

San Diego Creek Causal Assessment – Traditional Comparator Sites

SD Creek Causal Assessment Project

Interactive Workshop#3

July 28, 2015

Comparator Site Approaches

- Previous discussions - pool of 106 regional comparator sites (selected by David Gillett)
 - New, “experimental” approach
 - Based on measured environmental gradients
- Intensive computation/data management requirements for this approach
 - Might be safer/easier to also do a traditional approach to comparator sites

Advantages of Including a Traditional Comparison Approach

- A less complex approach will make a better learning/teaching platform
- David Gillett will still do the more complex/regional approach in parallel
 - We can evaluate the two approaches against each other at the end
- Better able to use knowledge about local site conditions

Comparator Site Selection Criteria

Biology:

Similar or better IBI/CSCI score

Similar environmental setting:

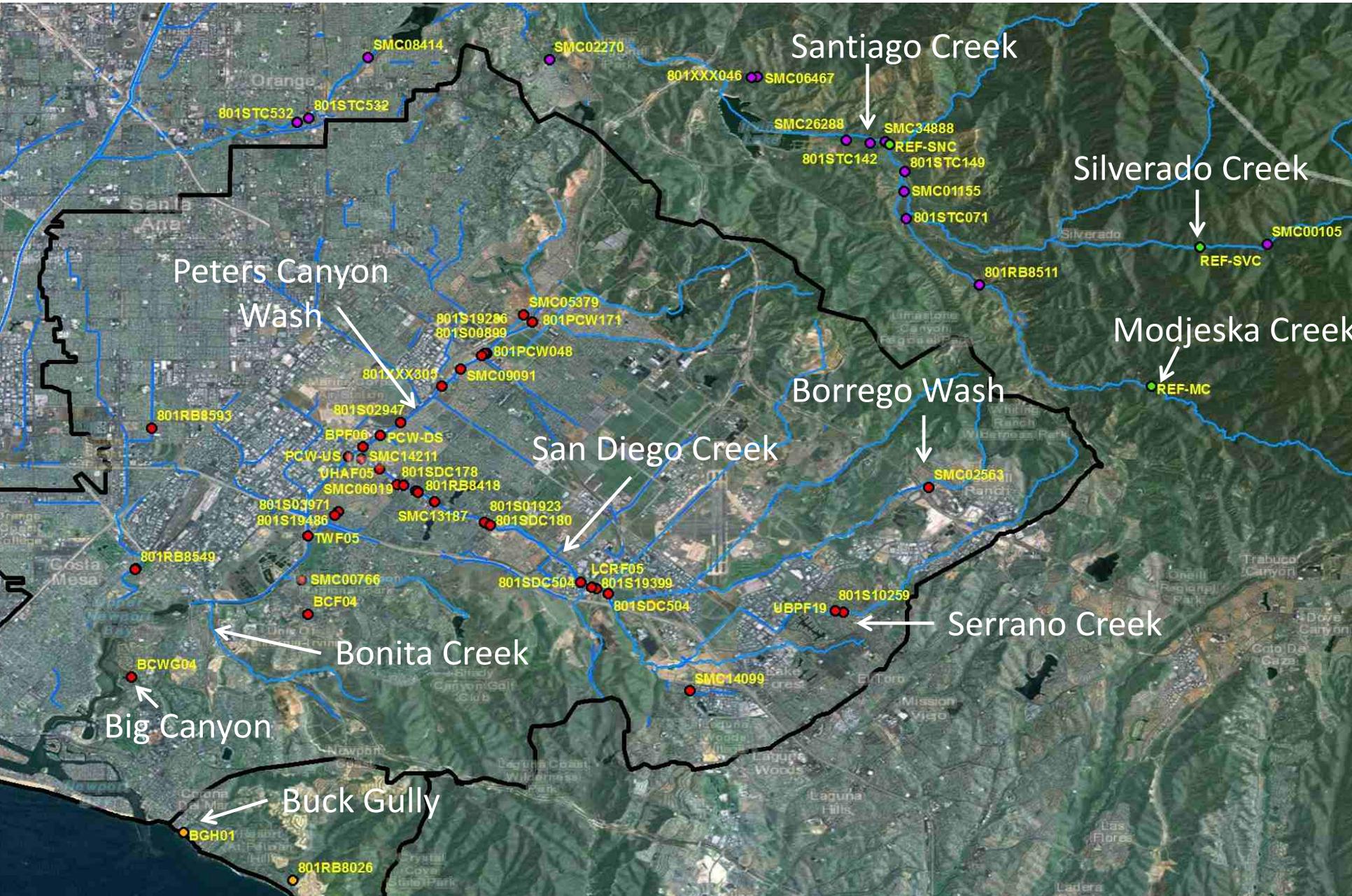
1. Low Elevation
2. Urbanized watershed
3. Modified channel but earthen bottom

