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TRUCKEE RIVER WATERSHED COUNCIL

Restoring What We Love – Restoration Projects That Restore Our Relationship With Nature

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thank you

Together for the Truckee Society 2021

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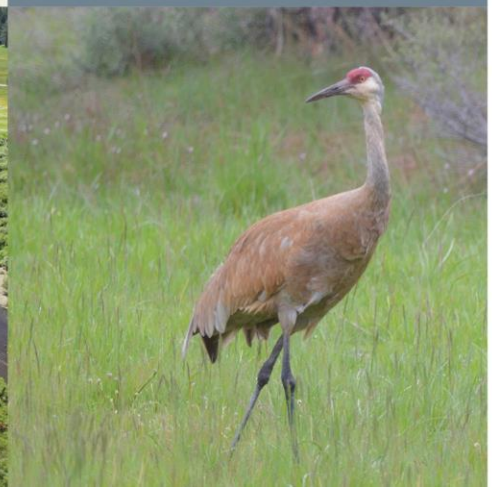
truckeeriverwc.org

Your multi-year support helps us develop restoration projects and manage our programs.



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

Laird Norton Family Foundation

Northstar California /
Vail Resorts EpicPromise

Gail and Rick Stephens

Tahoe Mountain Resorts Foundation

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

Anonymous

Dagny and John Borcich
in memory of Stephen F Martin

FiftyFifty Brewing Company

Granite Peak Management

Habitat Restoration Sciences,
a Dudek Company

Joan and Russ Jones /
Jones Corda Construction /
Truckee River Winery

Cheryl and Grady Kromer

Mountain Hardware and Sports

Raley's

Chris Ryman

Sierra Mountain Mortgage, Inc.

Squaw Valley Alpine Meadows

Teichert/Stonebridge Properties

Truckee River Rafting /
Bell & Courcier Families

Diane and Bill Zuendt

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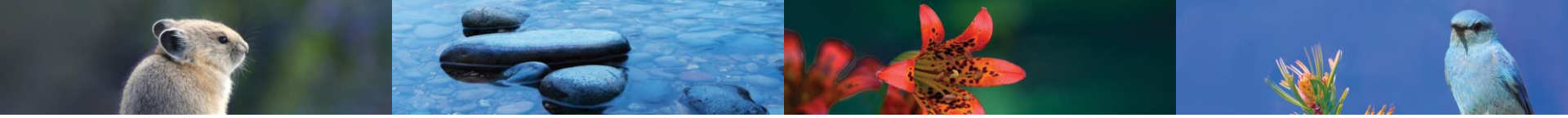
RESTORE a stream | $1,000 a year for 5 years

Anonymous (4)
Alicia and Andy Barr
Patty Lomanto and Bob Bell
Carmen Carr
Betsy Cole
Theresa and Richard Crocker
Ellen and Joffa Dale
Nancy D'Amico
Dickson Realty / Lil Schaller / Aimee and Kane Schaller
Amanda and Rick Dill
Sue and Kevin Drake
Kathleen Eagan and Jim Duffy
Elizabeth and John Eaton
Vivian and Bruce Euzent
Karolyn and Dick Gander
Mark Girard in memory of Mark Girard Jr.
Nancy and Max Gisko
Margaret Lewicki and Ernie Grossman
Colleen and David Haig
Cheryl and Dan Hansford
Greg Hovorka
Lauren and Jake Hudson
Jax at the Tracks
Cora Lea and WL Jenkins
Melissa Kaime
Susan and Steve Kitson
Mary and James Koons
Mary E. Reilley and James Krieg
Lahontan Golf Club
Marc Lamb
Barb and Ed Larson
Jan and Tony Lashbrook
Janet and David Lowell
Christney and Bill McGlashan
Don McLaughlin
Melanie and Jim Nangle
Earl Nemser Family
NSM Construction
Pacific Crest Wealth Planning
Mary and Rob Palmer
Jean Y. and Dr. Richard K. Park
Marti and Michael Park
PlumpJack Squaw Valley Inn
Leslie and Andy Price
Bonnie and Keith Riley
Kathryn and John Rohlf
Joanne Roubique
Carol and Michael Sabarese
Sue Sage in honor of Harriet Q. Johnson
Cindy and Gerry Salontai
San Francisco Fly Casting Club
Serendipity Fund held at Parasol
Silver Sage Center for Family Medicine
Marsha and James Sohn
Sue and John Sorensen
Jody and Bill Sterling
Wendy Sumner
Tahoe Oral Surgery and Implant Center
Tahoe Truckee Flyfishers
TrailRunner International
Truckee Tahoe Lumber Co.
Christine Villaman
Roxanne Duffield and Hans Wain
Lisa Wallace and Family
Margaret Ann and Ken Wallace
Ward-Young Architecture & Planning
Trinkie Watson
Lynne and Ken Weakley
Mike Witherspoon
Barbie and William Witmer
Janet and Chuck Zipkin



