

A Historic Meadow Reappears: Truckee Meadows

Matt Freitas (TRWC)

Brenda Gilbert (TRWC)

January 30, 2018





foriver

TRUCKEE RIVER WATERSHED COUNCIL

Welcome



You're
invited
to...

Presentation:

*The Invisible becomes Visible:
A Meadow Comes Back to Life
in the Heart of Truckee*

...a special
event to
thank our
donors

The event is free and open to donors
and their guests by reservation.

- Tuesday, January 30, 2018
- The Cedar House Sport Hotel
10918 Brockway Road, Truckee
- 5:00 – 6:00 p.m. Reception with
light appetizers and wine
- 6:00 – 7:30 p.m. Presentation

Space is limited. RSVP to
Brenda Gilbert by Jan. 25:
bgilbert@truckeeriverwc.org
or 530.550.8760, 5#



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TRUCKEE RIVER WATERSHED COUNCIL

PO BOX 8568, TRUCKEE, CA 96162
TRUCKEERIVERWC.ORG



Thank You



thank
you

Together for the Truckee Society

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TRUCKEE RIVER WATERSHED COUNCIL

Your multi-year support restores the watershed and everything it sustains. For today. For future generations.



PRESERVE the watershed | \$10,000 a year for 5 years

The Martis Fund
Northstar California/Vail Epic Promise

Squaw Valley Alpine Meadows
Gail and Rick Stephens

Tahoe Mountain Resorts Foundation
Cathy and Tom Van Berkem

PROTECT the river | \$5,000 a year for 5 years

Anonymous
FiftyFifty Brewing Company
Dave Giacomini
Habitat Restoration Sciences,
a Dudek Company

Mountain Hardware and Sports
Chris Ryman
San Francisco Fly Casting Club
Teichert/Stonebridge Properties

Truckee River Winery &
Jones Corda Construction
Diane and Bill Zuendt

RESTORE a stream | \$1,000 a year for 5 years

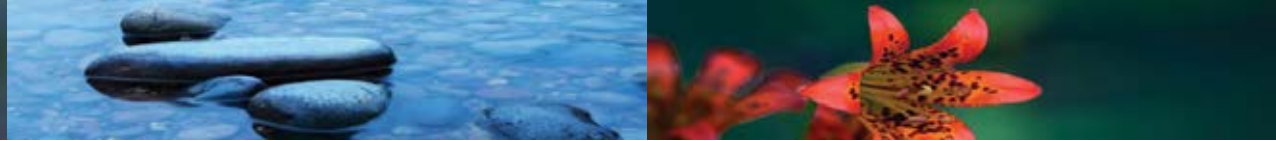
Anonymous
Patty Lomanto and Bob Bell
Alton Barmant, Attorney at Law
Anne Bidsong
Mary and Chip Brown
Georgine Casella
Coachland RV and MH Park
Betsy Cole
Sue and Steve Cooper
Theresa and Richard Crocker
Nancy Cushing
Ellen and Joffa Dale
Dickson Realty
Amanda and Rick Dill
Marilyn and Steve Disbrow
Kathleen Eagan and Jim Duffy
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Elizabeth and John Easton
Vivian and Bruce Ezzert
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Greg Hovorka
Lauren Schaake and Jake Hudson
Hydro Restoration
Interior Design by Julie Johnson-Holland
I.R.I.E. Rafting Co. Inc.
Jax at the Tracks
Jane and Ron Jenny
Glenn and John Jones
Melissa Kaime
Susan and Steve Kison
Mary and James Koons
Mary E. Reilly and James Krieg
Cheryl and Grady Kromer
Lahontan Golf Club
Barb and Ed Larson
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Janet and David Lowell
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Christrey and Bill McGlashan
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Sue Sage (in memory of Larry Sage)
Serendipity
Sue and John Sorensen
Jody and Bill Sterling
Tahoe Oral Surgery and Implant Center
Tahoe Mountain Lodging
Tahoe Truckee Flyfishers
The Integrity Coach Inc.
Trailrunner International
Truckee-Tahoe Lumber Co.
Rosanne DuField and Hans Wain
Lisa Wallace and Family
Ward-Young Architecture & Planning
Trinkie Watson
Lynnie and Ken Weakley
Kathy and David Welch
Ron Zech
Janet and Chuck Zipkin



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Middle Truckee River Watershed

- 285,000 acres or 435 square miles
- 26 tributaries
- 7 major water bodies
- Water supply
- Many managing agencies







Help us save
tomorrow –

stream by stream
meadow by meadow
project by project

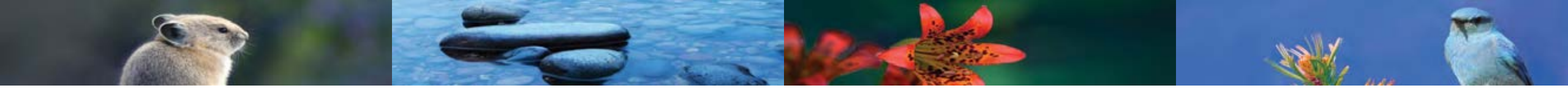




We need to fix this

so nature and humanity thrive together





Projects Policies People



We influence water policy.



We engage people - Truckee River Day volunteers.



We restore: Perazzo Meadows.

