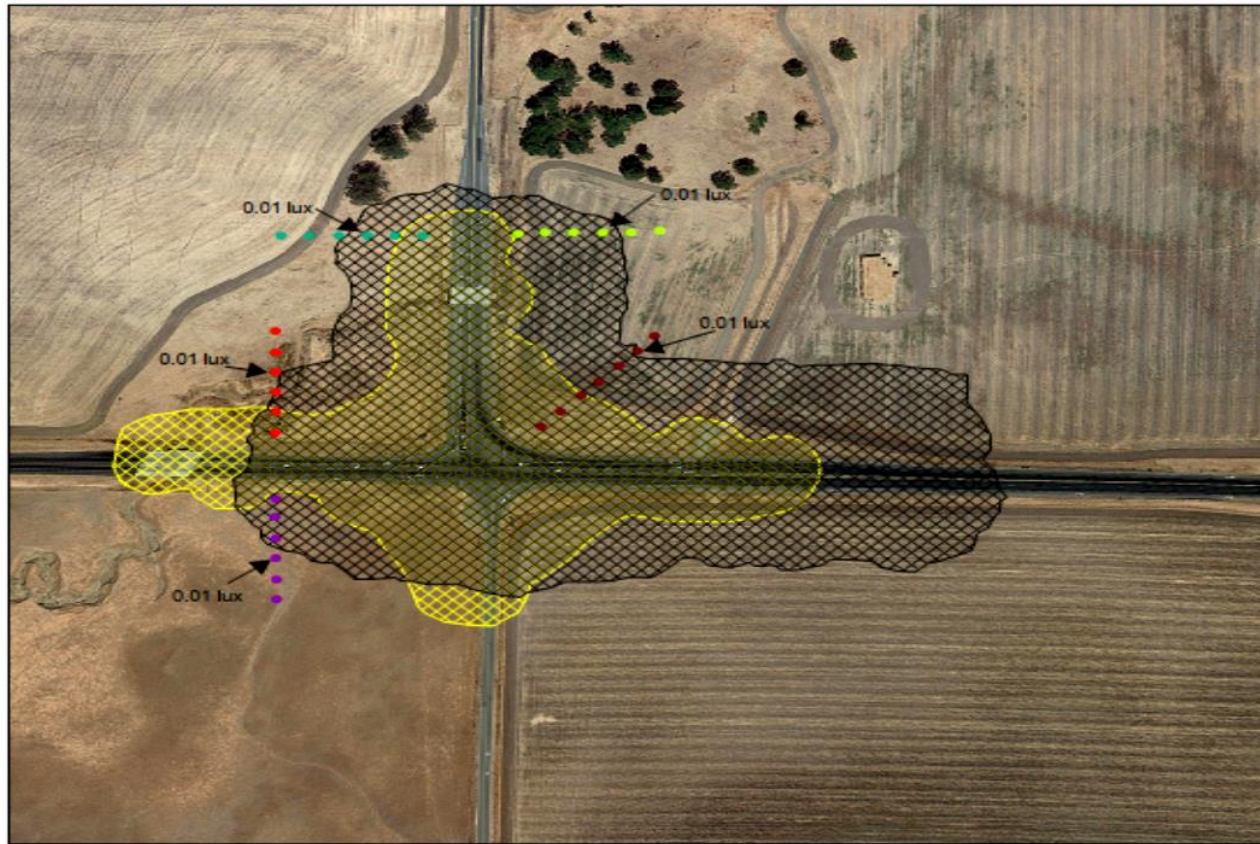
Figure 2 Ability to perceive different wavelengths of light in humans and wildlife is shown by horizontal lines. Black dots represent reported peak sensitivities. Figure adapted from Campos (2017)<sup>8</sup>.



# Artificial Light at Night (ALAN)



## SR 12/113 Light Survey Transects



### Legend

-  Existing Lighting (0.01 lux)
-  Proposed Lighting (0.01 lux)
-  Light Study Transect\_1
-  Light Study Transect\_2
-  Light Study Transect\_3
-  Light Study Transect\_4
-  Light Study Transect\_5

Valley Water  
Lisa Bankosh

# Trails and Riparian Areas

**Lisa Bankosh, Assistant Officer  
Watershed Stewardship and Planning**



**Valley Water**

Clean Water • Healthy Environment • Flood Protection

# Opportunities

- Access to open space and natural environment for urban residents
- Provide off-street regional trail routes benefiting a broad range of users
- Support alternative transportation reducing Greenhouse Gas Emissions
- Maintenance to address illegal uses
- Potential for more community partnerships to enhance environmental stewardship



# Challenges

- San Francisco Bay Area is a hotspot of biodiversity within CA and the US
- 80% of all animals use riparian resources and habitats at some life stage
- 50% of breeding birds nest in riparian habitats
- The easy trails have been built!



# Trail Criteria and Guidance to meet existing Valley Water Policy

1. Planning and Public Outreach
2. Flood Protection
3. Valley Water Operations
4. Habitat Protection
5. Trail Maintenance and Security
6. Water Quality
7. Channel Stability
8. Regulatory Compliance



# Q&A and Discussion





# SAN JOSÉ TRAIL NETWORK TOOLKIT PLANNING & DESIGN

CITY OF SAN JOSÉ  
DEPARTMENT OF PARKS, RECREATION  
AND NEIGHBORHOOD SERVICES  
TRAIL PROGRAM

In collaboration with  
M&C, INC.

WORKING DRAFT V1 | FEBRUARY 2018  
BUILDING COMMUNITY THROUGH NATURE





## Trestle Bridge (before)

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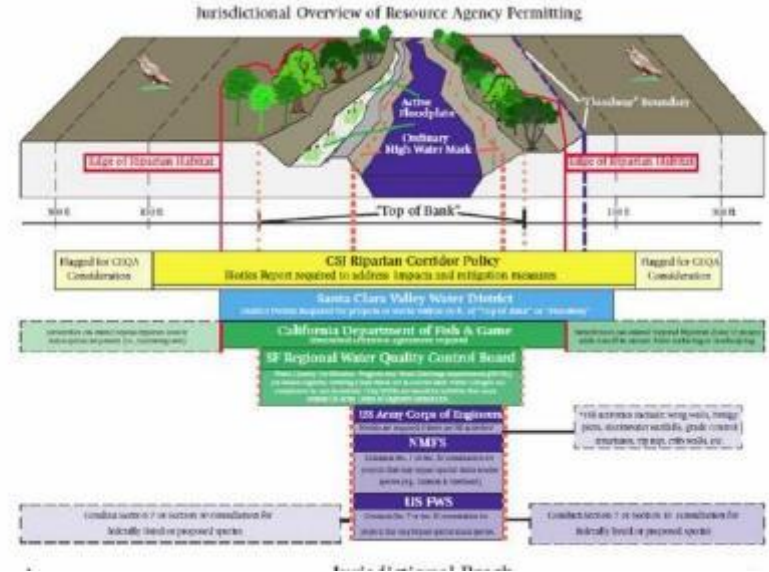


# Trestle Bridge (after)



Coyote Creek  
Selma Olinder to Story

before and after



## Agency Permitting

- City Riparian Policy
- California CEQA
- Federal NEPA
- Up to six regulatory / permitting agencies

# 2020 Interim Survey San Jose Trail Network during COVID

With Shelter-in-Place restrictions in place since March, how has your use of San Jose Trails changed?

