

Highway 17

Wildlife Habitat Connectivity Project

*Promoting Habitat Connectivity
in Santa Cruz County*



Photo: Paul Zarestsky

Nancy R. Siepel and Morgan A. Robertson
Project Public Information Meeting
May 2, 2018





- Santa Cruz County
- Highway 17
- At Laurel Road Postmile 9.5
a.k.a Laurel Curve

Project Need



- High traffic volumes (61,500 vehicles per day)
- Concrete median barriers
- Inadequate culvert or bridge under crossings that provide safe passage for wildlife

Creating a barrier for mountain lions and other wildlife

Underneath the Highway Laurel Curve



Photo:  Pathways
for Wildlife



A Collaborative Partnership



- Land Trust of Santa Cruz County
- California Department of Transportation (Caltrans)
- Santa Cruz County Regional Transportation Commission
- California Department of Fish and Wildlife (CDFW)
- Pathways for Wildlife
- U.C. Santa Cruz Puma Study



California Department of
Fish and Wildlife



santacruzpumas.org

A UC Santa Cruz mountain lion habitat fragmentation study.



Project Funding



Land Acquisition:

- **Land Trust of Santa Cruz County** purchased 463 acres through fee title or conservation easements--- protecting wildlife habitat on both sides of Highway 17 at Laurel Curve.

Project Development:

- **Caltrans** -- \$3.11 million from the 2016 SHOPP 240 Advanced Mitigation Program to complete the environmental document and design phase of the project.

Construction Cost -- over \$5 million:

- **Santa Cruz County Regional Transportation Commission** -- \$5 million for construction through the 2016 Santa Cruz County Tax Measure D.
- **Land Trust of Santa Cruz County** --- Raising additional funds for construction.



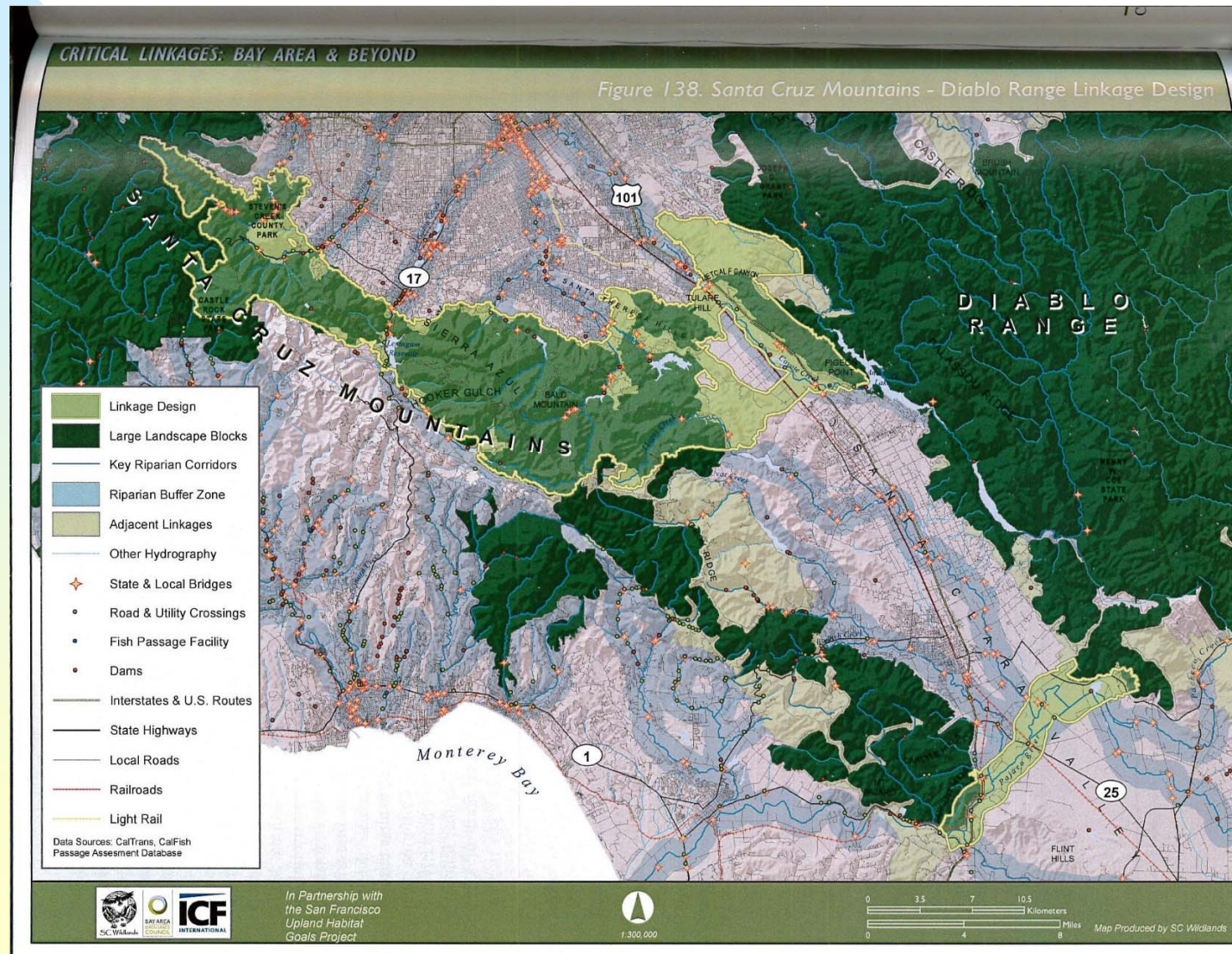
Methods for Identifying the Location to Improve Connectivity

