

Partnerships Pave the Way: Highway 17 Wildlife Crossing Completed for Mountain Lions

Santa Cruz County, California



California Department of Transportation District 5
Santa Cruz County Regional Transportation Commission
Land Trust of Santa Cruz County
Pathways for Wildlife



Wildlife Undercrossing

Presentation credit and thanks:

Morgan Roberts, Caltrans

Nancy Siepel, Caltrans (retired)

Dan Medeiros, The Conservation Fund

Ahíga Sandoval, Pathways for Wildlife

Rachel Moriconi, Santa Cruz County Regional Transportation Commission



- Santa Cruz Mountains in Central California
- Hwy 17 – primary connection between Santa Cruz and San Francisco Bay Area
- At Laurel Road, Postmile 9.5 (Laurel Curve)



A brief tour of the Laurel Curve crossing



The Power of Partnering



It takes a village...

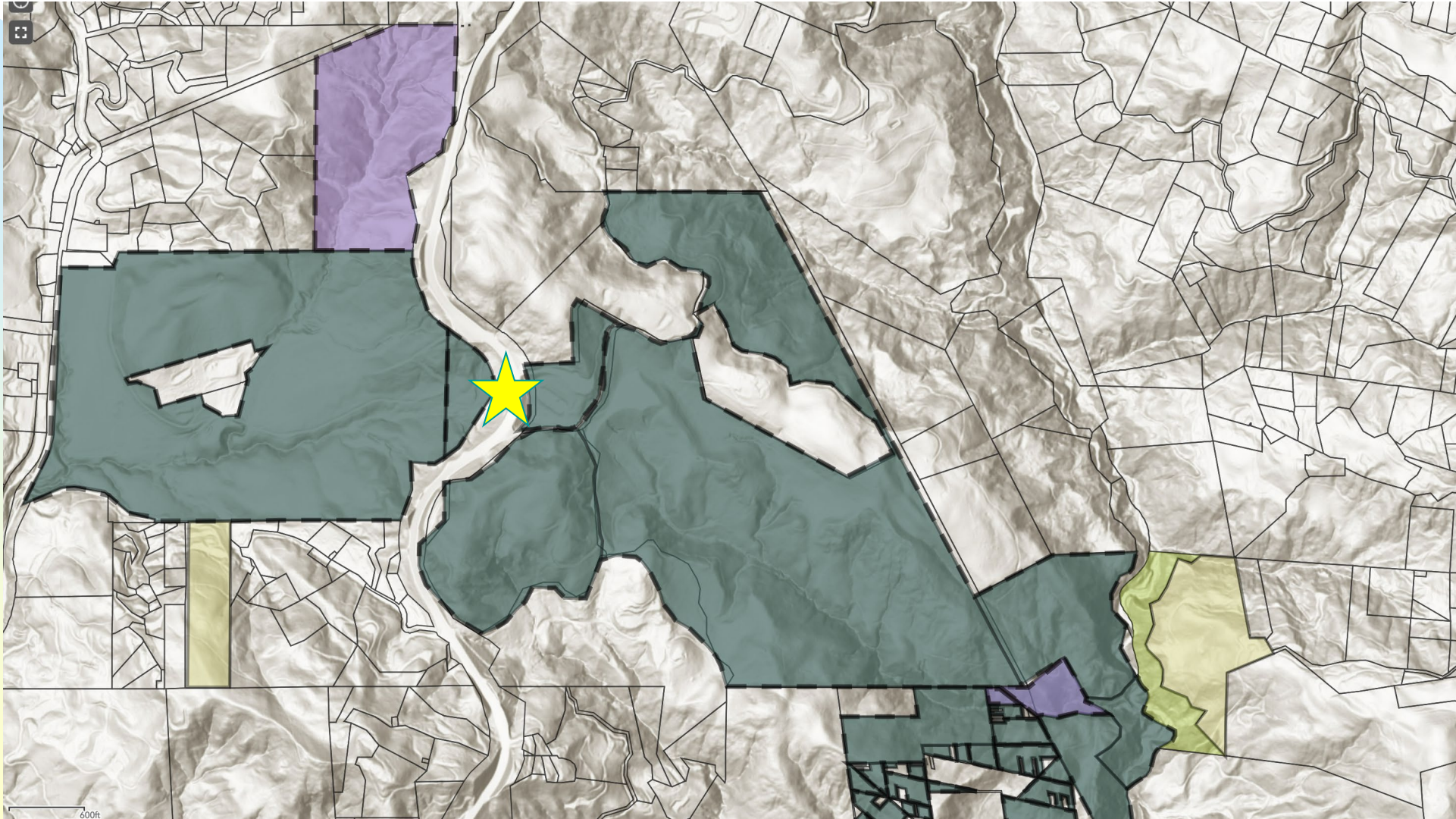




Partner Contributions

- **Caltrans** — \$3.1 million from the State Highway Operation and Protection Program (SHOPP) for environmental and engineering design; \$2 million construction support
- **Santa Cruz County Regional Transportation Commission** -- \$5 million for construction through **Santa Cruz County Tax Measure D**
- **Land Trust of Santa Cruz County** --- Protected 500 acres through fee title & conservation easements on both sides of Highway 17 (~ \$10 million through fund-raising & grants)/ Plus an additional \$3 million for construction
- **Pathways for Wildlife and UC Santa Cruz Puma Project** --- Contributed data to support the need for a crossing at Laurel Curve
- **California Department of Fish and Wildlife** --- Advanced Mitigation Credit Agreement in collaboration with Caltrans Headquarters
- **California Transportation Commission** --- Construction funding
- **CA Coastal Conservancy, Wildlife Conservation Board** --- Land protection funding
- **Wildlife Conservation Network** --- Post-construction performance monitoring

The Land Trust facilitated the crossing by lands straddling the highway, coalition building and extensive advocacy



Community Support



SCCRTC

Santa Cruz County Regional Transportation Commission



Community Support



- This unique and innovative project is the result of many years of community outreach and collaboration.
- SCCRTC earmarked \$5 million for the Wildlife Crossing in a 2016 Ballot Measure approved by over 2/3rd of Santa Cruz County voters
- SCCRTC and the Community recognized the impact transportation infrastructure has on wildlife and safety benefits of wildlife crossing



