

Riparian Summit
UC Davis
October 18, 2017

Floodplain Restoration and Protection Along the Santa Clara River Parkway: Multiple Techniques for Multiple Benefits



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*Project Director
Santa Clara River and Coast Project*

The Nature
Conservancy 

OUR MISSION

**Conserve the lands and waters
on which all life depends.**



Statewide Restoration Projects

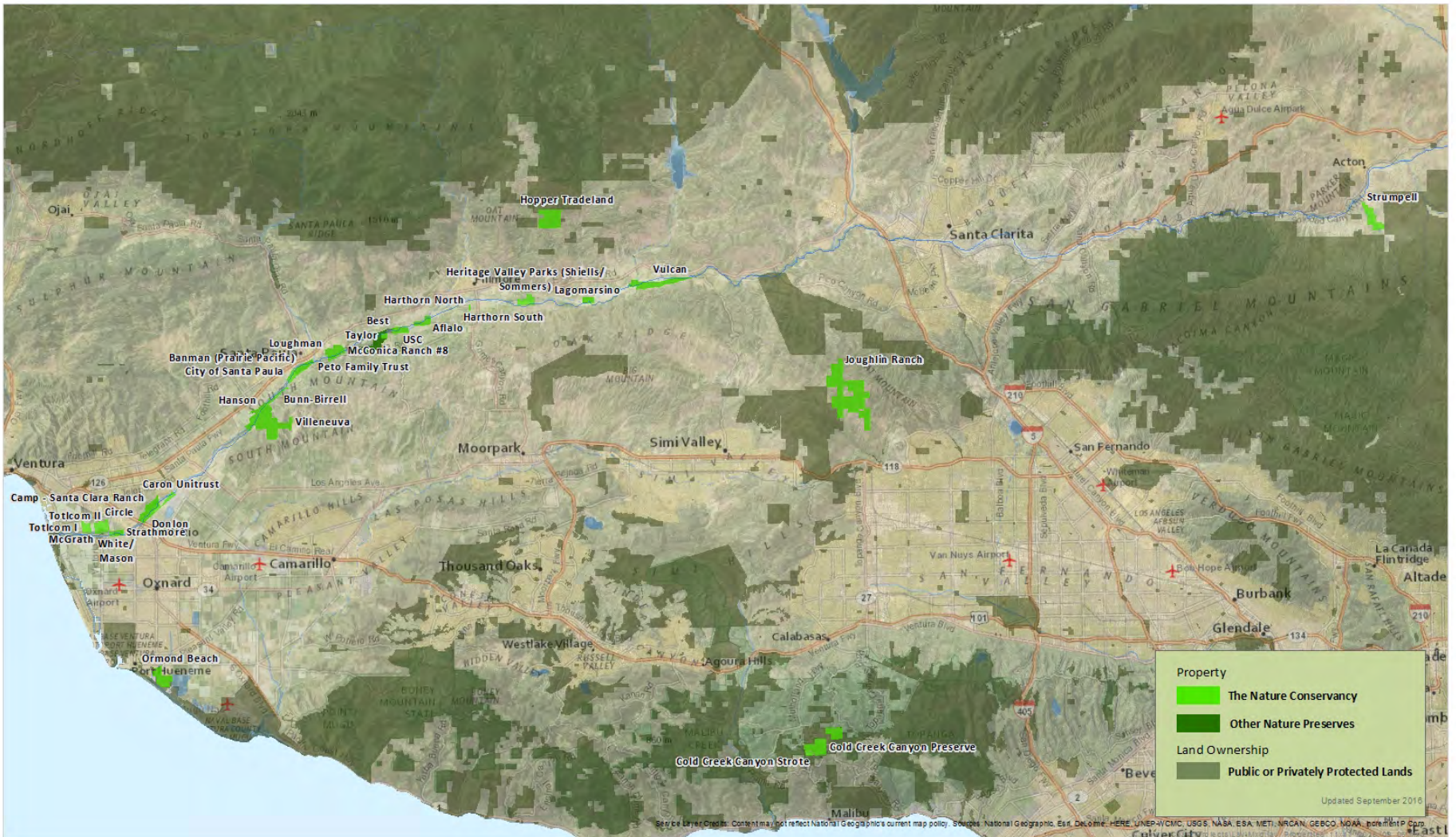


Santa Clara River & Coast Project



Santa Clara River and Coast Conservation

The Nature Conservancy



Goal: Protect and Restore the SCR System

- Restore hydrologic and geomorphic processes - create and maintain **native habitat and biodiversity**
- **Reconnect** the river to its floodplain by removing levees
- Promote **non-structural flood control** measures
- Provide enhanced **flood protection** for surrounding communities
- Control **invasive plant** species
- Promote the preservation of **compatible agriculture** in the watershed



