



Truckee River Watershed Council

Collaborative solutions to protect, enhance and restore the Truckee River Watershed

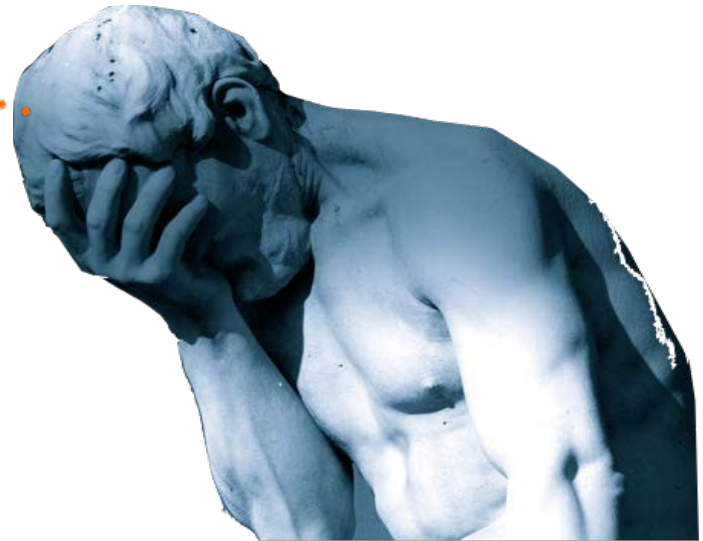


Restoring Resilience in Martis Valley
Annual Project Presentation
January 31, 2017

Thank You



The Truckee River is NOT Pristine.



The Truckee

It may look pretty

but it's not pristine



If you look closer...