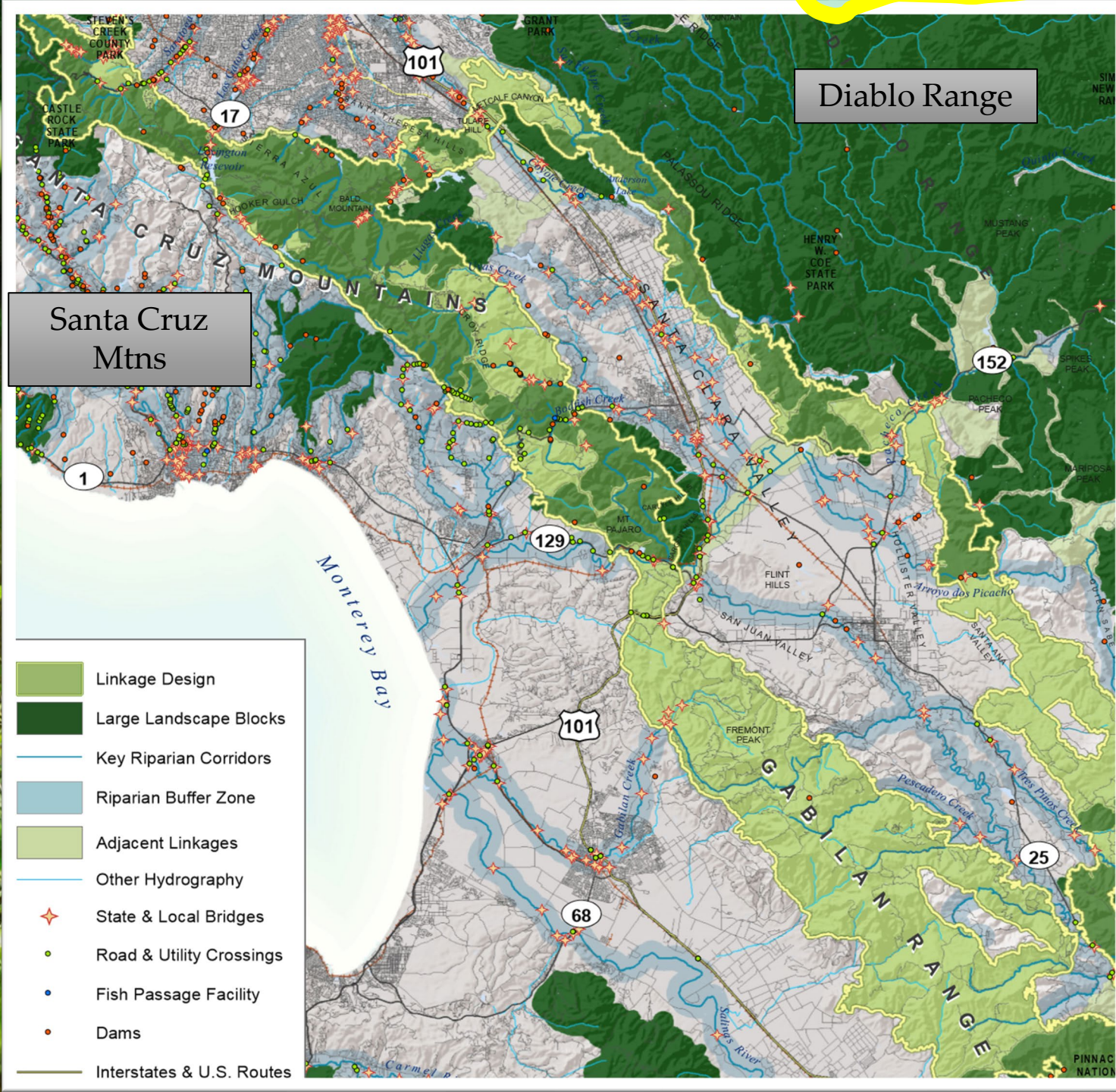
Based in Science



- Land Trust's "Conservation Blueprint" Prioritized Hwy 17
- U.C. Santa Cruz Puma Project's modeling identified Laurel Curve
- Pathways for Wildlife data confirmed UCSC's modeling



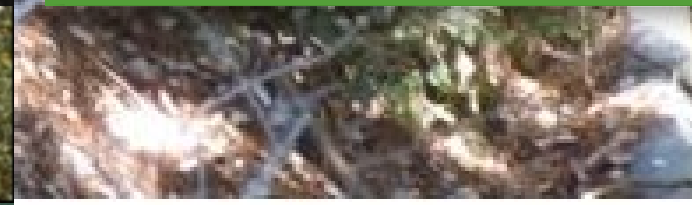
Important linkage for mountain lions to travel in and out of the Santa Cruz mountains.