Project Objectives

Multi-benefit Conservation Program

Habitat conservation

Acquire over 3,400 acres of river and coastal wetlands

Zoning policy changes (Conservation Subdivision)

Prioritize using Conservation Nodes

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

Promote Natural Infrastructure

Sustainable Groundwater Management Act (SGMA)

Groundwater Sustainability Plans that protect groundwater dependent ecosystems

Research to inform the ecosystem requirements



HISTORICAL ECOLOGY

of the lower Santa Clara River, Ventura River, and Oxnard Plain: an analysis of terrestrial, riverine, and coastal habitats



San Francisco Estuary Institute

7770 Pardee Lane, 2nd Flr, Oakland, CA 94621

p: 510-746-7334 (SFEI), f: 510-746-7300, www.sfei.org

HISTORICAL ECOLOGY PROGRAM
CONTRIBUTION NO. 641 • AUGUST 2011



Conservation Plan for the Lower Santa Clara River Watershed and Surrounding Areas

2008

Restoration Node Planning



Los Padres National Forest

Piru Node

Fillmore

Hatchery Node

Sespe Node

Hanson Node

Santa Paula

South Mountain

Moorpark

Simi Valley

Camarillo

Saticoy

Ventura

Estuary Node



5000 m

Habitat Restoration - Hanson

Fall 2014



Spring 2017



Hanson Restoration – Wetland Creation



Groundwater recharge
Seasonal wetland habitat
Stopover on the Pacific Flyway



Post-Fire Restoration



Results



Griffith Wildlife Biology



Griffith Wildlife Biology

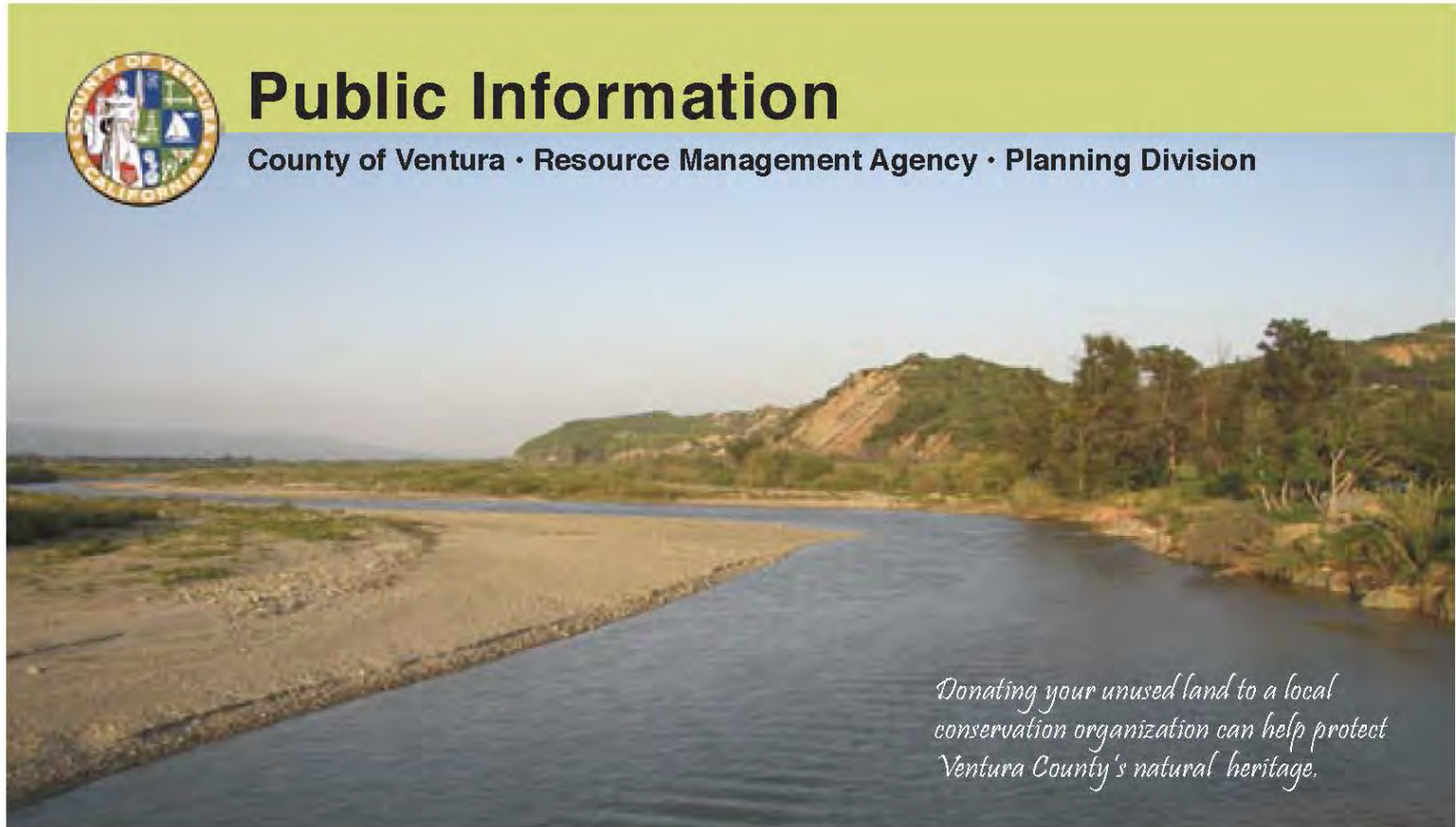
What are the factors that will lead to the delisting of the endangered least Bell's vireo?