The following data was used to identified a location where a new wildlife crossing would provide the greatest benefit for improving wildlife connectivity between protected open space and core habitat areas:

- Modeling
- Roadkill data: Caltrans and Pathways for Wildlife
- Camera monitoring data: Pathways for Wildlife
- GPS telemetry data: U.C. Santa Cruz Puma Study

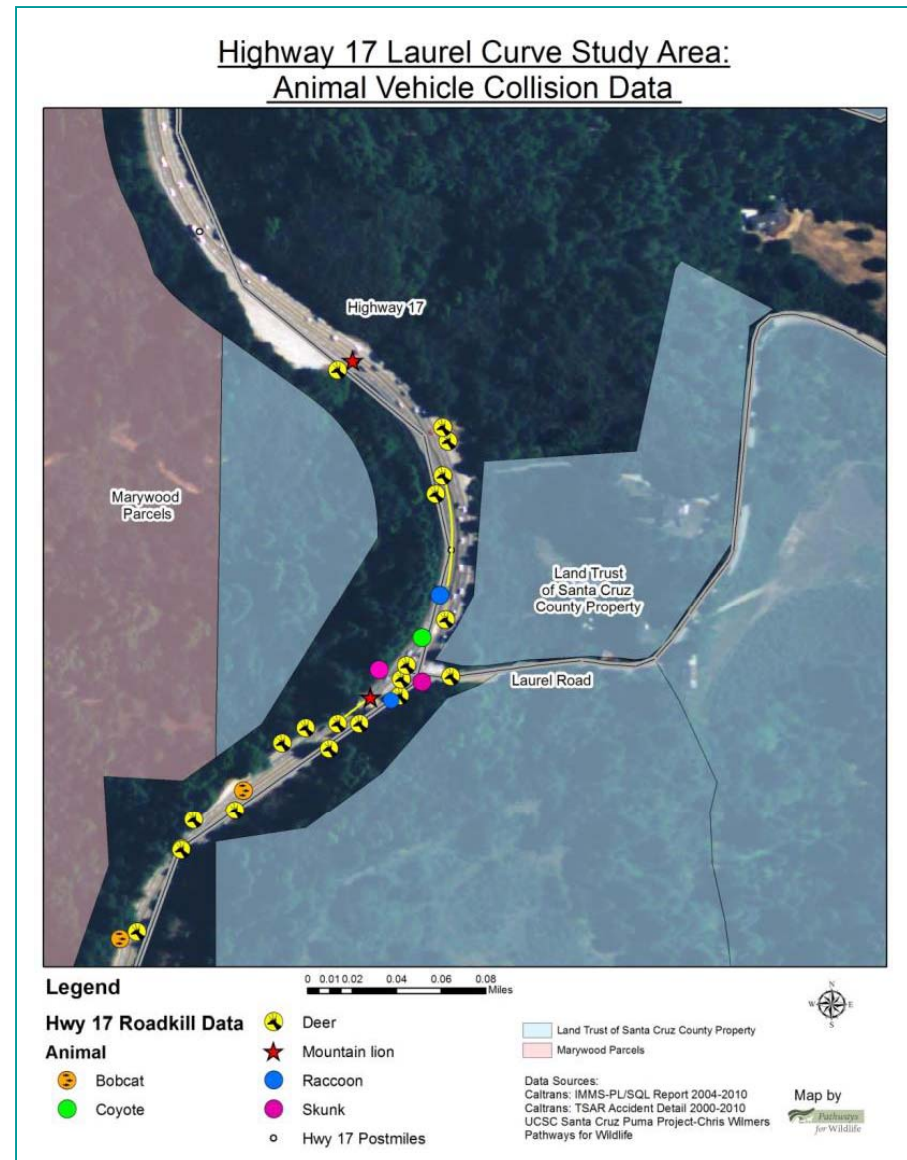
Regional Linkage Map

Critical Linkages: Bay Area and Beyond



Animal-Vehicle Collision Data Laurel Curve

- Colored dots show the different animals that have been hit on the highway.
- Laurel Curve is an AVC hot spot where animals are hit on a consistent basis.

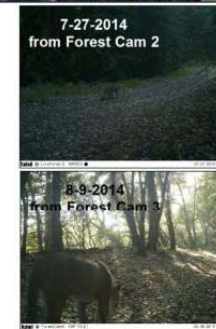


Laurel Curve Camera Data