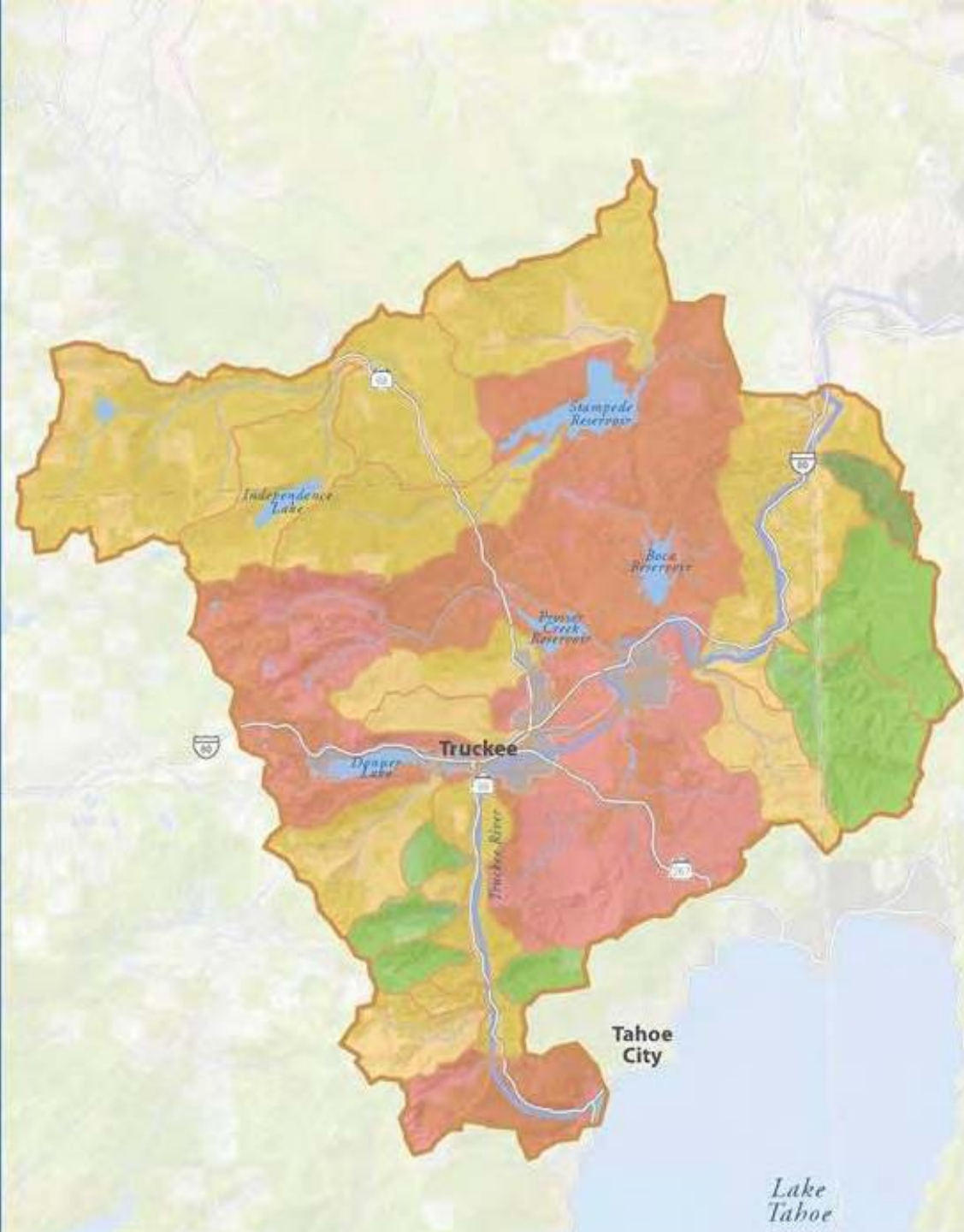
Merrill Davies

2006 During



2017 After





2018 – 2019 Work

Assess

1. River Revitalization – Town Corridor
2. Boca Complex

Design

1. Bear Creek
2. Coldstream, Phase 2
3. McIver Dairy Meadow
4. Sagehen Fen

Construct

1. Johnson Canyon
2. Martis Creek Wildlife Area
3. Perazzo Meadows, Phase 3



thank
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The Overlooked Watershed

A meadow comes back to life in the
heart of Truckee





How do you experience the Truckee River watershed?

What have you missed?