Conservation Subdivision



Public Information

County of Ventura • Resource Management Agency • Planning Division



Donating your unused land to a local conservation organization can help protect Ventura County's natural heritage.

Have you considered donating or selling a portion of your land to a conservation agency?

Conservation Subdivision

Exemption from Minimum Lot Size Requirements

- *Problem:* Property owner couldn't donate or sell a portion of a parcel unless it met the minimum size required for its zoning classification.
- *Solution:* Can subdivide into smaller than minimum lot size **if** one of those parcels is restricted to habitat conservation in perpetuity

Easier Subdivision Process

- *Problem:* Property owners who wanted to sell part of a parcel to a private conservation agency would have to process a subdivision map.
- *Solution:* Conservation Subdivision uses a Parcel Map Waiver process: **faster and cheaper!**



Conservation Subdivision

Advantages:

- Tax break for donated land
- Cash for the portion of the land that's unusable for building or agriculture if a conservation group is willing to buy it
- Reduce maintenance costs, property taxes, estate taxes and/or insurance costs
- Protect valuable habitat and open space in Ventura County



Floodplain Protection



Levees beget more levees

Hard bank, hard
bottom structures

Levees eliminate
wetlands

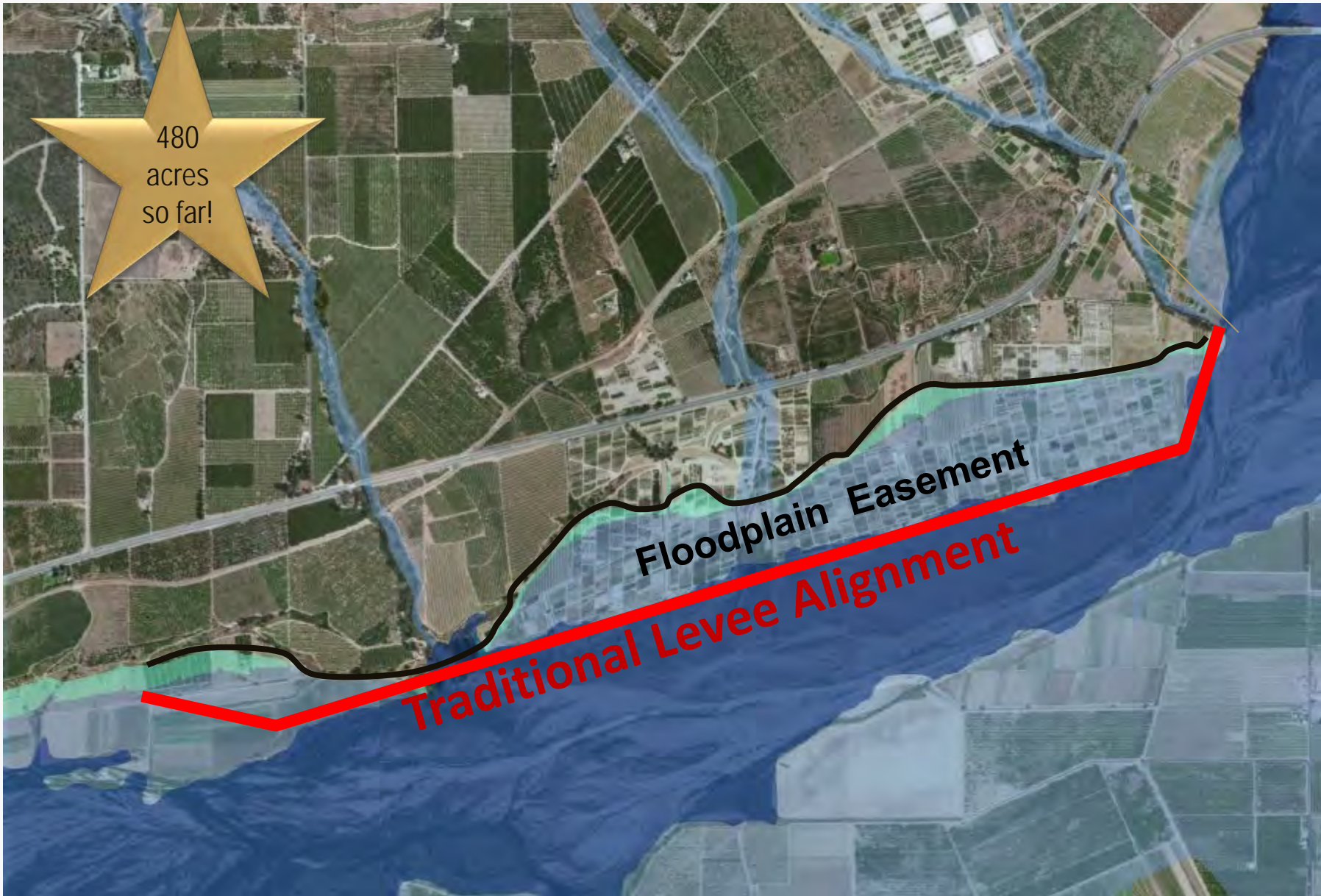
Contribute to up and