Erosion



Down cuts



Dams



That affect our

Birds



Fish



Humans



We need to fix this



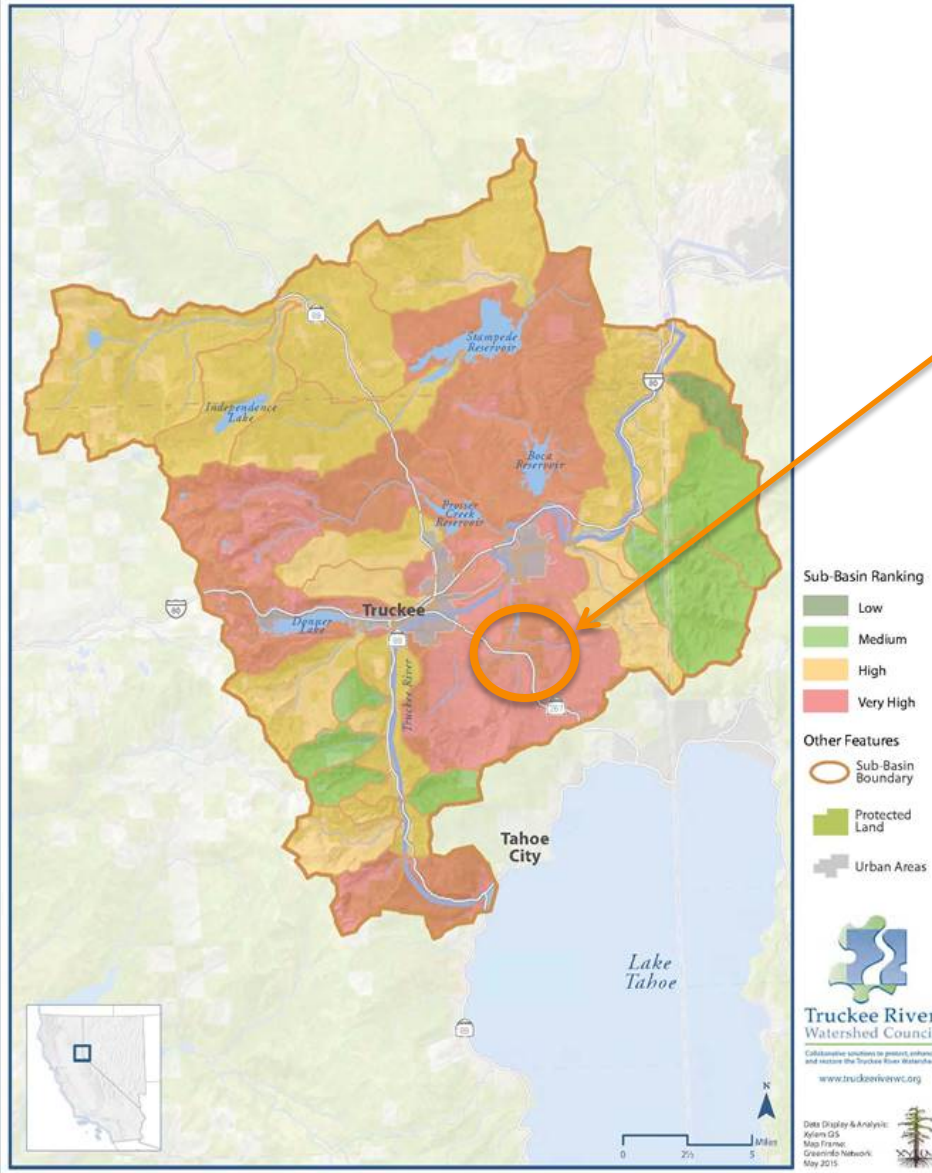
So nature and humanity thrive together



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Priorities

The Middle Truckee River Watershed Priorities



Restoring Resilience
in Martis Valley



Here's what we do



Restore

Prevent

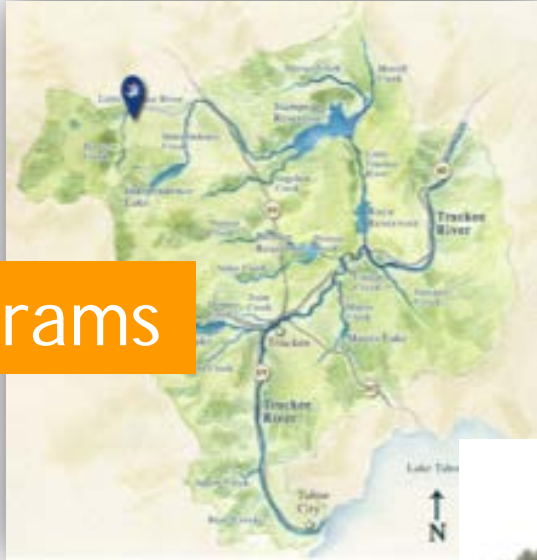


Engage



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Here's how we do it



Programs

Policy



People



To create...



Photo: Matthew Grimm



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Together

Truckee River Day 2016: Middle Martis Creek





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Restoring Resiliency in Martis Valley

Cedar House, January 31, 2017

Beth Christman, Director of Restoration Programs

Middle Martis Restoration

- Background
- Project Goals
- Restoration in Action!
- Next steps



Middle Martis Creek Project Area



Problems addressed

- Channel undersized for moderate flows
- Incision, erosion, and headcutting in Middle Martis Creek
- Meadow impacts
- Highway 267 flooding
- Access road and trail impacts

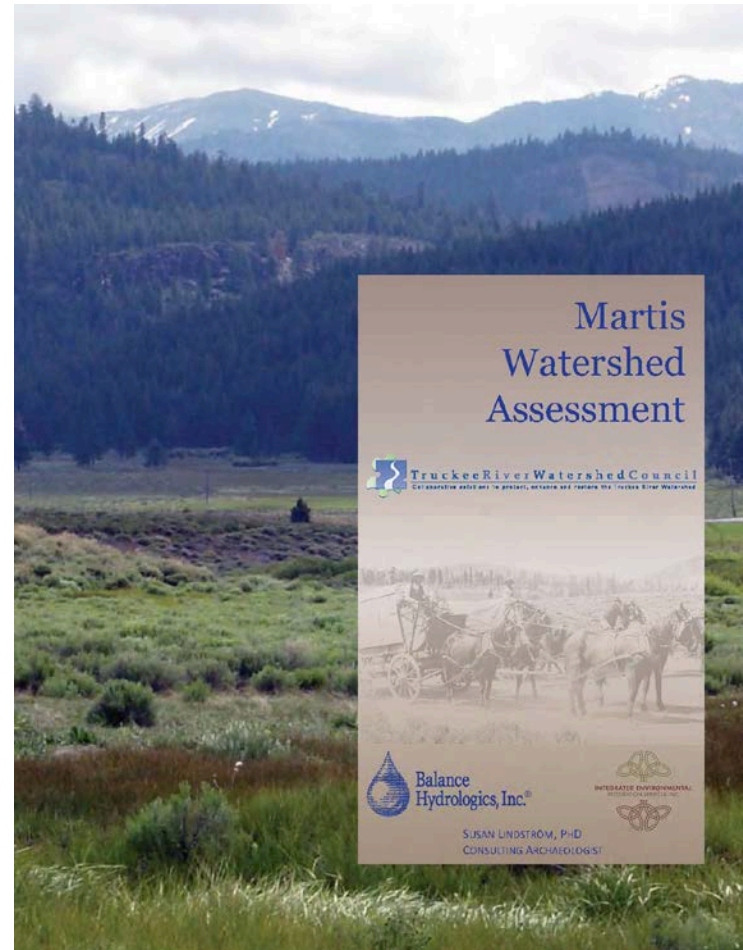


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Project History

- Identified through Martis Watershed Assessment - 1 of 20 projects
- Top priority for stakeholders



