

Santa Clara River Parkway Conference  
September 24, 2016

# Restoring Balance for People and Nature



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Santa Clara River and Coast Project*

The Nature  
Conservancy 

## OUR MISSION

Conserve the lands and waters  
on which all life depends.



# Based in Science



- 1915: Ecological Society of America founded to promote the science of ecology  
*disagreement about whether or not to take a political or activist stance on ecological preservation*
- 1946: Ecologist's Union split off to focus on preserving nature by protecting ecological communities
- 1951: Ecologist's Union became The Nature Conservancy

# Conservancy Facts

- Non-profit organization
- Protected more than 119 million acres of land and 5,000 river miles worldwide
- Operate in more than 100 marine conservation projects
- Own and manage the largest network of private preserves in the U.S.
- Chapters in all 50 states and more than 30 countries
- Over 3,500 staff, including over 400 scientists



# Santa Clara River



# Regional Conservation Value

- River still in predominantly natural state
- Home to many rare natural communities and 32 threatened, endangered and protected species
- 16 million people live within an hour's drive of the project
- Some of the most important wetlands in Southern California



# Richness of Wildlife



Least Bell's Vireo

Kylie Fischer



Coast Horned Lizard



Mountain Lion

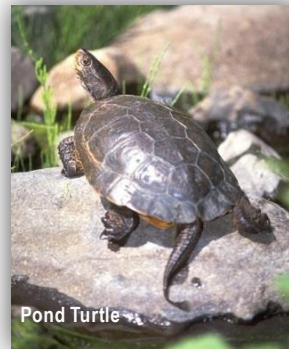


Southwestern Willow Flycatcher

Utah Dept. Natural Resources



Tidewater Goby



Pond Turtle



California Red-legged Frog



Arroyo Toad



Black Bear



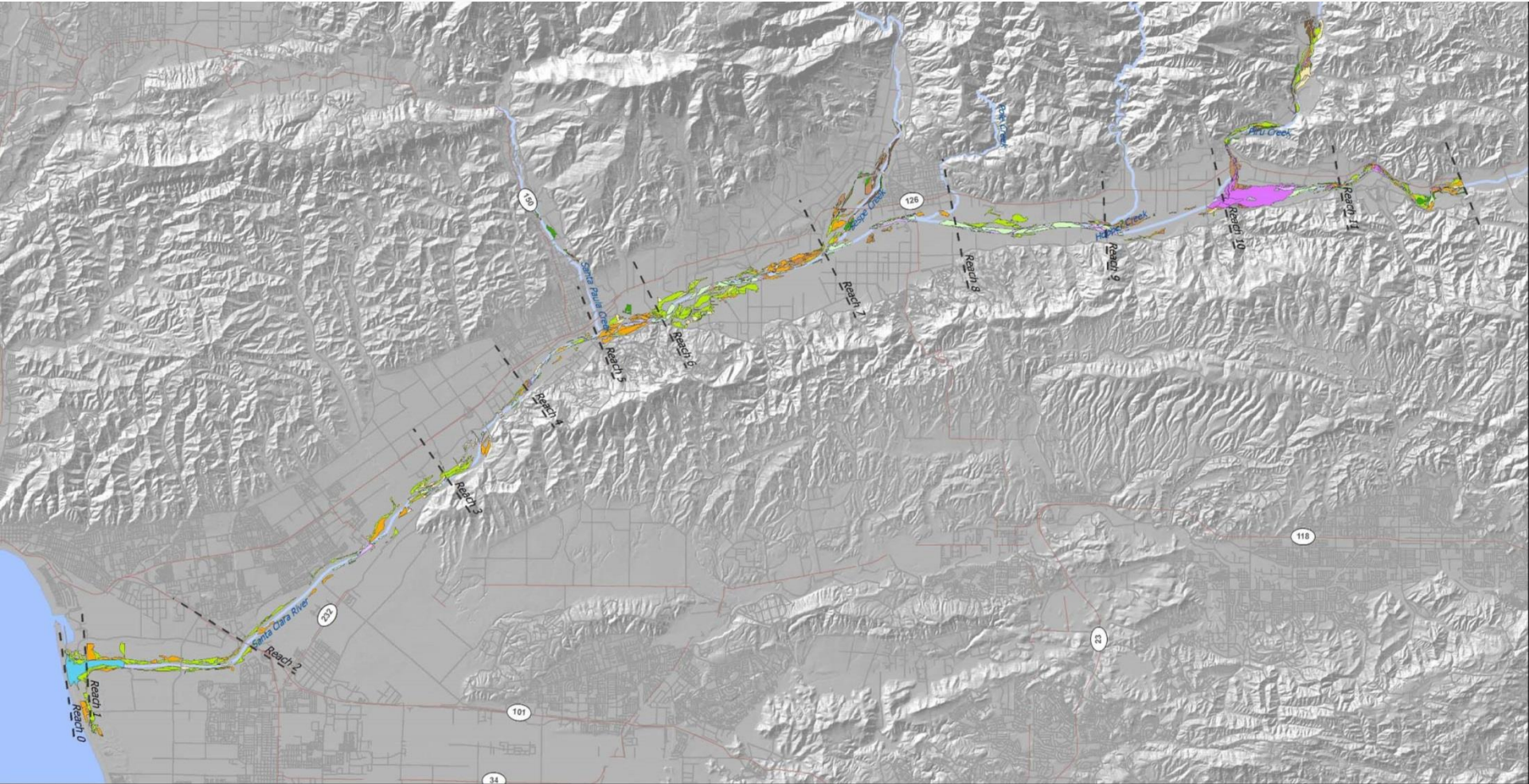
Unarmored Threespine Stickleback

Christopher Mosser, UC Davis



Southern California Steelhead

# Vegetation and Rare Plants




LOWER SANTA CLARA RIVER DISTRIBUTION OF POTENTIAL HABITAT

## ALL NATIVE FOCAL SPECIES



Arroyo toad \* Western pond turtle \* Least Bell's vireo \* Western yellow-billed cuckoo  