- Green dots = Camera stations from Soquel Creek to Hwy 17.
- There have been several treks by individual mountain lion (s) towards Hwy 17 at Laurel Rd.



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



Map & Data Collection by:
Pathways for Wildlife



Other Wildlife Species Captured on Camera



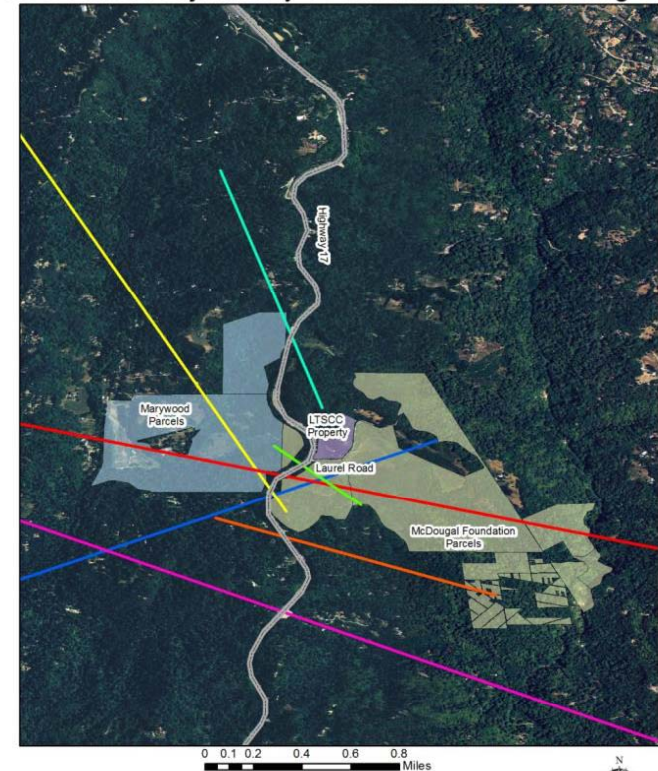
Laurel Curve Study Area

GPS Telemetry Data

- The majority of crossings in Santa Cruz County are at Laurel Curve
- Colored lines show pathways mountain lions used to cross Hwy 17



UCSC Puma Project-Hwy 17 Mountain Lion Crossing Data



Legend

| | | |
|---|---|--|
|  |  | Land Trust of Santa Cruz County Property |
|  |  | McDougal Foundation Parcels |
|  |  | Marywood_Parcels |
|  | | |
|  | | |
|  | | |