TRWC's role

- Each landowner addressing separately
- Problem too large for single entity
- TRWC identified root cause
- Brought landowners together



Project Partners

- Caltrans
- Northstar California/Vail Resorts
- Northstar Community Services District
- Truckee Donner Land Trust
- Truckee Tahoe Airport District
- Truckee River Watershed Council
- U.S. Army Corps of Engineers



Solution

- Restore peak flows to north side of highway
- Split flows at existing culvert
- Maintain base flow on south side of Highway



Project Benefits

- Restore 40 acres wetland
- Improve 1 mile stream habitat & 2 acres riparian habitat
- Improve water quality
- Enhance fish and wildlife habitat
- Reduce infrastructure impacts



Restored alluvial fan channel



Project Timeline

Phase	Completion
Watershed Assessment	April, 2012
Concept Design	December, 2012
Final Design	December, 2014
Permitting/Environmental Compliance	July, 2016
Pre-project Monitoring	August, 2016
Post-project Monitoring	July, 2019



Project Elements

- Split flow at existing culvert
- High flows to north
- Base flows stay in existing channel

- How? Let's take a tour of the project!



Middle Martis Creek Project Area



Channel
Excavation







Middle Martis Creek Project Area

















CA

A15278
214

Hard hat

High-visibility vest

Water hose

White tanker truck





Middle Martis Creek Project Area



Drainage Problems

K. Drake



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Middle Martis Creek Project Area