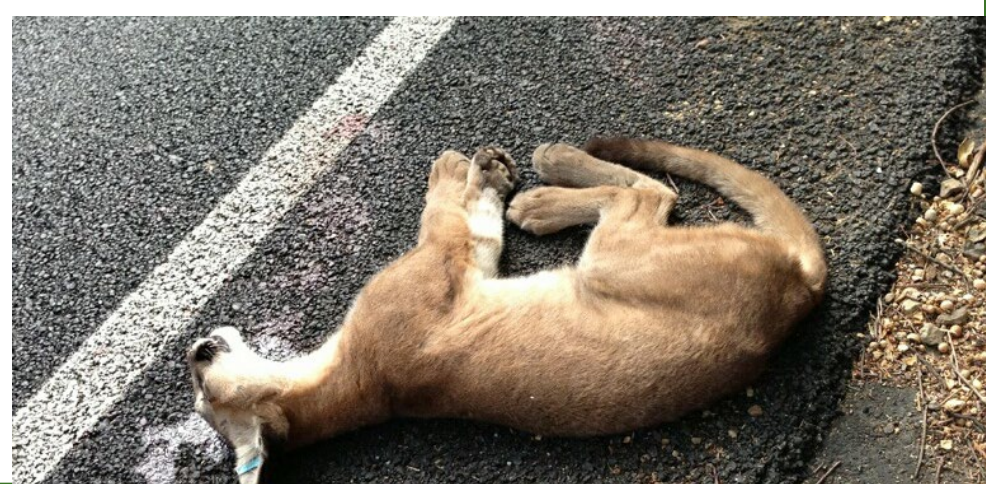


Hwy 17 lacks existing culverts or bridges for wildlife passage.





High rates of wildlife-vehicle collisions.



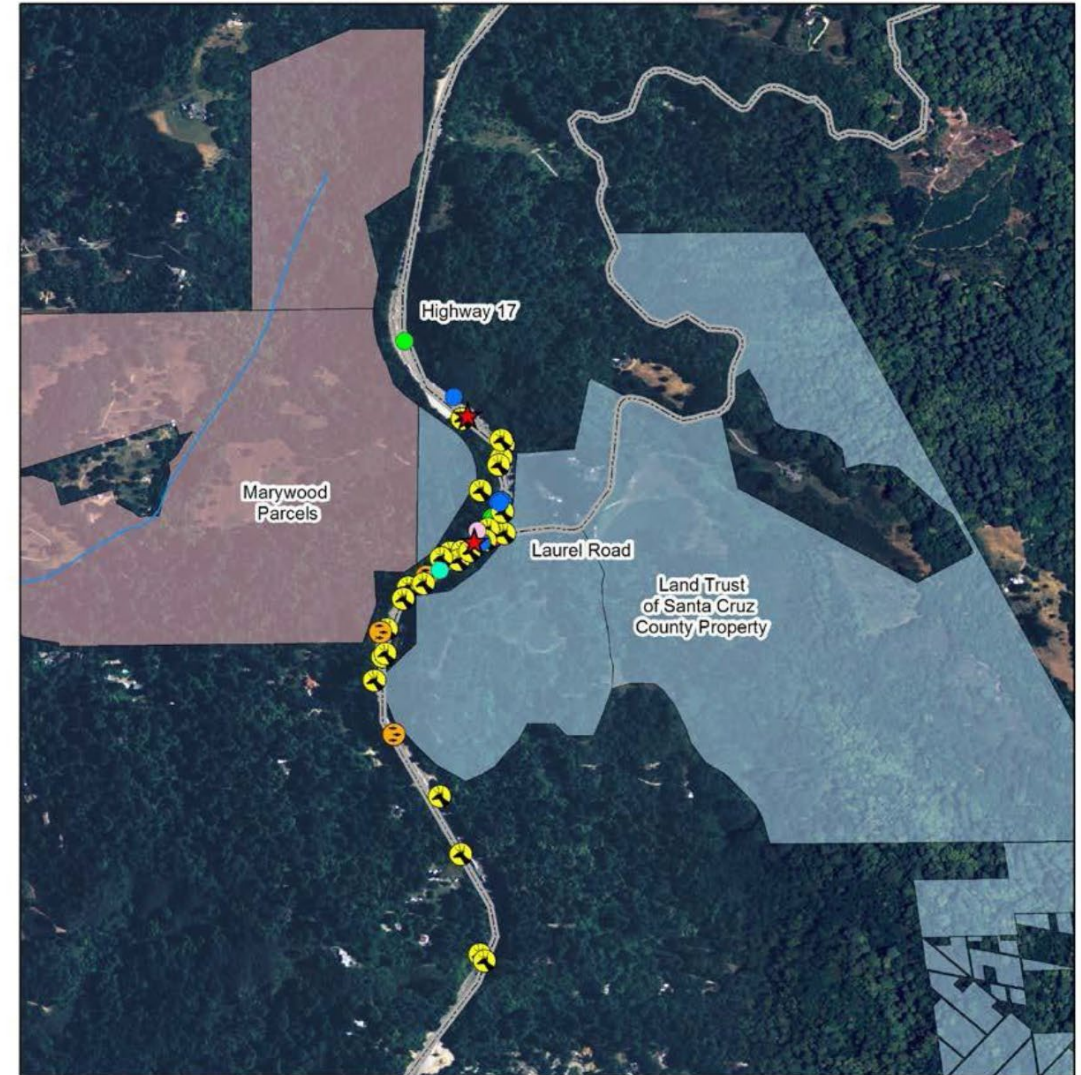
Data used to determine where to install a wildlife crossing structure.