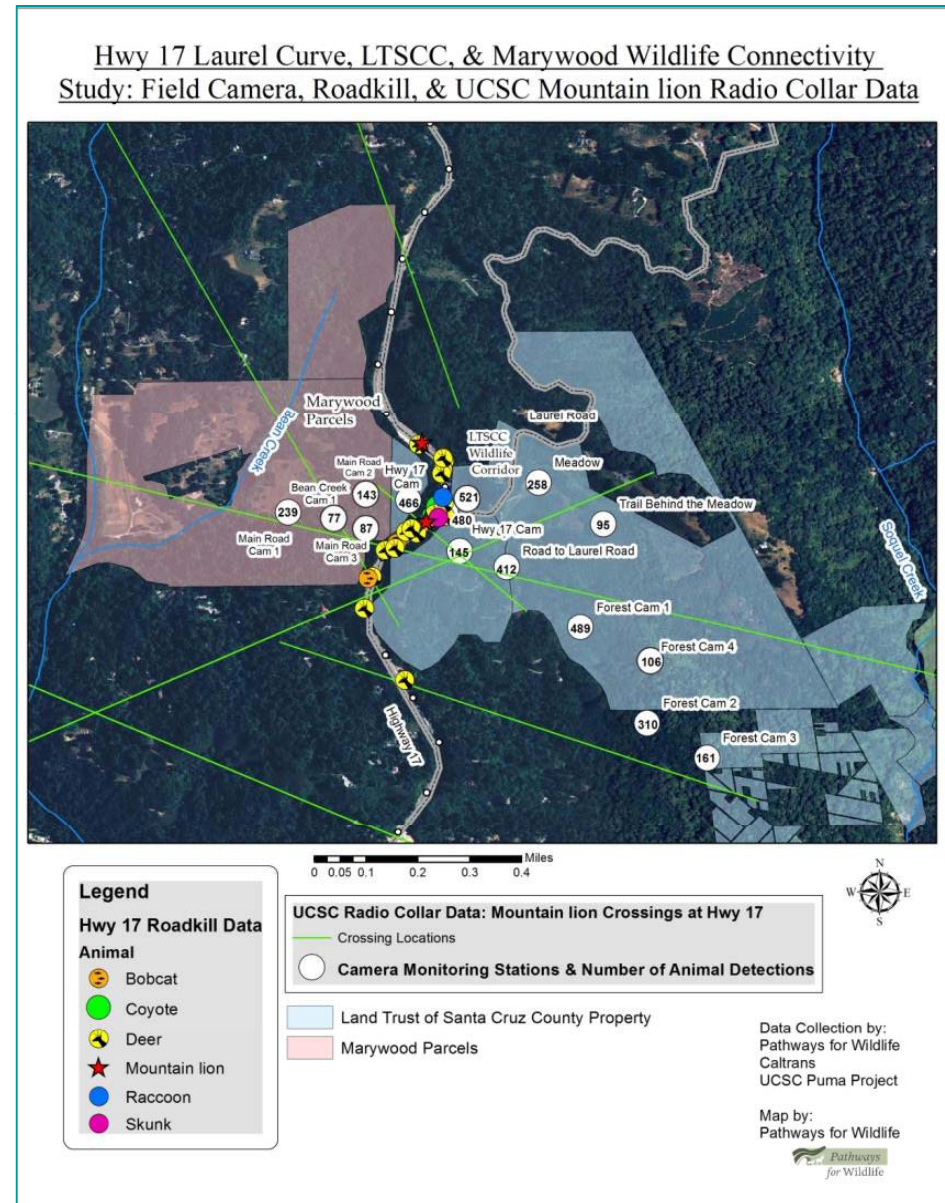
Data Source: UCSC Santa Cruz Puma Project
Chris Wilmer

Map by
Pathways
for Wildlife

Summary: Laurel Curve Data

Data overlays include:

- Roadkill Data
- Camera Data
- UCSC Puma Project Telemetry Data
- Conservation Easements