 Southwestern willow flycatcher \* Nevin's Barberry \* Slender-horned spineflower  
 Tidewater goby \* Southern steelhead

Total Potential Habitat: 8564 acres (3466 hectares)

### HABITAT TYPES

 Mixed riparian forest	 Coastal sage scrub
 Cottonwood-willow forest	 Desert riparian scrub
 Herbaceous	 Mixed riparian scrub
 Tidal estuary	 Mixed willow scrub



 Riverwash  
 Freshwater wetland





# Rare Plants

Slender-horned Spineflower



© Mark W. Skinner

Ventura Marsh Milkvetch



Lyon's Pentachaeta



James Baley

California Orcutt Grass



Jasmine J. Watts

San Fernando Valley Spineflower



Nevin's Barberry



©www.tradewindsfruit.com

# Threats to the River

## Habitat Loss and Destruction from:

- Aggregate mining
- Channelization/levees
- Erosion/channel incision
- Conversion from agriculture to urban land uses
- Development in the floodplain
- Invasive non-native vegetation
- Poor water quality



*In 2005, American Rivers designated the Santa Clara River as one of the most threatened rivers in the nation.*



# Invasive Plants: *Arundo donax* (giant reed)



# Invasive Plants: *Arundo*/giant reed



# Invasive Plants: *Arundo*/giant reed



# *Arundo* Facts

- Found throughout southern California
- Native of eastern Asia
- Brought here as an ornamental plant, for erosion control, and for the production of reeds for musical instruments
- Uses 6-12 times more water than native vegetation
- Reduces stream shading, making rivers too warm for native fish
- Crowds out native plants, making it difficult for birds and other wildlife to make nests or find cover
- Removing *Arundo* provides millions of liters of water supply benefit annually

*California Invasive Plant Council ranked the Santa Clara River watershed as #2 of 24 watersheds making it a high priority for treatment.*



# Other Invasive Plants



Short pod mustard



Tree tobacco



Milk thistle surrounded by rip gut brome



Salt cedar (tamarisk) in bloom



Salt cedar (tamarisk)