Middle Truckee River Watershed

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

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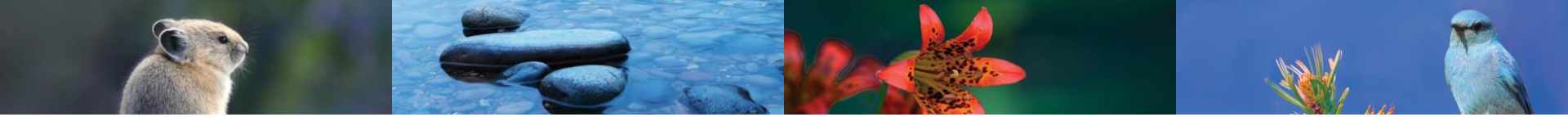

Projects

Jordan Plotsky

We restore: Perazzo Meadows

People

Sarah Green

We engage the community:
Truckee River Day 2020!

Policy

Michele Prestowitz

We influence policy

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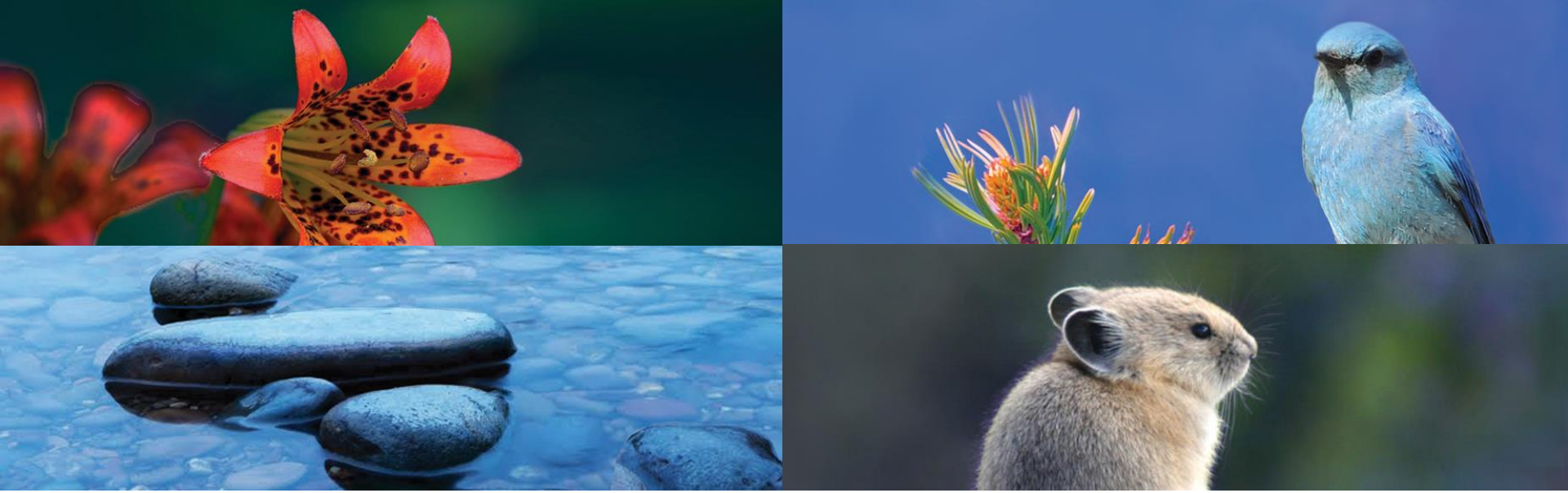
Restoring what we Love – Restoration Projects that Restore our Relationship with Nature

Michele Prestowitz- Program Manager

Eben Swain- Program Manager

Beth Christman- Restoration Programs Director

February 11, 2021



Loving the Bear Creek Lower Meadow Restoration Project

Michele Prestowitz, Program Manager

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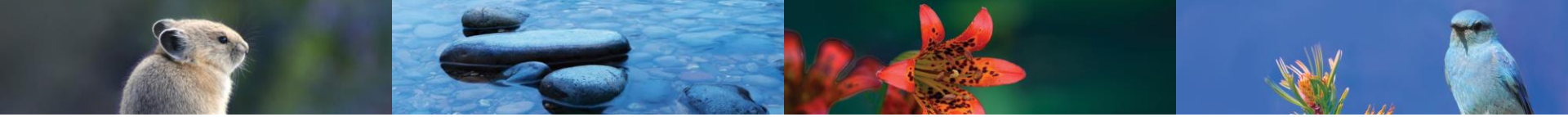