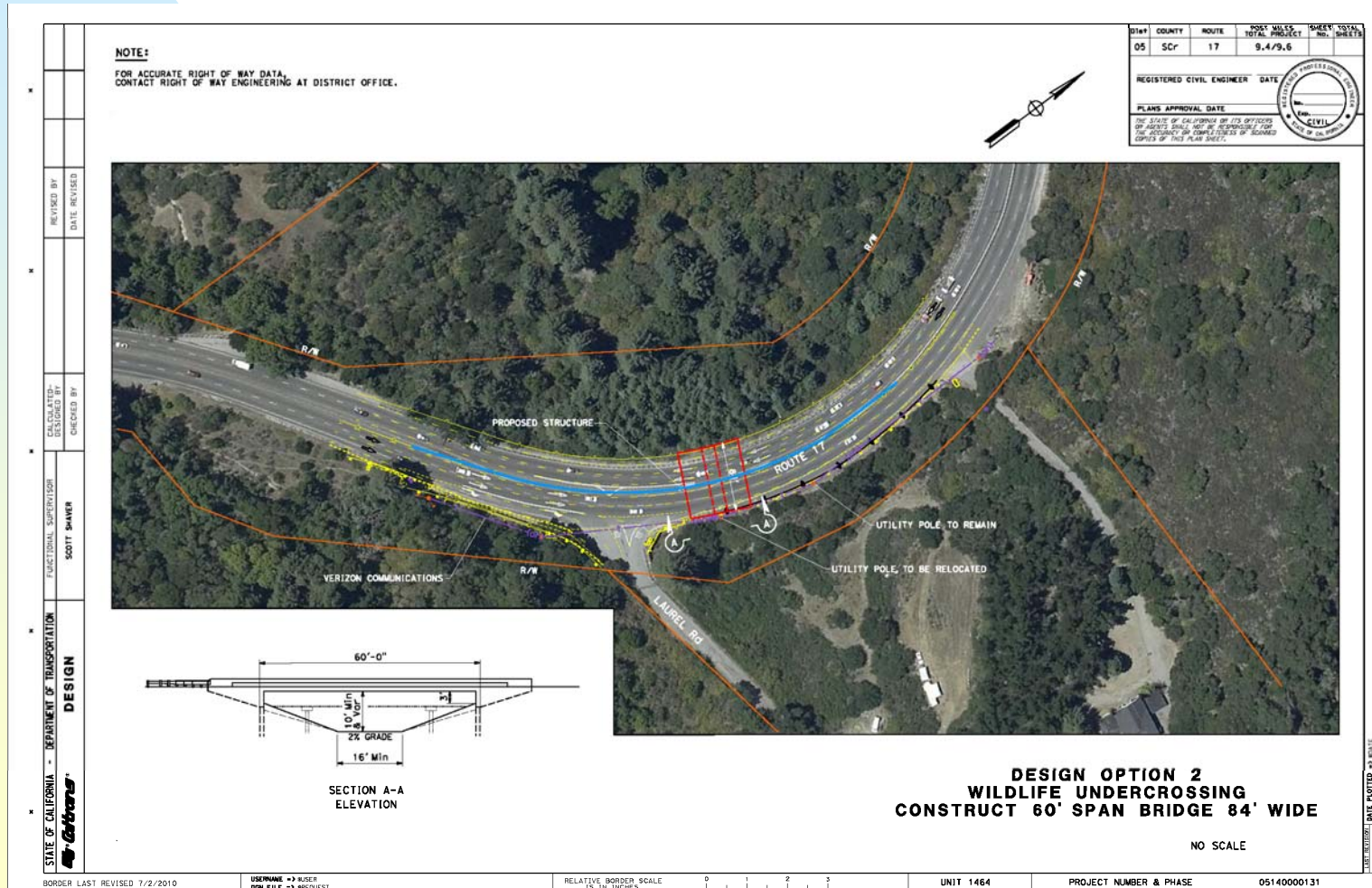


Laurel Curve Wildlife Undercrossing

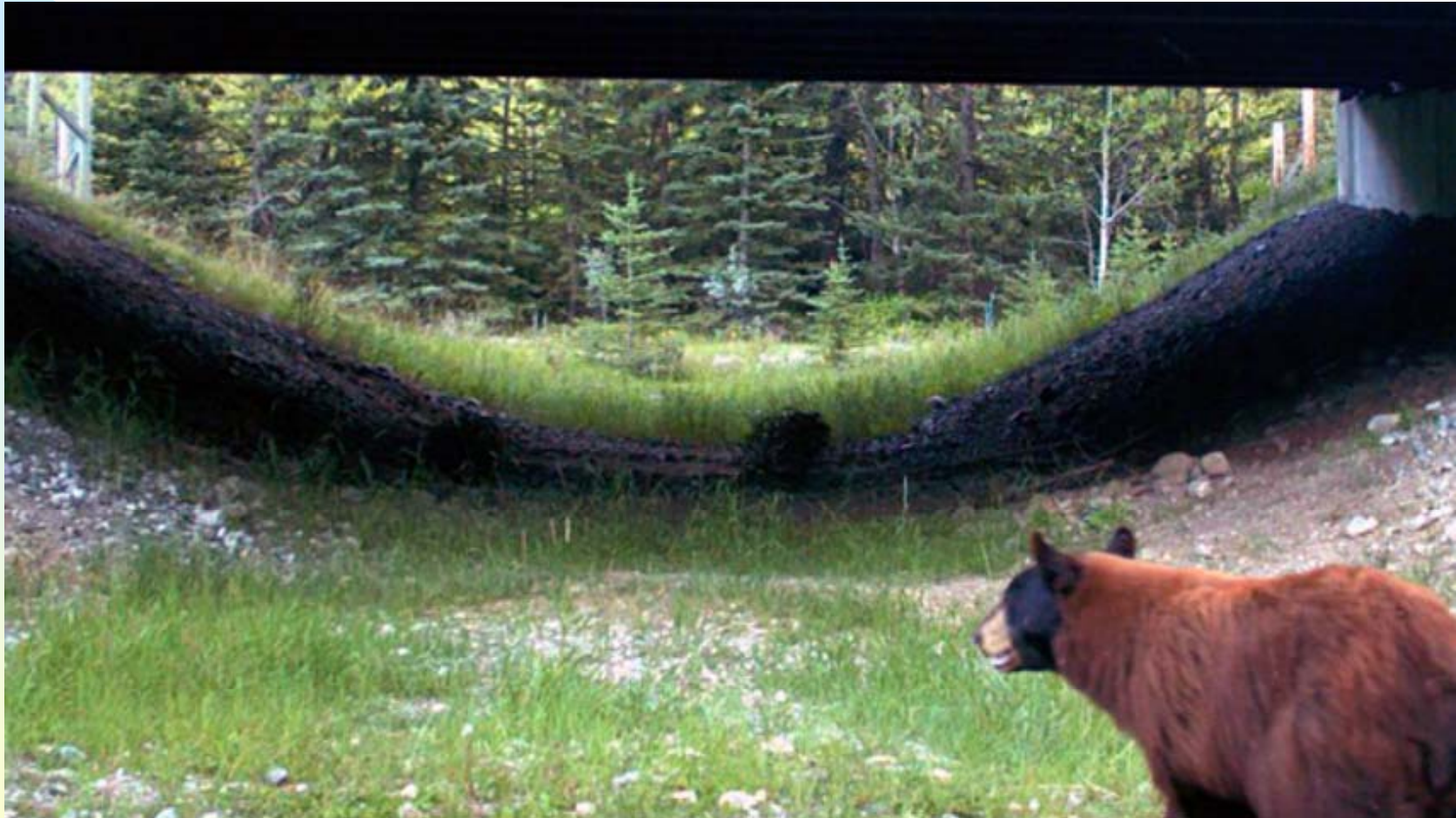


Preliminary Design:

Span Bridge 16' x 12' that is 60 feet in length with natural bottom



Similar Wildlife Undercrossing



Escape Ramps & Wildlife Guards



- Example of an escape ramp



- Example of a wildlife guard design





Thanks to All of the Project Partners!



And a Special thanks to the following partners:

- Residents of Santa Cruz County who supported Tax Measure D and donated funds to the Land Trust for this project.

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