The Overlooked Watershed



Google Earth

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The Overlooked Watershed



The Overlooked Watershed

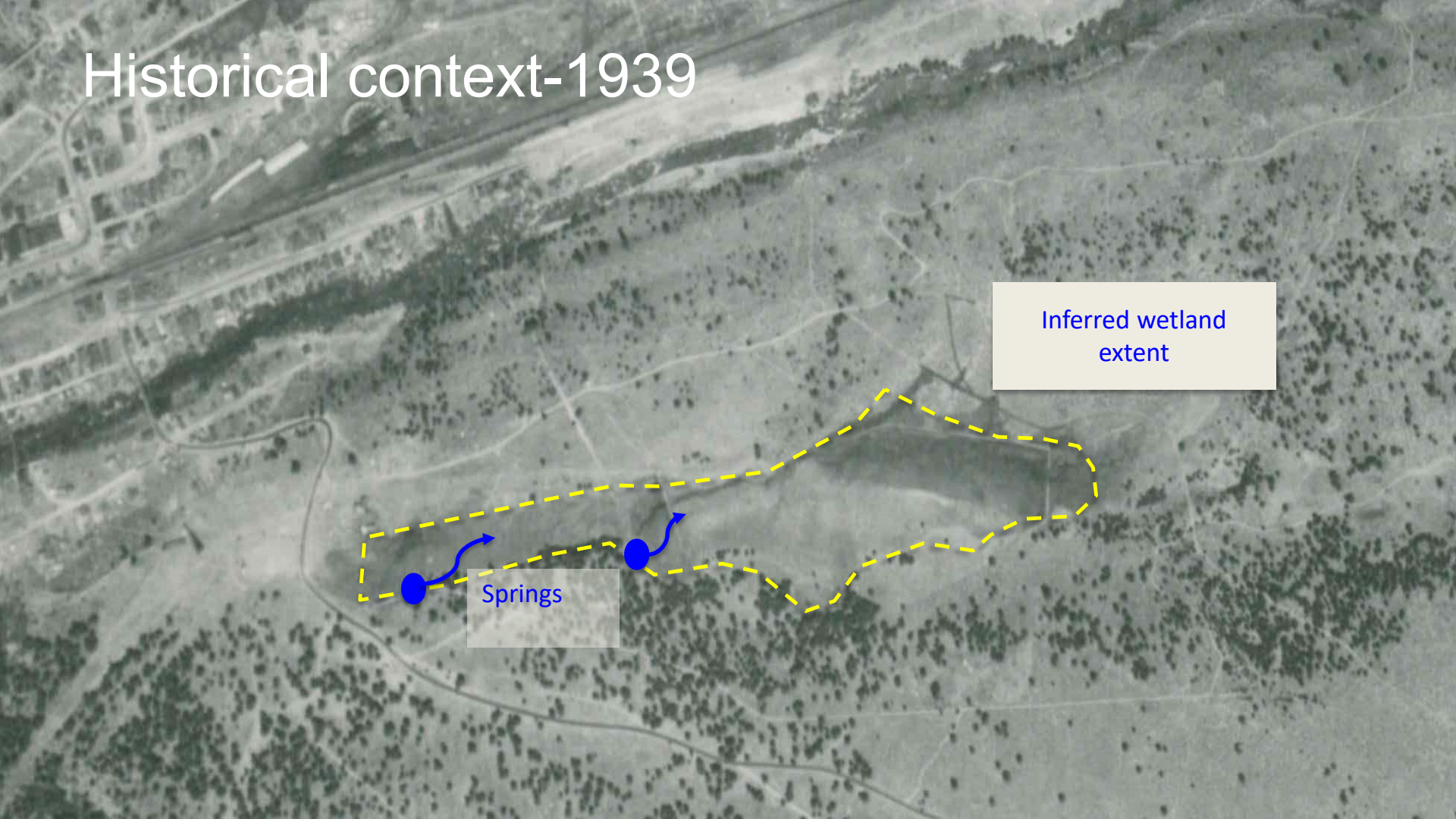


The Overlooked Watershed

Old Brockway Rd
Truckee, California
Google, Inc.
Street View - Oct 2018



Historical context-1939



Inferred wetland
extent

Springs

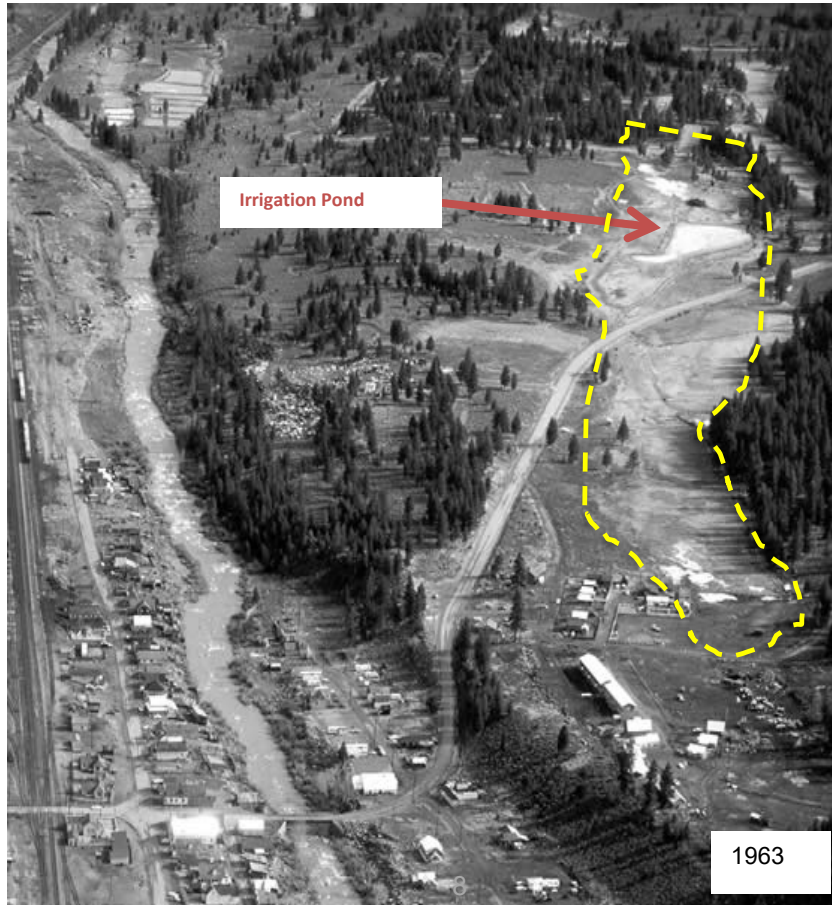
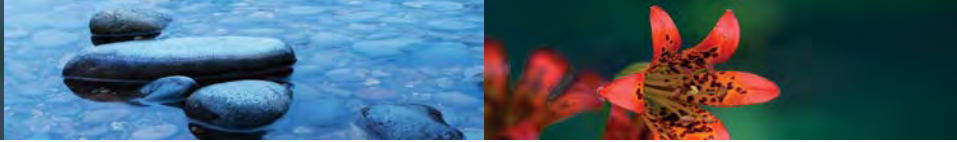
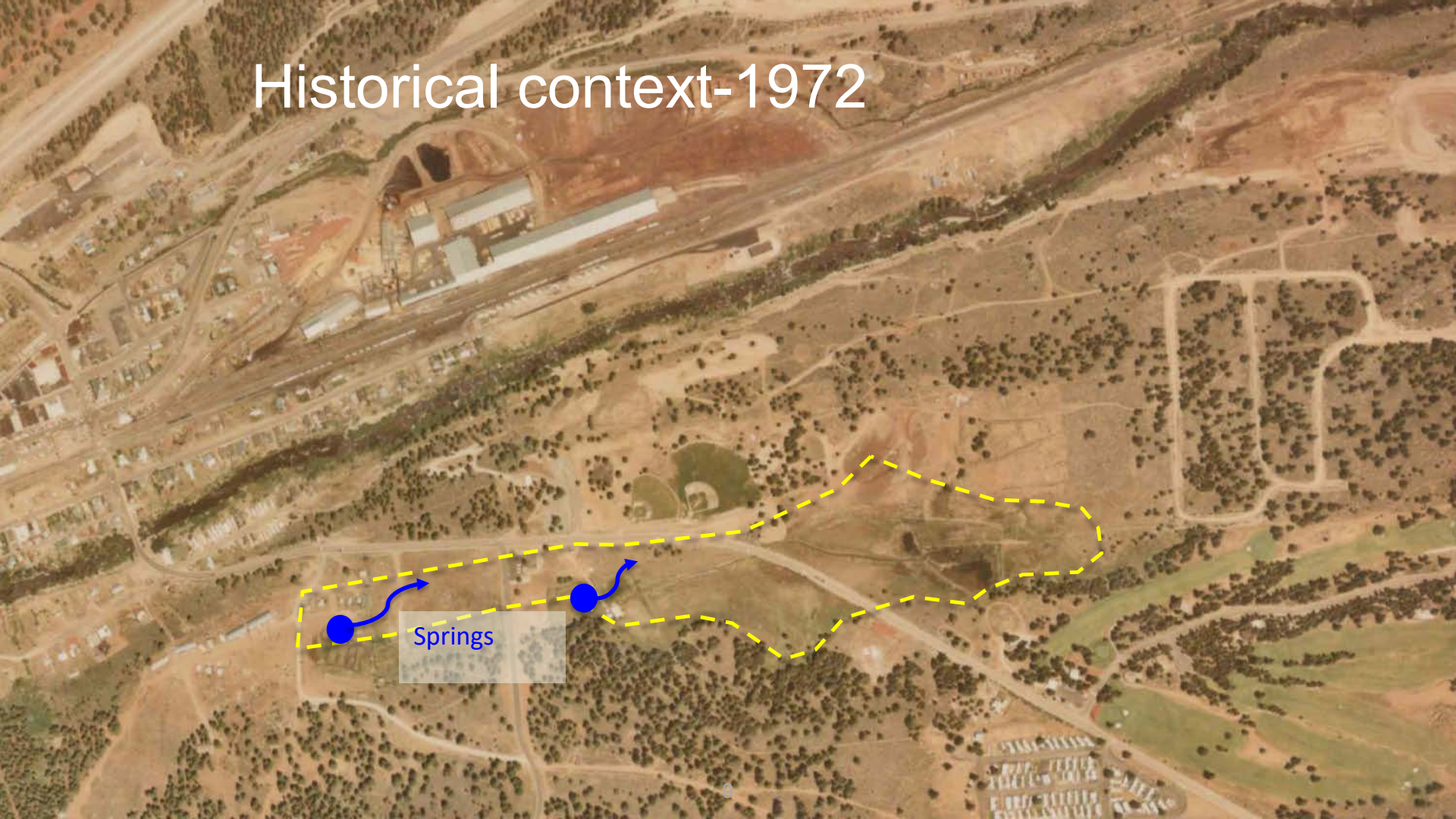