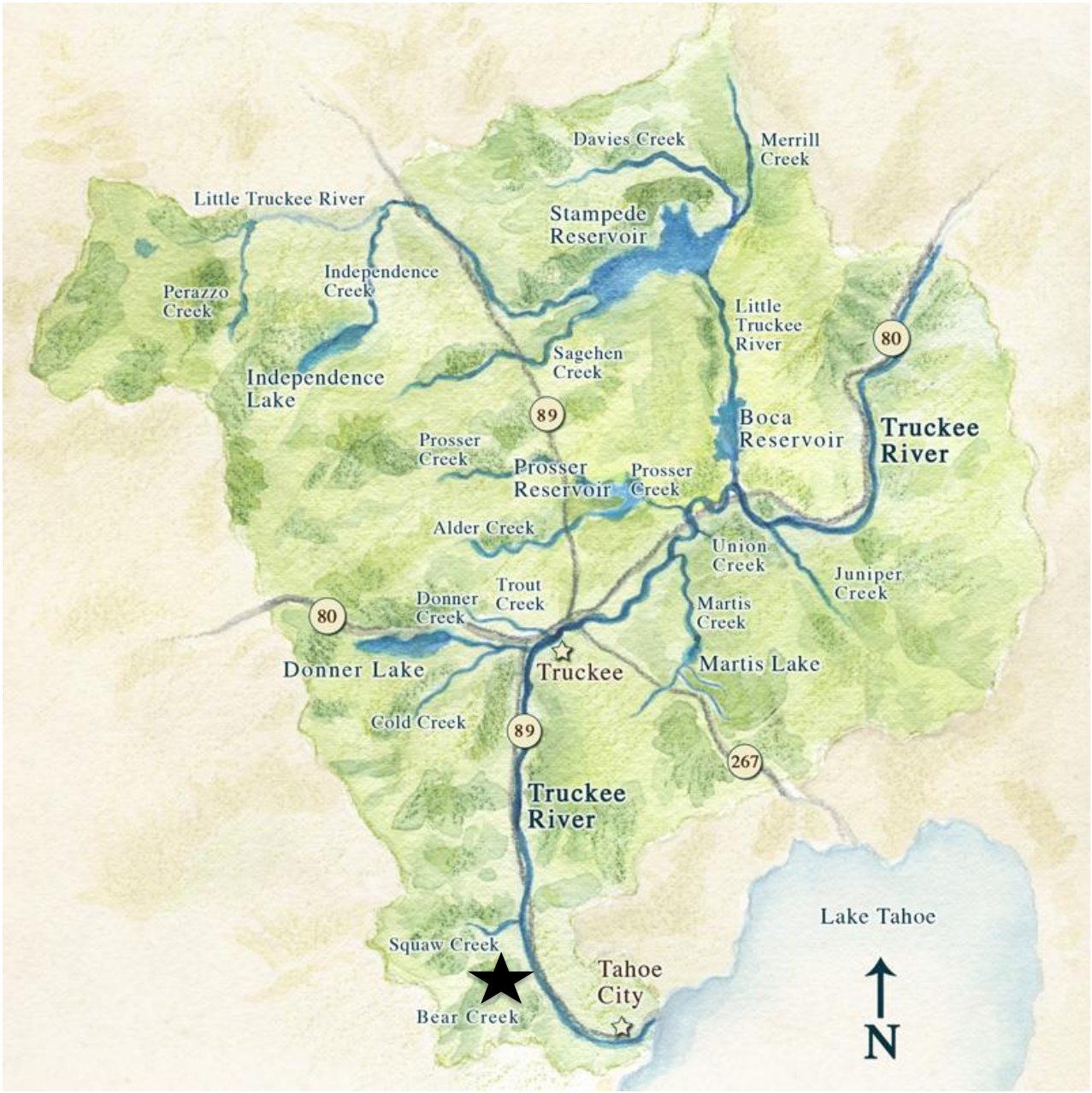

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Bear Creek Lower Meadow Restoration

Photo credit: Balance Hydrologics

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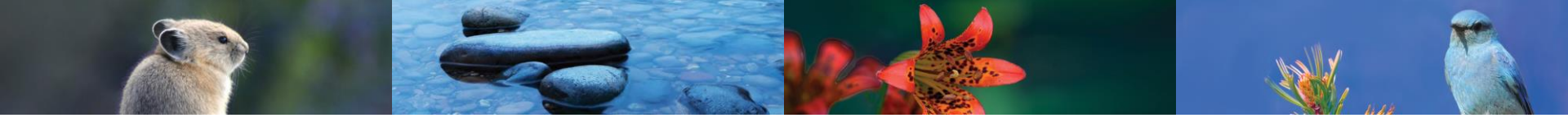

What was the problem?