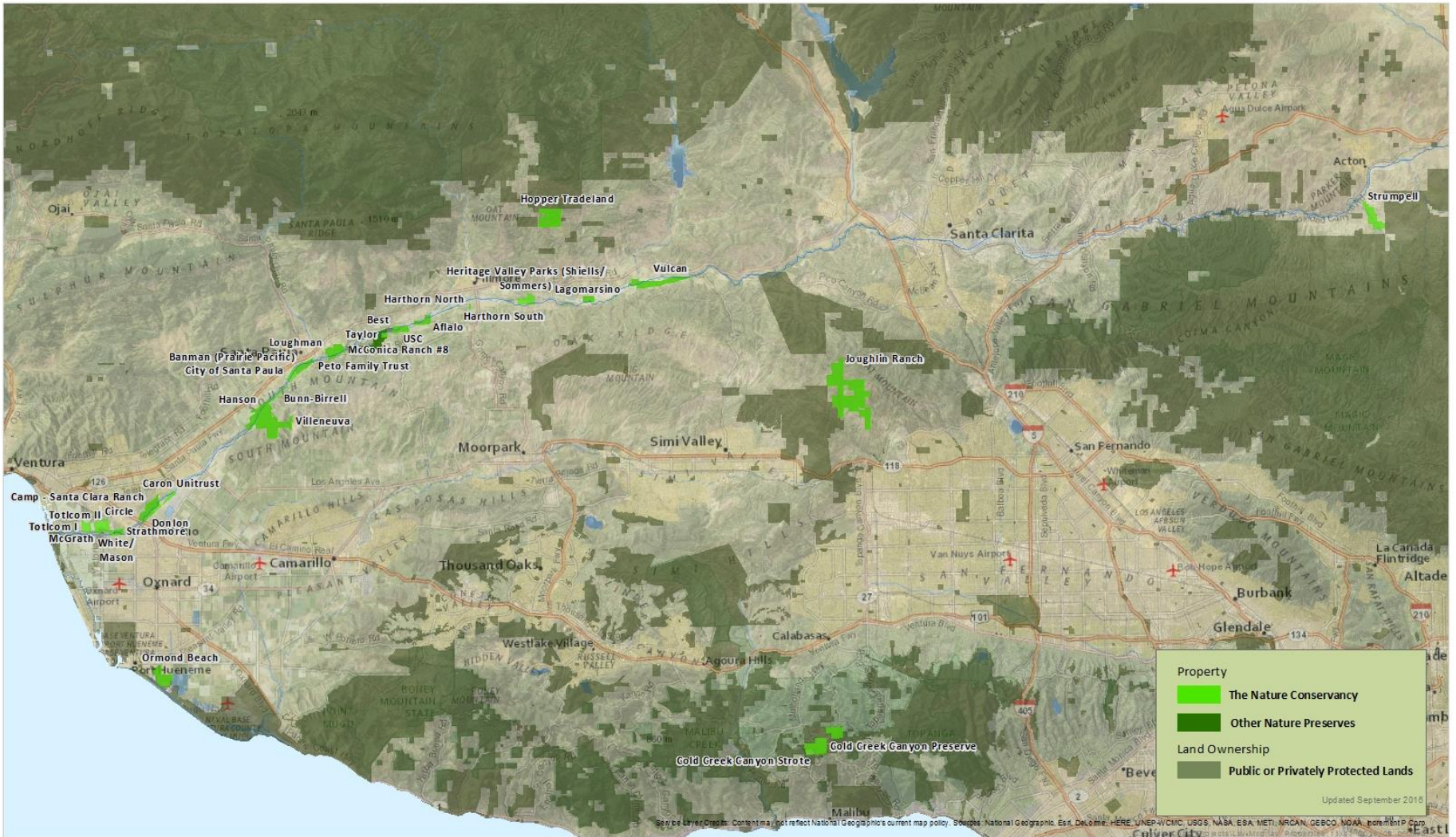
Castor bean

# Santa Clara River & Coast Project



Santa Clara River and Coast Conservation

The Nature Conservancy





# Project Objectives

## *Multi-benefit Conservation Program*

### Habitat conservation

- Over 3,600 acres of river and coastal wetlands acquired
- Zoning policy achievements (Conservation Subdivision)
- Conservation and restoration by habitat nodes
- Wildlife corridors