Location:

SD Creek or adjacent watersheds

“Comparator sites with similar natural gradients found within the watershed, in nearby watersheds or even statewide should be considered.” – *California Causal Assessment guidance document*

All Potential Comparatore Sites



Available Sites – Santiago Creek

Parameter	Santiago Creek			SD Creek Test Sites
	Upper	Middle	Lower	
No. of Samples	8	12	4	6
IBI Average	37	29	18	12
IBI Range	20 - 59	20 – 39	1 - 46	1 - 23
Site Elevations	1,426 – 1,815 feet	700 – 1,063 feet	205 – 500 feet	54 – 110 feet
Dominant Land Use	Open Space	Open Space	Urban	Urban
Channel	Largely natural	Largely natural	Modified	Modified

Available Sites – San Diego Creek & Tributaries

Parameter	Borrego & Serrano	San Diego Creek			
		Hwy-133	Test Sites	Culver - Confluence	Lower
No. of Samples	8	7	6	5	5
IBI Average	12	5	12	11	6
IBI Range	4 – 20	1 – 13	1 – 23	0 – 26	2 – 11
Site Elevations	235 – 695 feet	113 – 170 feet	54 – 110 feet	39 – 52 feet	7 – 26 feet
Dominant Land Use	Open Space	Urban	Urban	Urban	Urban
Channel	Modified/ Natural	Modified	Modified	Modified	Modified

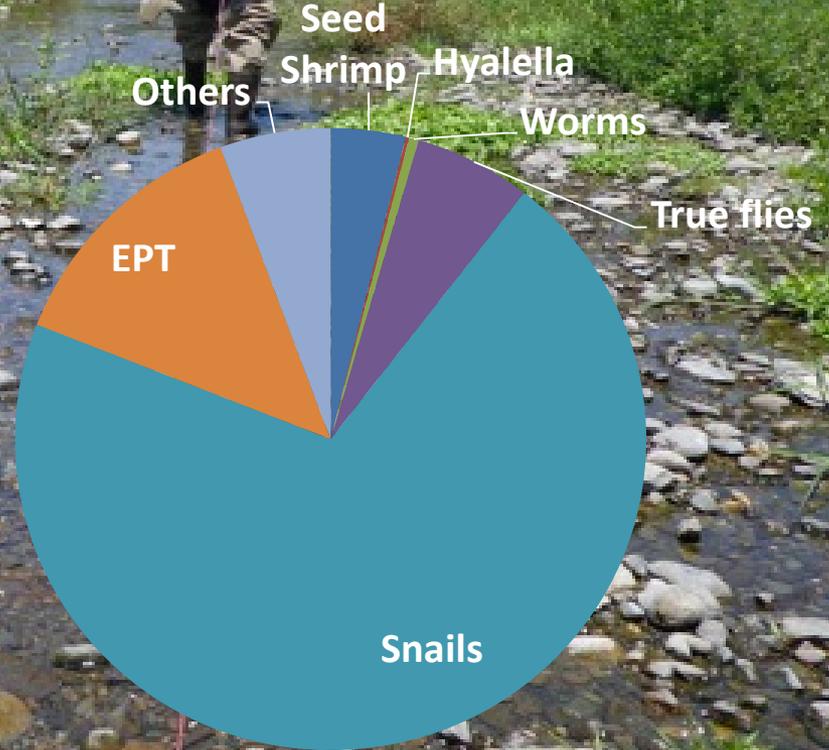
Proposed Sites

Parameter	Santiago Creek Site 532	Serrano Creek Site 259	SD Creek Test Sites	SD Creek Site 14211
Elevation	205 feet	404 feet	54 – 110 feet	39 feet
Sample Year	2012	2012	2006, 2009 2011, 2013	2013
IBI	46	20, 16	1-23 Avg. = 12	26
Channel Bottom	Earthen	Earthen	Earthen	Earthen