- Old logging roads
- Construction of Alpine Meadows Road
- Stormwater runoff

Multi-channel,
wet meadow system → Single, incised channel

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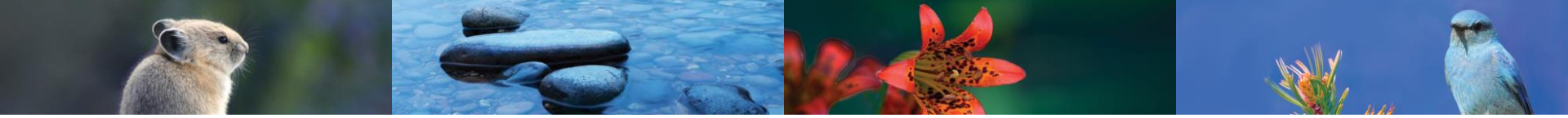
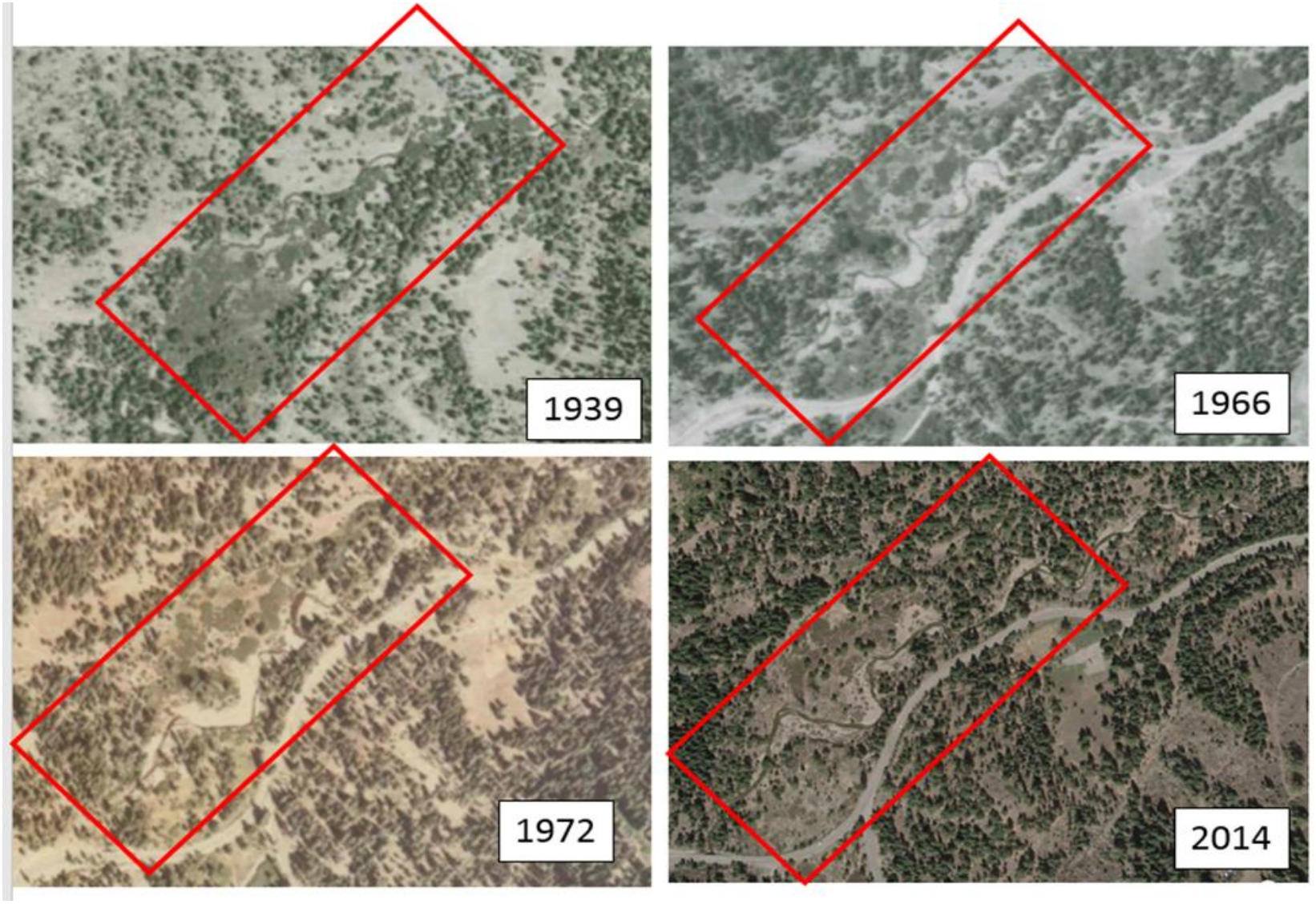
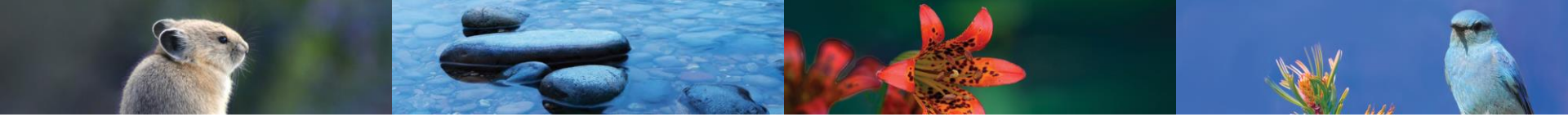