### Non-structural flood protection

- Floodplain Easement Program
- Piloting green infrastructure program

### Land Management

- Promote agriculture as valued land use
- Leasing over 500 acres

### Climate Change Adaptation

- Coastal Resilience Ventura
- Natural Infrastructure

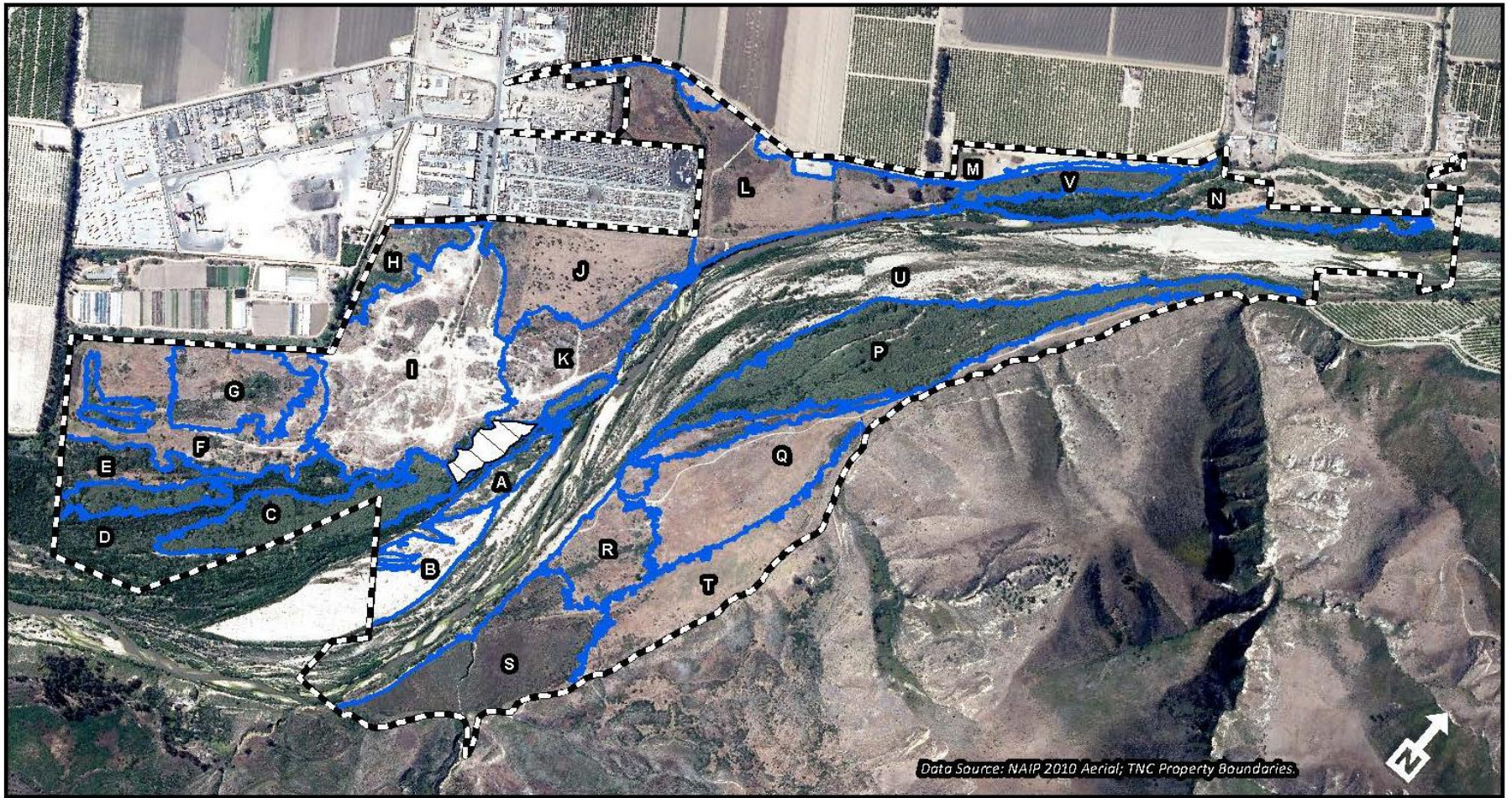


# Habitat Restoration

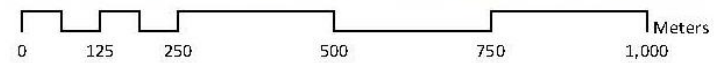


# Hanson Restoration

*Hanson-Villanueva Property: Riparian Restoration and Enhancement Plan*



Data Source: NAIP 2010 Aerial; TNC Property Boundaries.