Photo: California Department of Transportation

1963

Historical context-1972



Springs

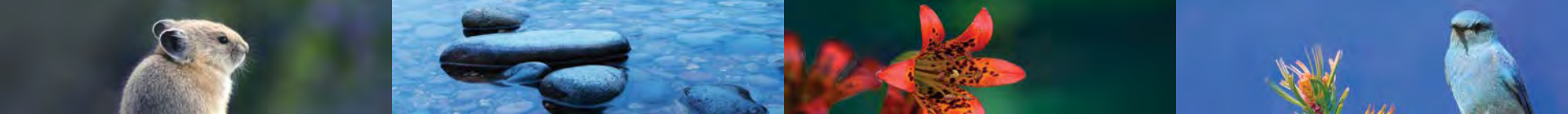
Historical context-2010





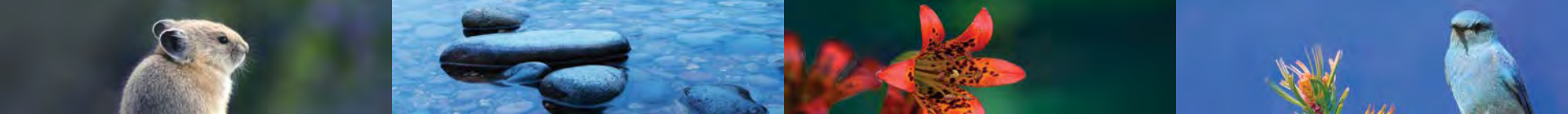
The partnership

A project takes shape



Truckee Meadows Restoration Partnership





Thank you to our funders



Department of Conservation

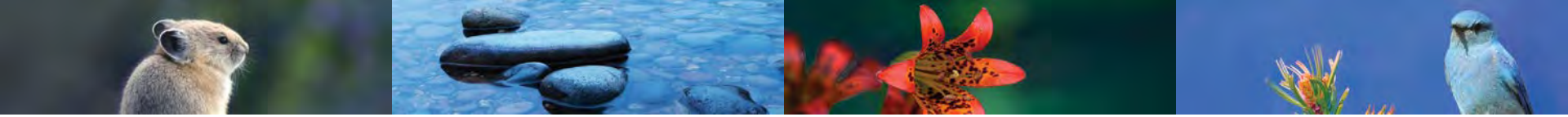


TRUCKEE RIVER FUND
Enhancing and protecting our water resources

Donors of:

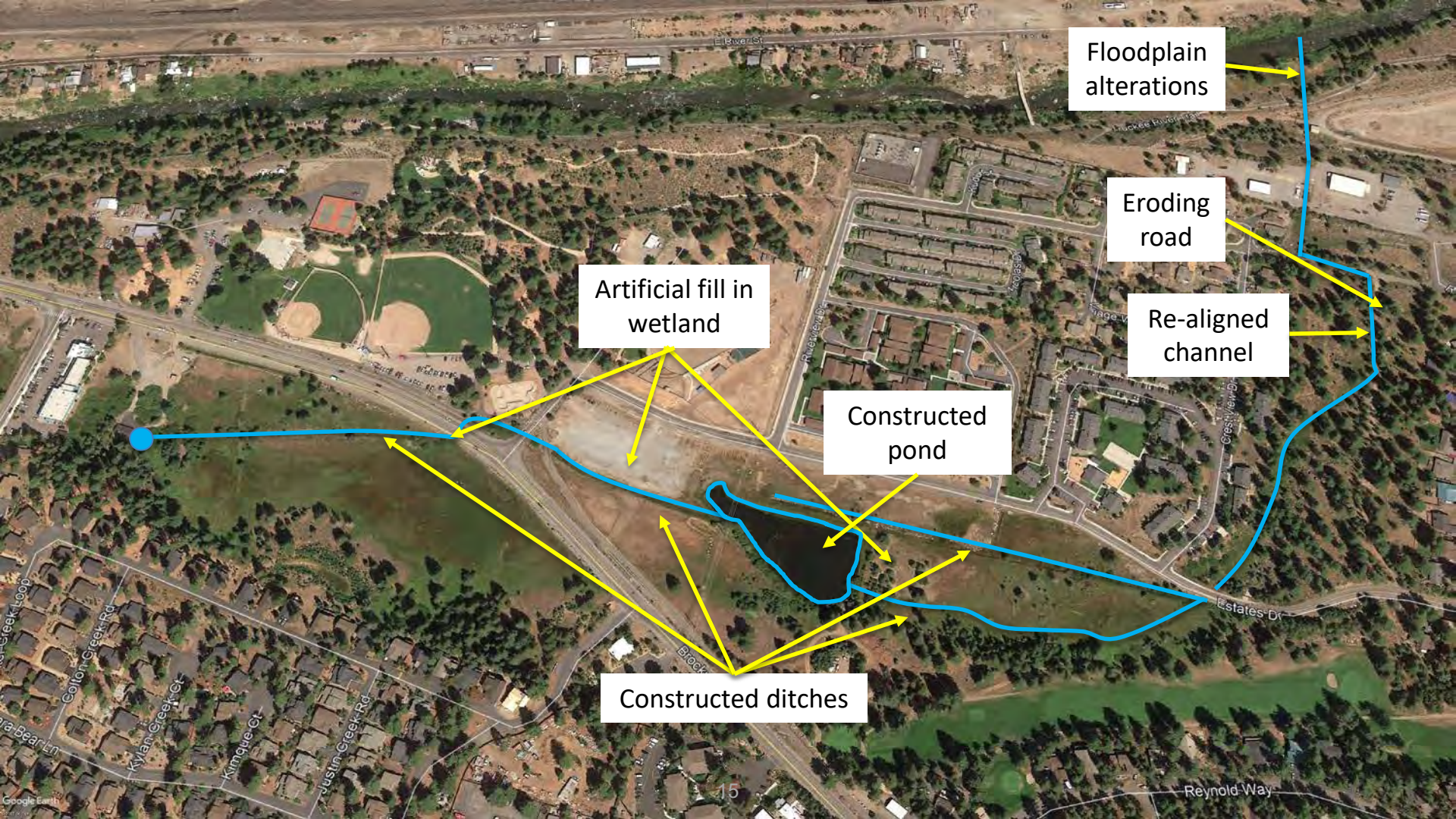
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What was the problem?

- Fragmented wetland complex
- None of the wetlands are fully functioning
 - Disconnected hydrology
 - Significant storm runoff
 - Significant erosion
 - Inappropriate land use