What this looks like over time





20-year storm is trapped!

Photo credit: Balance Hydrologics

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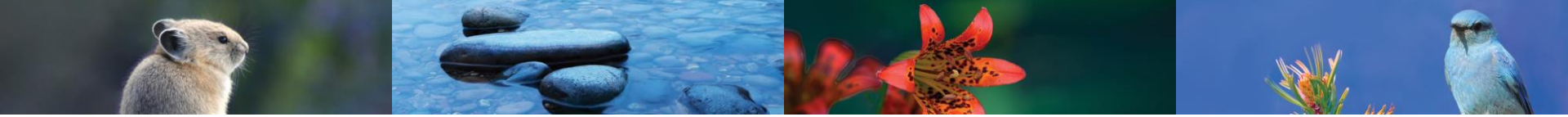

Project Goals

- Restore 30 acres of montane meadow
- Improve 3,000 feet of incised channel
- Regain aquatic and riparian habitat
- Reduce sediment by 60%
- Improve water quality

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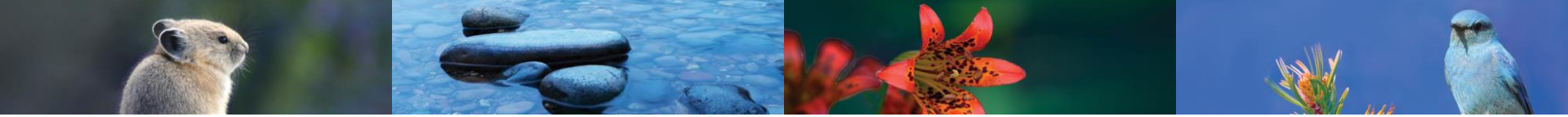
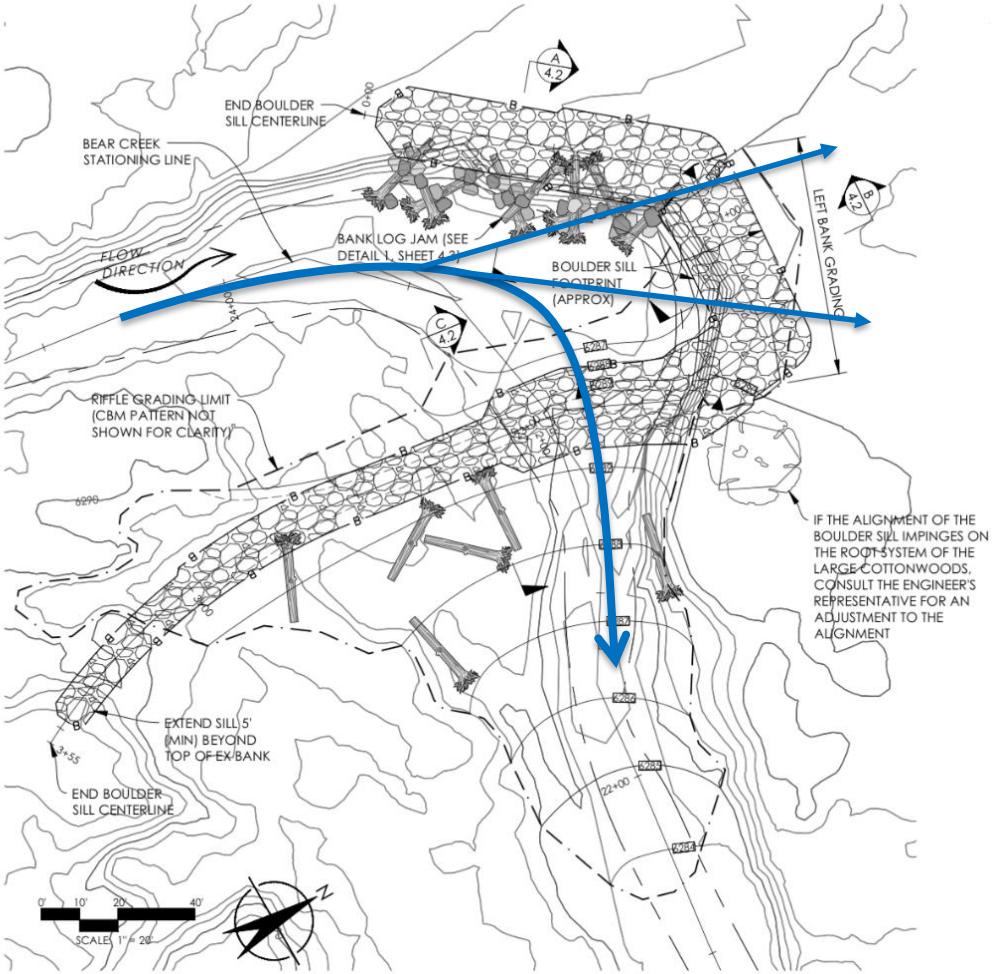