downstream erosion
and flooding

Non-structural Solutions



480
acres
so far!

Floodplain Easement
Traditional Levee Alignment



Open Floodplain Benefits

- Lower initial costs than levees
- No maintenance costs
- Compatible with existing ag
- Downstream flood protection
- Improve surface water quality
- Increase ground water recharge
- Benefit wetlands habitat and sediment deposition
- Avoid regulatory issues (CEQA, 404, 1600 Permits)
- Eliminate need for “decertification”
- “Adversaries” become partners in implementation
- Funding is available!
\$4.5M in grants (IRWMP/Prop 84 & Santa Clara River Trustee Council)





Multi-benefit conservation balances the needs of people, agriculture, industry with nature

- Protects floodplain, agricultural land, and riparian habitat and streambed
- Increases groundwater recharge
- Habitat restoration reduces water demand and increases habitat for rare, threatened and endangered species
- Optimizes development and urbanization - Eliminates need to protect flood prone properties
- Allows for future restoration, expansion of floodplain, and reduction of flood hazards, while increasing ecological health

Thanks to our Funders and Partners!



Caltrans



Santa Clara River Trustee Council



Santa Clara River
Steelhead Coalition



*Western Foundation of
Vertebrate Zoology*



Stillwater Sciences

The Nature
Conservancy 



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Thank you!