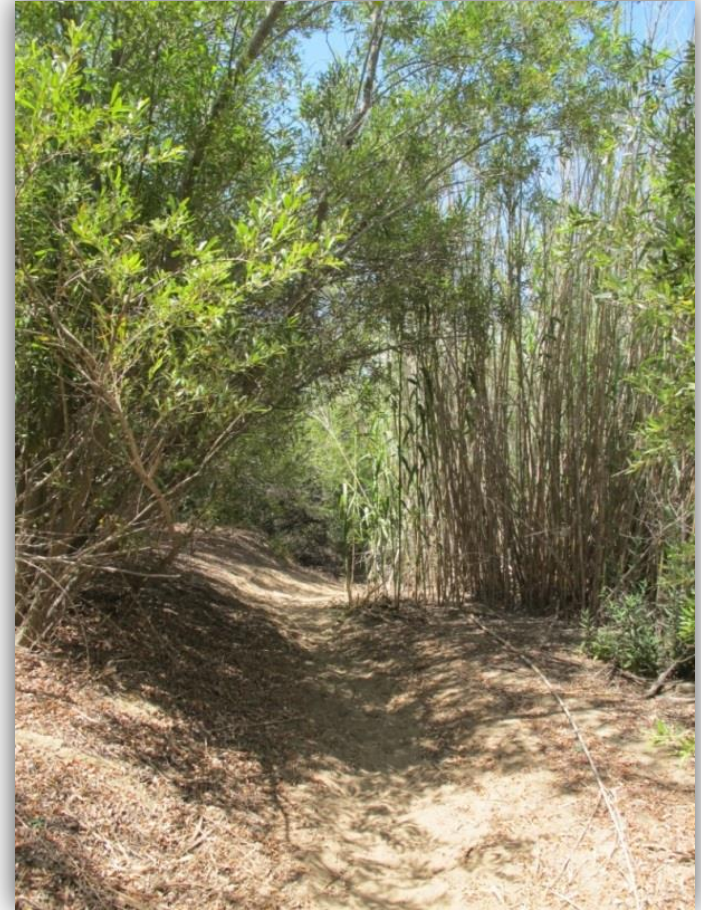


# Banman Restoration



# Restoration Focus

- Implement resilient, large-scale restoration that will withstand flood and fire
- Develop methodologies that are cost effective and replicable throughout the river and coast
- Share methods and lessons learned
- Work cooperatively with partners and farmers for natural floodplain management
- Plan for long-term coastal resilience and sea level rise



# Scientific Studies



Griffith Wildlife Biology



Griffith Wildlife Biology

*What are the factors that will lead to the delisting of the endangered least Bell's vireo?*

# Migration Monitoring



# How to visit?

## Monthly Naturalist-led Hikes

- Free!!
- Open to the public
- Hiking difficulty is usually easy
- Under 18 accompanied by a parent or guardian



© The Nature Conservancy



© The Nature Conservancy



© The Nature Conservancy

### 2016

**Watershed Habitats**  
September 11<sup>th</sup>  
9-11 am  
**Peto (Santa Paula East)**

Tour a restoration site and discover the rich riparian areas that persist beyond the veil of trees and brush.

**Coastal Bird Walk**  
October 1<sup>st</sup>  
9-11 am  
**Ormond Beach (at McWane Blvd.)**

This fall come see a diverse array of migratory birds as they make their way south through Ormond Beach and the adjacent wetlands.

**Rare/Endangered Species**  
November 20<sup>th</sup>  
2-4 pm  
**Santa Paula West (Hanson)**

Learn about the many endangered species on the Santa Clara River.