Integrated solution to multi-faceted problem



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Bank Stabilization

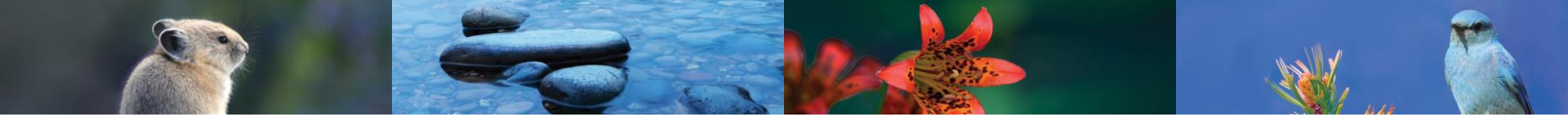
Before

During

Boulder Sill & Riffle

Before

During



Precision Teamwork

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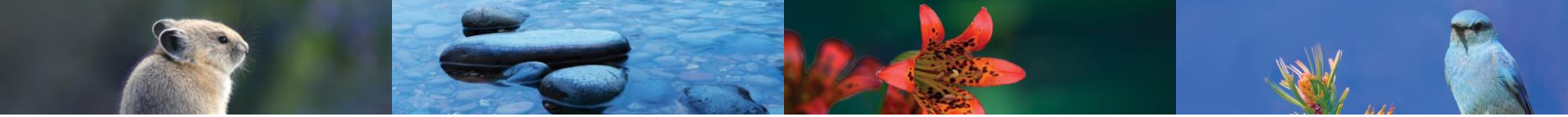

Timeline

Stage	Dates
Assessment	August 2017 – January 2018
Restoration Design	December 2017 – December 2019
Permitting	March 2019 – August 2020
Construction	August – November 2020
Monitoring	Until 2023

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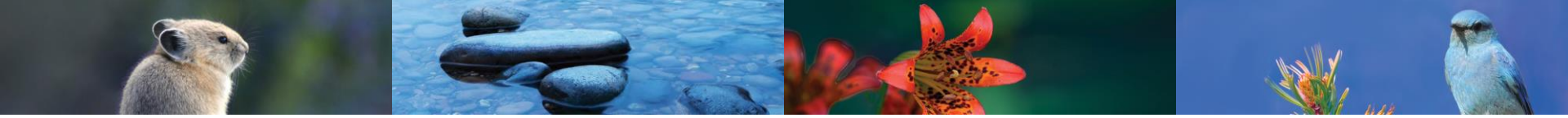

Thank You!