Floodplain alterations

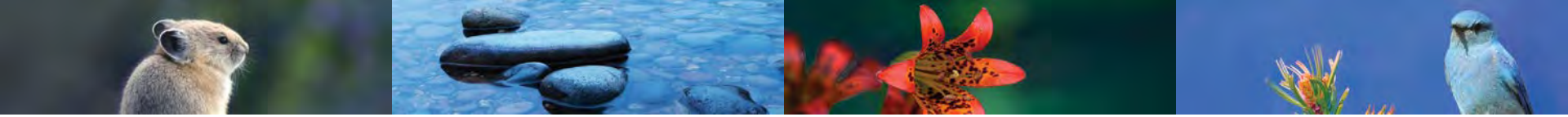
Eroding road

Re-aligned channel

Artificial fill in wetland

Constructed pond

Constructed ditches



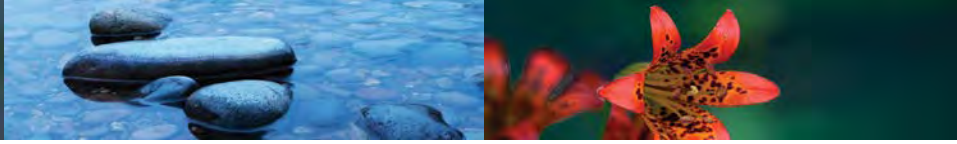
Hydrologic Alterations





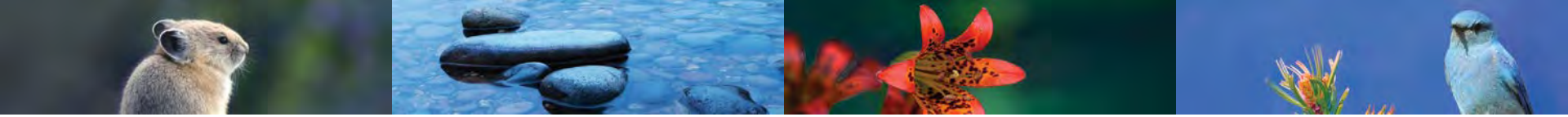
Erosion and sedimentation





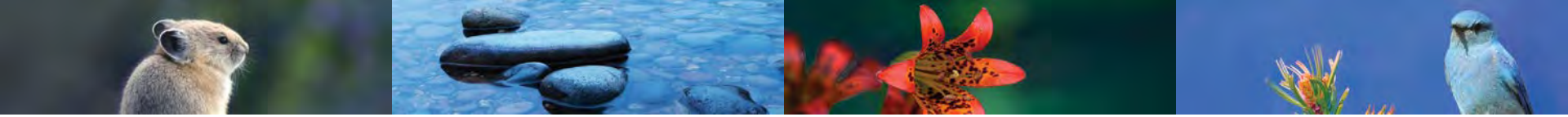
Floodplain alterations





Feasibility Study

- Surface flows should be used to restore hydrology
- **Recommendation: restoration was possible**



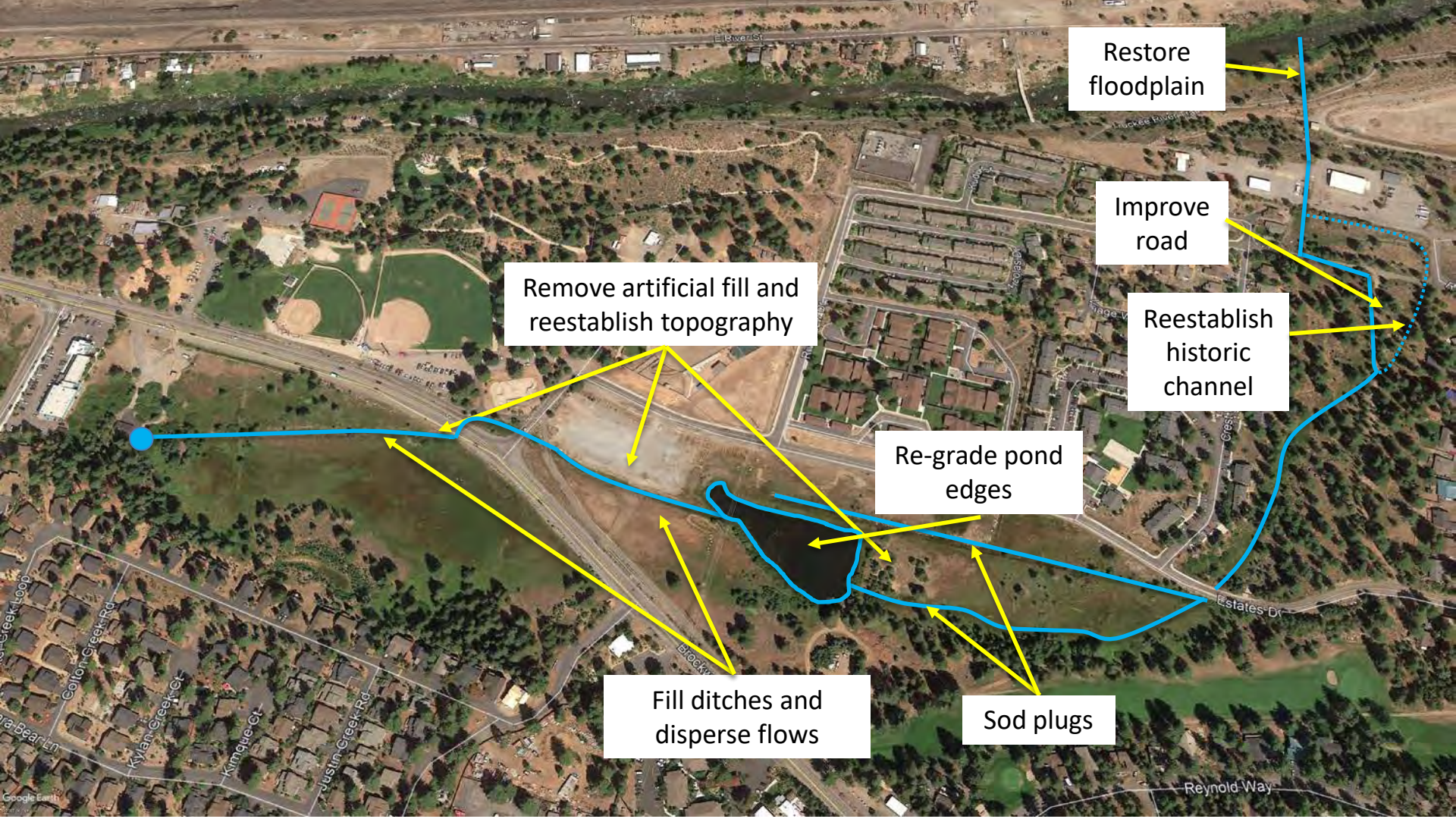
Restoration within constraints

- Altered hydrology
 - Focus on only impaired areas- avoid functional habitat
- Infrastructure to remain
- Land use to continue
- Focus on restoring function not acres.



So what's the plan?