1. Roadkill data: yellow circles=deer, red stars=mountain lions.

2. UCSC Radio Collar Data: Colored lines show=mountain lions that successfully crossed highway.

3. We identified 2 important locations for implementing wildlife connectivity enhancements.

Highway 17 Laurel Curve Study Area: Animal Vehicle Collision Data



Legend

Hwy17SC2015rk

Animal

- Bobcat
- Coyote
- Deer

- Gray fox
- Mountain lion
- Raccoon
- Skunk

- Land Trust of Santa Cruz County Property
- Marywood Parcels

Data Sources:
Caltrans: IMMS-PL/SQL Report 2004-2010
Caltrans: TSAR Accident Detail 2000-2010
UCSC Santa Cruz Puma Project-Chris Wilmers
Pathways for Wildlife

Map by
Pathways
for Wildlife

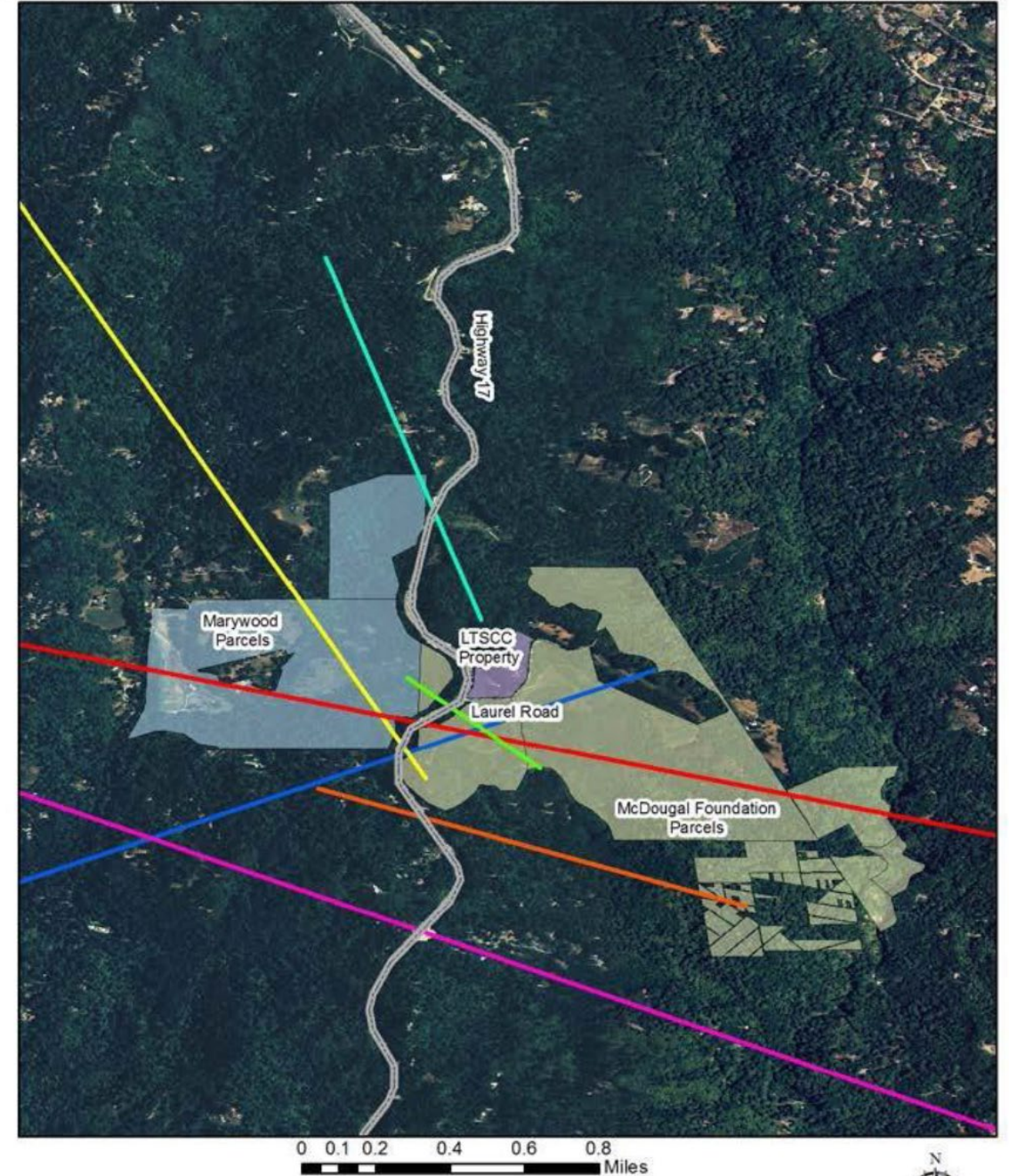
Data used to determine where to install a wildlife crossing structure.