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Donors to Truckee River Watershed Council

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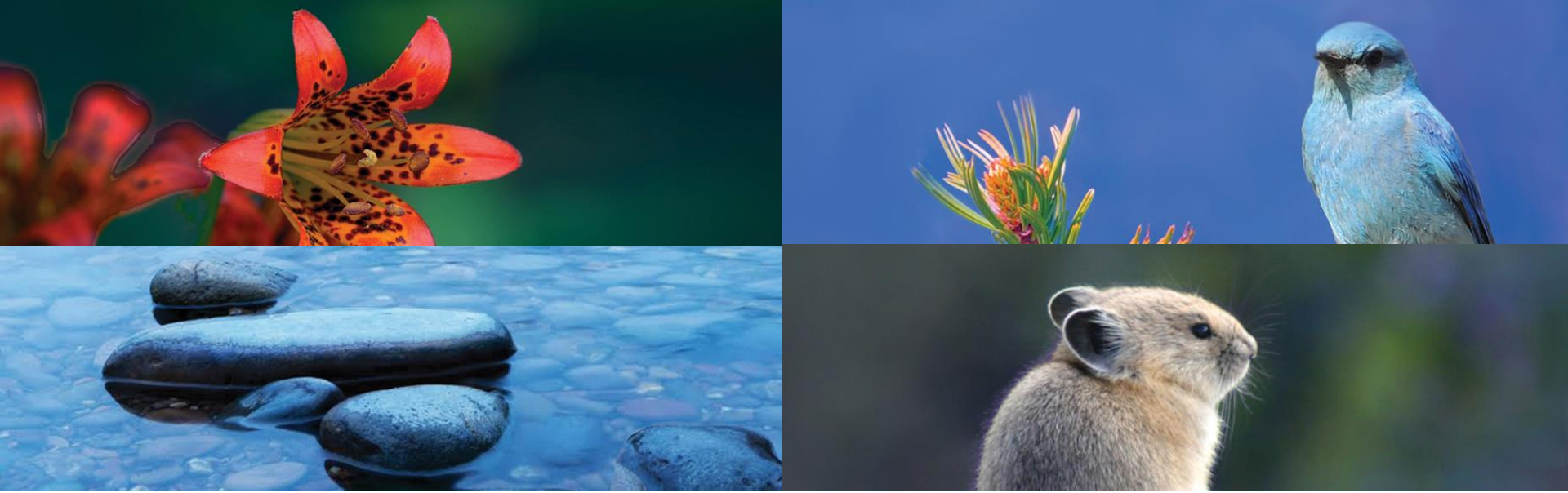