Spring to river



Restore floodplain

Improve road

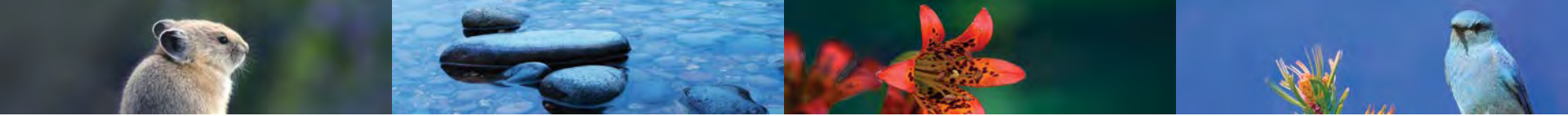
Reestablish historic channel

Remove artificial fill and reestablish topography

Re-grade pond edges

Fill ditches and disperse flows

Sod plugs



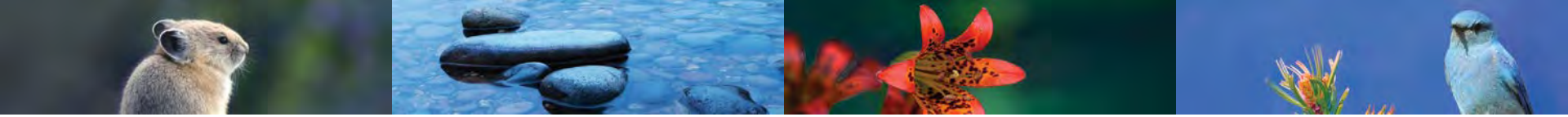
Expected outcomes

- 9 acres of wetland enhanced
- 1.4 acres of historic wetlands re-established
- Improved hydrologic connectivity and function
- Improved pond management for irrigation & wetlands
- Reduced erosion & sedimentation

- Total Cost: \$2.1 million

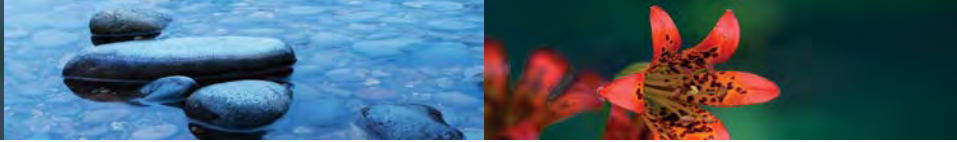


Construction



Truckee Meadows construction

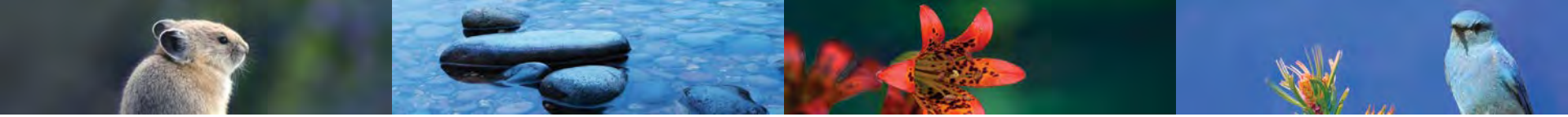
- Phased construction
- Stakeholder and public outreach
- Upstream to downstream
- Challenges—*all that water!*