Beaver
Dams



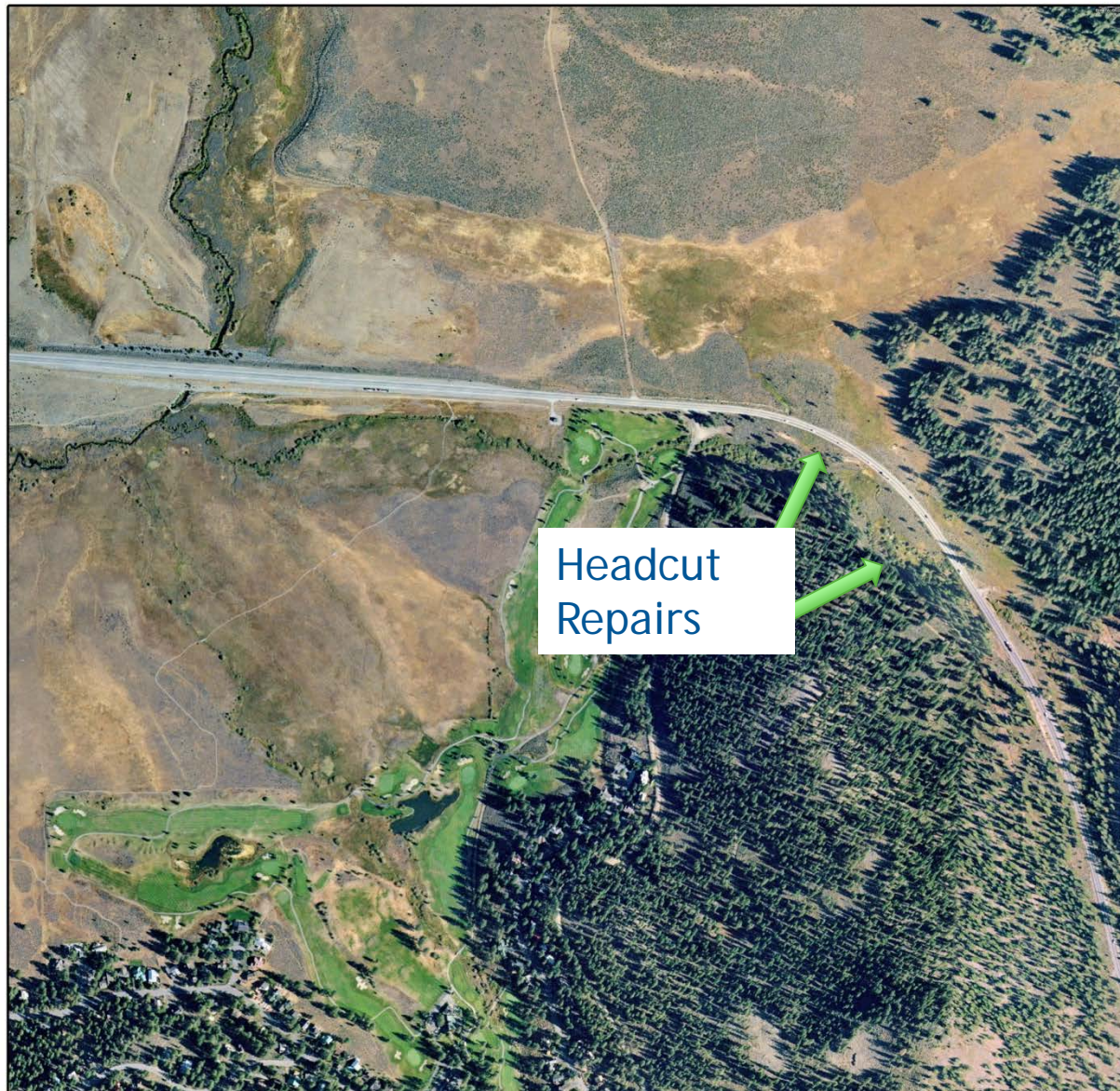








Middle Martis Creek Project Area











Results to date....

Series of rainstorms - starting Oct. 16th

"Real time" adaptive management



Minor erosion - corrected



December 16, 2016



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December 16, 2016



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~25-year flood on January 9th

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What partners have to say

“Wow! This project is a work horse. A big thanks for completing and monitoring this project.... So many community benefits, well done.”

-Jerusha Hall, Northstar California

“We've already gotten our return on investment on this project.”

-Mike Staudenmayer, Northstar Community Services District



Thank you Project Team!

● Partners

- Caltrans
- Northstar California
- Northstar Community Services District
- Truckee Donner Land Trust
- Truckee Tahoe Airport District
- U.S. Army Corps of Engineers

● Implementation Team

- Habitat Restoration Sciences
- Dyer Excavation
- Balance Hydrologics
- Dudek
- Auerbach Engineering
- Holdrege and Kull
- Susan Lindstrom, Consulting Archaeologist



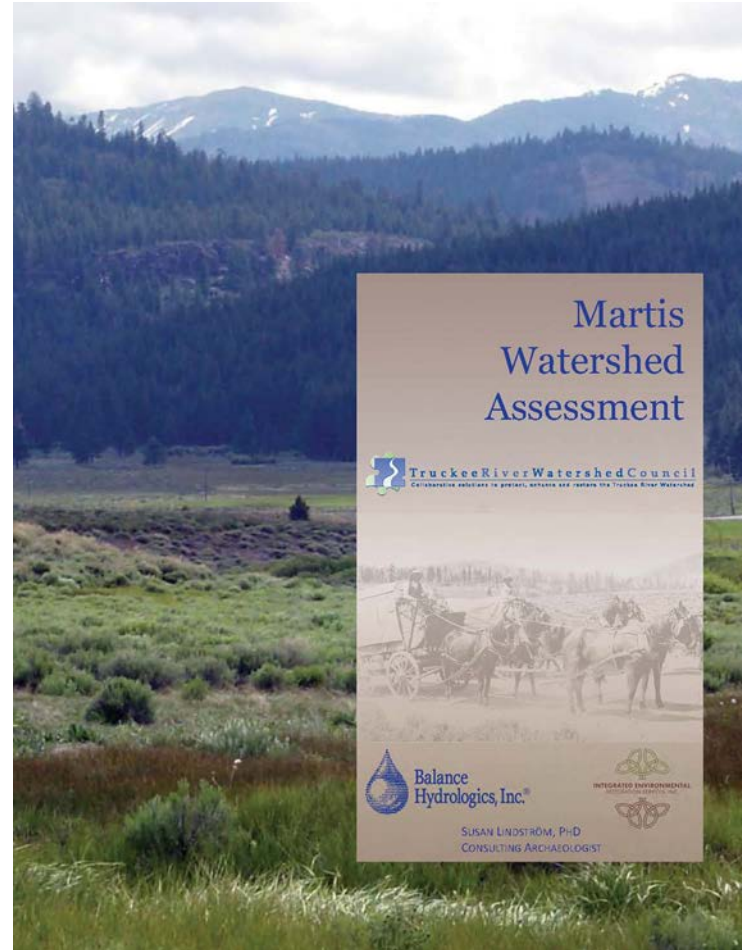
Thank you Funders!

- Donors to the Truckee River Watershed Council
- Project Partners
- California Department of Fish and Wildlife
- Lahontan Regional Water Quality Control Board
- The Martis Fund
- National Fish and Wildlife Foundation
- Tahoe Truckee Community Foundation



What's next?

- Commitment to Martis Valley
- 20 projects identified
- 3 projects moving forward 2017



Questions?