1. Roadkill data: yellow circles=deer, red stars=mountain lions.

2. UCSC Radio Collar Data: Colored lines show=mountain lions that successfully crossed highway.

3. We identified 2 important locations for implementing wildlife connectivity enhancements.

UCSC Puma Project-Hwy 17 Mountainlion Crossing Data

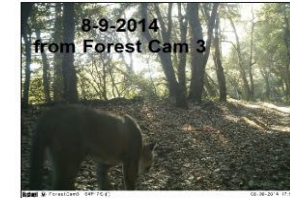
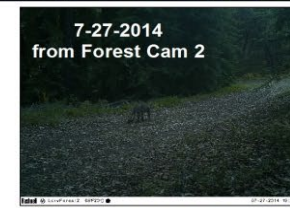


Site of importance: Hwy 17 Laurel Curve.



Camera surveys: camera arrays recorded individual mountain lions traveling to Highway 17.

McDougal Property Camera Locations and Mountain lion Movement from Forest Cam 3 to LTSCC Wildlife Corridor



Map & Data Collection by:
Pathways for Wildlife





Speaker: Ahiga Sandoval, Pathways for Wildlife



Wildlife-Vehicle Collision Data





These data were used to develop a wildlife crossing structure, which has been constructed at Highway 17 at Laurel Curve.









0:00:00 0:00:01

Gray foxes running through Hwy 17 Laurel Curve Wildlife Crossing on 2-17-2023

48 F 02/17/2023 11:24 PM 17LCAPSE

Pathways for Wildlife Caltrans LAND TRUST



**CAUTION
ELECTRIFIED
WILDLIFE
MAT**









Partners = People and Wildlife

Thanks to all the partners on the Highway 17 Wildlife Crossing Project!



*Special thanks to the Residents of Santa Cruz County who supported Tax Measure D and donated funds to the Land Trust.
Also thanks to Aaron Henkel and Cecelia Boudreau at Caltrans, Graniterock Construction, and Crosstek*



THANK YOU TO OUR PARTNERS!

Members of the Land Trust of Santa Cruz
Santa Cruz County Voters
The David and Lucille Packard Foundation
The Gordon and Betty Moore Foundation
The Resources Legacy Fund
Caltrans
Pathways for Wildlife
UCSC Puma Project
Santa Cruz County Regional Transportation Commission
California Wildlife Conservation Board
California Department of Fish and Wildlife
California Department of Conservation
California Transportation Commission
California State Coastal Conservancy
Wildlife Conservation Network
Graniterock