Meadow area

- Upstream of Brockway Road
- *2018 construction*

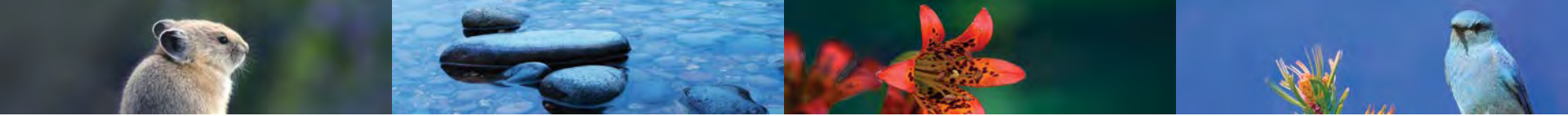




Meadow Area

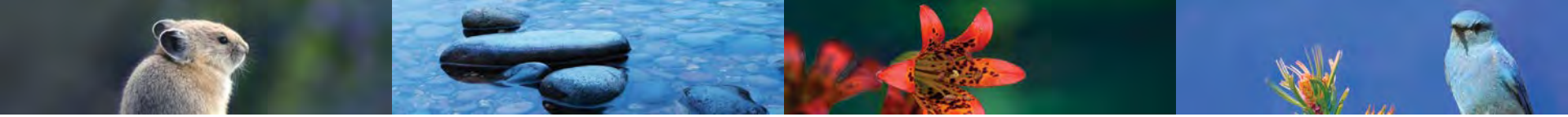


Photo: Joe Bryan



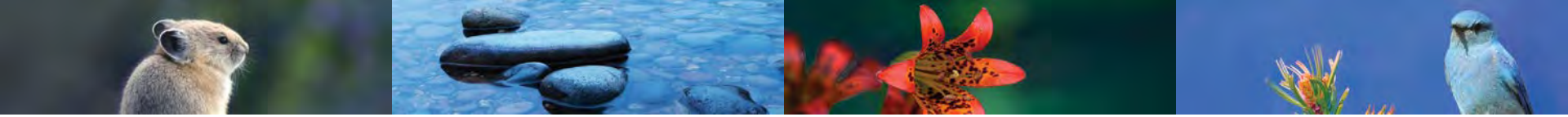
Meadow Area





Meadow Area

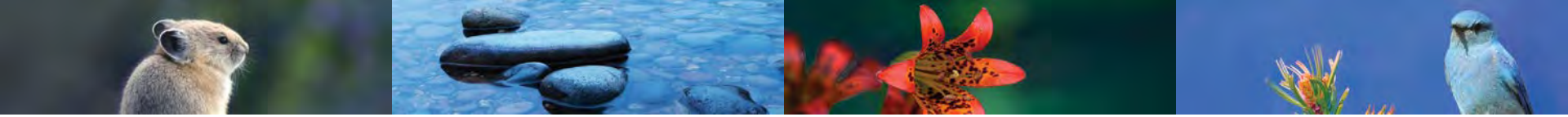




Meadow Area





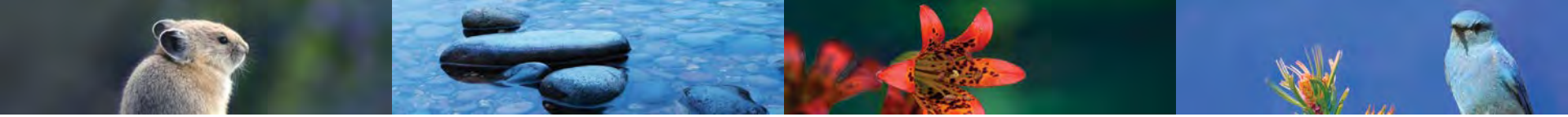


Pond Area



Photo: Joe Bryan



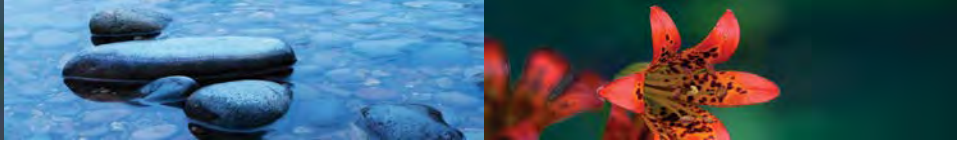


Pond Area



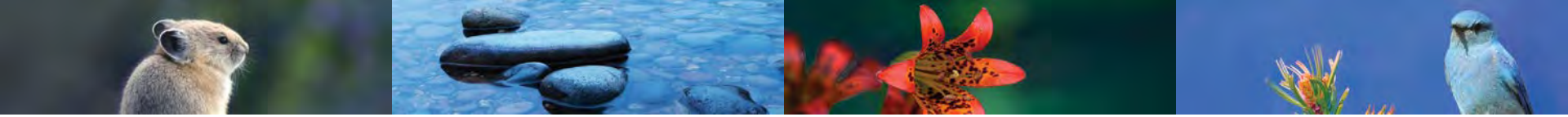
Pond Area





Road and drainage work





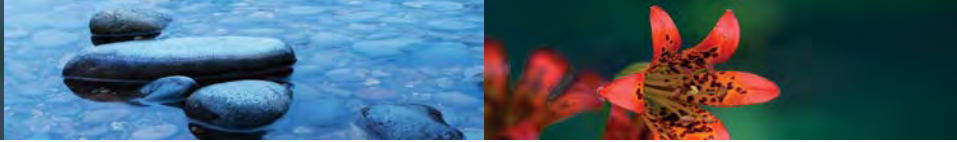
Road and drainage work





Floodplain restoration

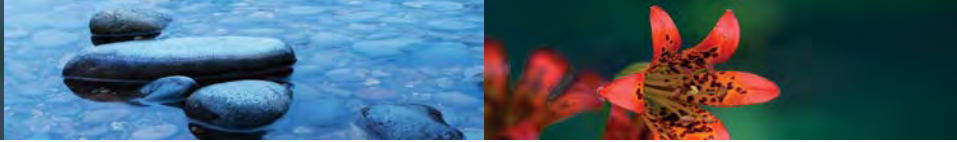




Floodplain restoration



Photo: Joe Bryan



Revegetation

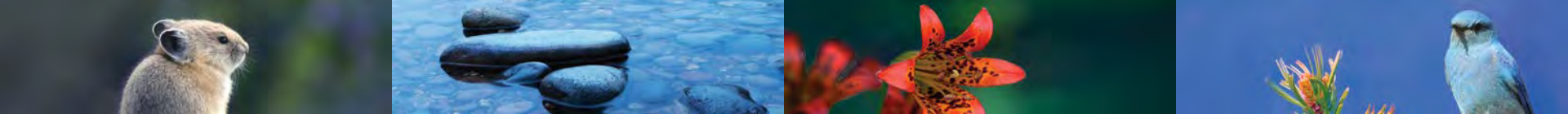








Our partners



Contributions



- CEQA, permit support, staging, access
- Cost sharing contributions, logs, construction water



TAHOE DONNERSM

- Logs and fill material



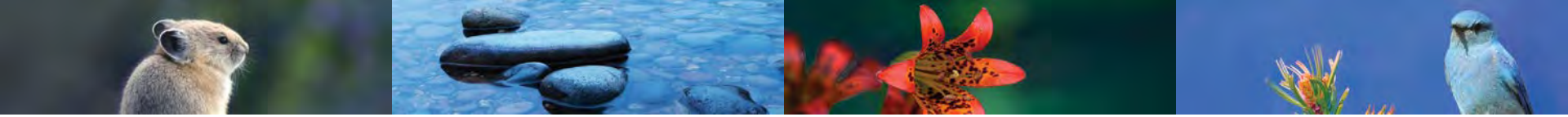


Next steps

Next steps

Coming in 2018





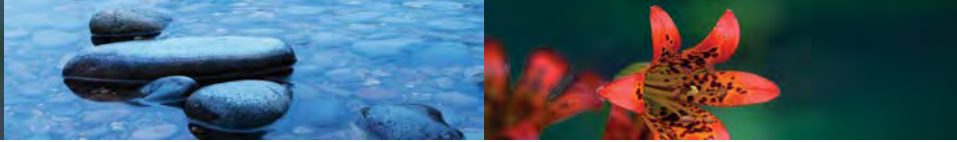
Monitoring

- Pre- and post-construction
 - Vegetation
 - Groundwater
 - Soil carbon stock & greenhouse gas flux



No Longer Overlooked





No Longer Overlooked





Thank you!
Questions or comments?

Matt Freitas

mfreitas@truckeeriverwc.org