*Hike difficulty: Moderate*

**Sunset Nature Walk**  
December 18<sup>th</sup>  
3-5 pm  
**Ormond Beach (at Arnold Rd.)**

Participants are invited to a walk on the beach to see the dunes, plants and animals during a sunset.

### 2017

**Chumash Wild Craft and Lifestyles**  
January 14<sup>th</sup>  
9-11 am  
**Peto (Santa Paula East)**

Learn how the indigenous peoples of Ventura county lived on the local landscape and used their resources.

**Wetland Ecosystems**  
February 5<sup>th</sup>  
2-4 pm  
**Ormond Beach (at Arnold Rd.)**

Discover the inner-workings of one of Southern California's rarest ecosystems and it's inhabitants.

**Spring Migratory Bird Walk**  
March 4<sup>th</sup>  
9-11 am  
**Santa Paula West (Hanson)**

Watch birds as they return north at the beginning of spring.

**Wetland Bird Walk**  
April 2<sup>nd</sup>  
9-11 am  
**Ormond Beach (at McWane Blvd.)**

**A hike through a coastal wetland to observe the different bird species and how they've adapted to this unique habitat.**

**Be a Nature Detective**  
May 6<sup>th</sup>  
9-11 am  
**Peto (Santa Paula East)**

Learn about the art of animal tracking and observation, discover the clues and signs of animal presence.

**Beach Life**  
June 11<sup>th</sup>  
9-11 am  
**Ormond Beach (at Arnold Rd.)**

A leisurely walk on the beach to learn about the coast and how the area is teeming with life.

**Survival Adaptations**  
July 10<sup>th</sup>  
9-11 am  
**Santa Paula West (Hanson)**

Venture into east county to observe and learn about how the flora and fauna adapt in order to survive in their unique environments.

*Hike difficulty: Moderate*

**Eco Awareness Clean-up**  
August 1st  
9-11 am  
**Ormond Beach (at McWane Blvd.)**

**A fun educational clean-up to help increase participants level of stewardship & pride in the environment.**



# Useful Websites

The Nature Conservancy – general info, national and international projects, membership [www.nature.org](http://www.nature.org)

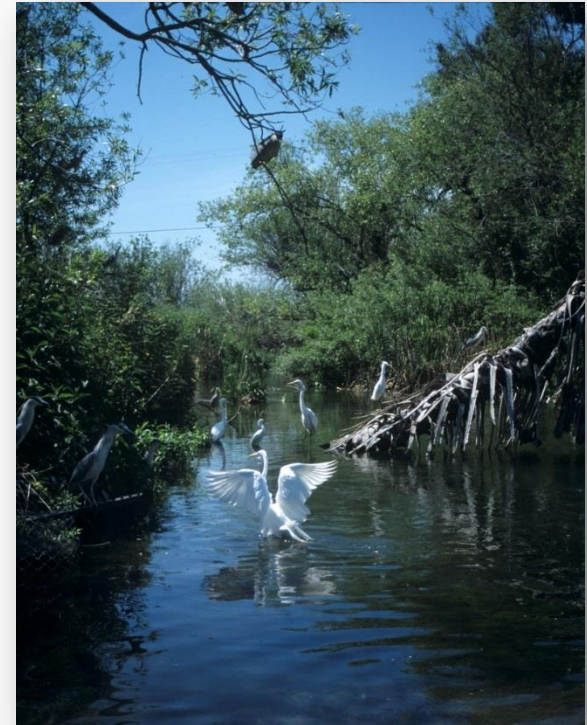
The Santa Clara River & Coast Project description and nature hike schedule [www.nature.org/ourinitiatives/regions/northamerica/unitedstates/california/placesweprotect/la-ventura.xml](http://www.nature.org/ourinitiatives/regions/northamerica/unitedstates/california/placesweprotect/la-ventura.xml)

Santa Clara River Parkway project description and reports [www.santaclarariverparkway.org/](http://www.santaclarariverparkway.org/)

Coastal Resilience Ventura

<http://coastalresilience.org/>

<http://maps.coastalresilience.org/network/>





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Thank you!

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