Need to integrate test site data

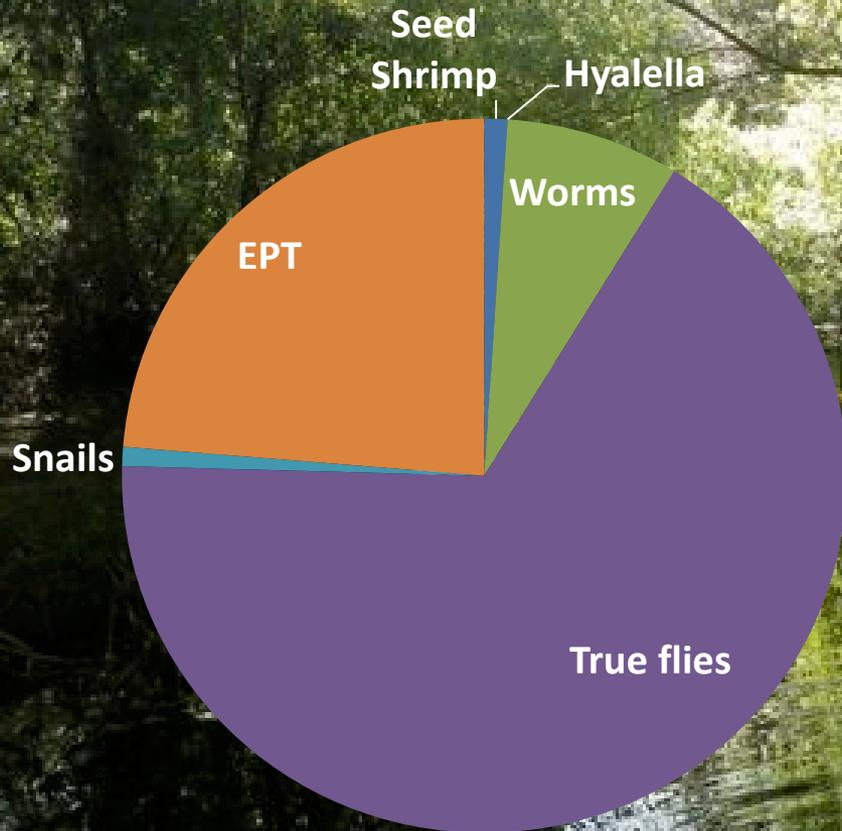
Santiago Creek @ Tustin Street

2012



Site 532
Sampled June 2012;
IBI=46

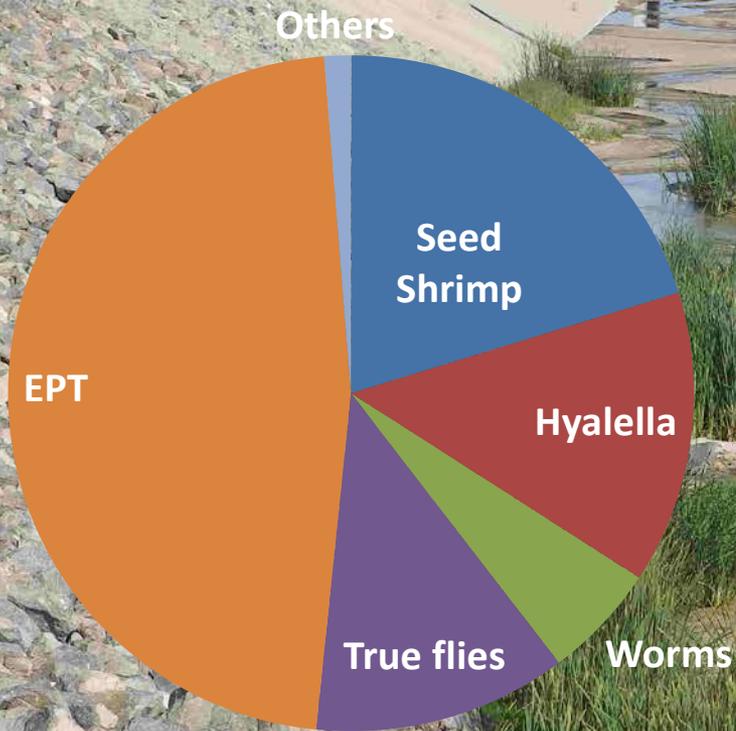
Serrano Creek @ Serrano Creek Park



Site 801S10-259-1
Sampled June 2012;
IBI=20, 16

SD Creek @ Harvard Avenue

(picture: May 2013)



Site SMC 14211
Sampled June 2013; IBI=26

Summary Biota Comparison

Seed Shrimp Hyallela Worms EPT True flies Snails Others