Coldstream Canyon– Creating Wetland Habitat

Eben Swain, Program Manager

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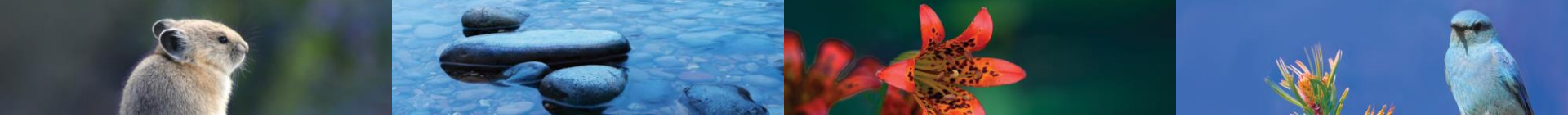
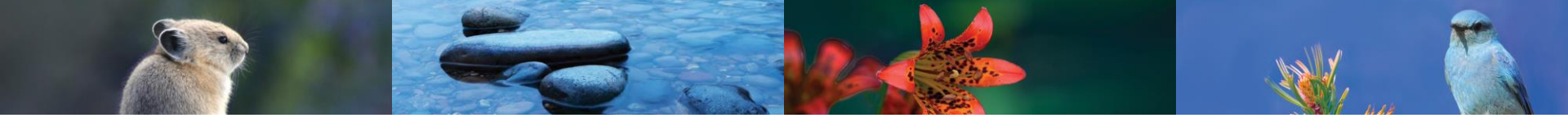
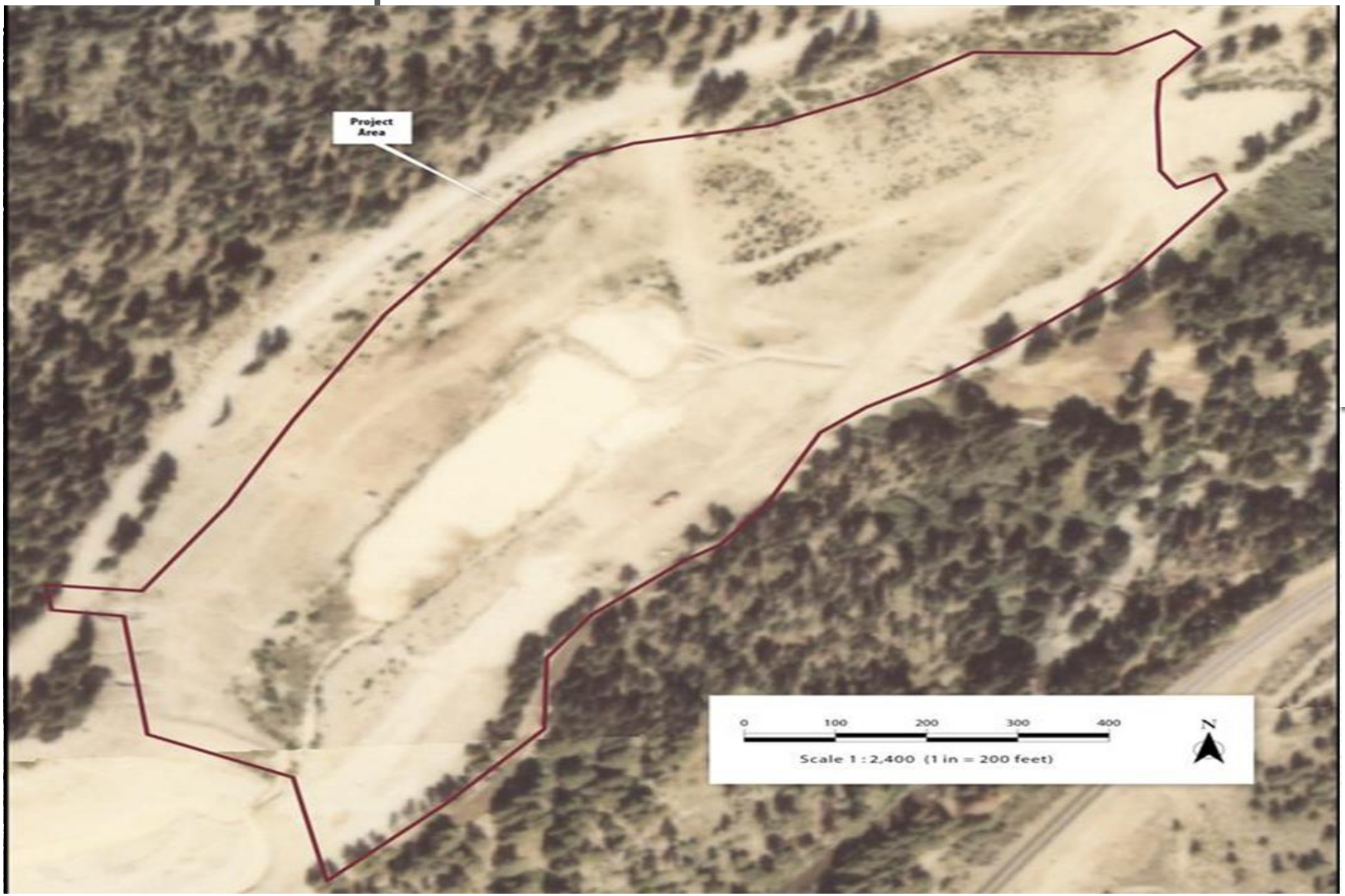
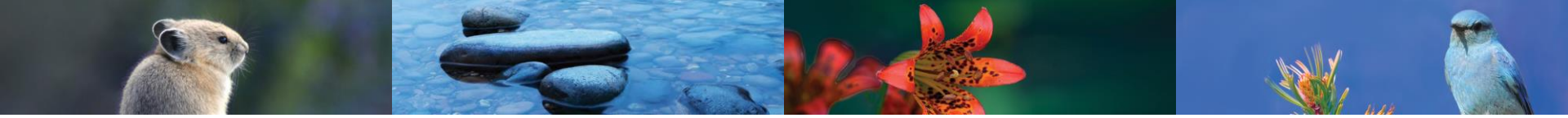


Site Location



Watershed Impacts





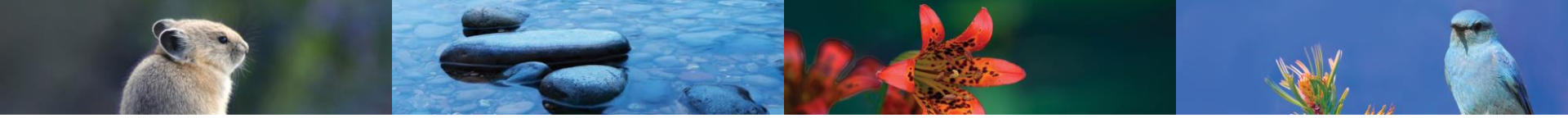
Coldstream Canyon Watershed Assessment

- Objectives
  - Describe fluvial geomorphic function
  - Identify human impacts and consequences
  - Develop opportunities for restoration

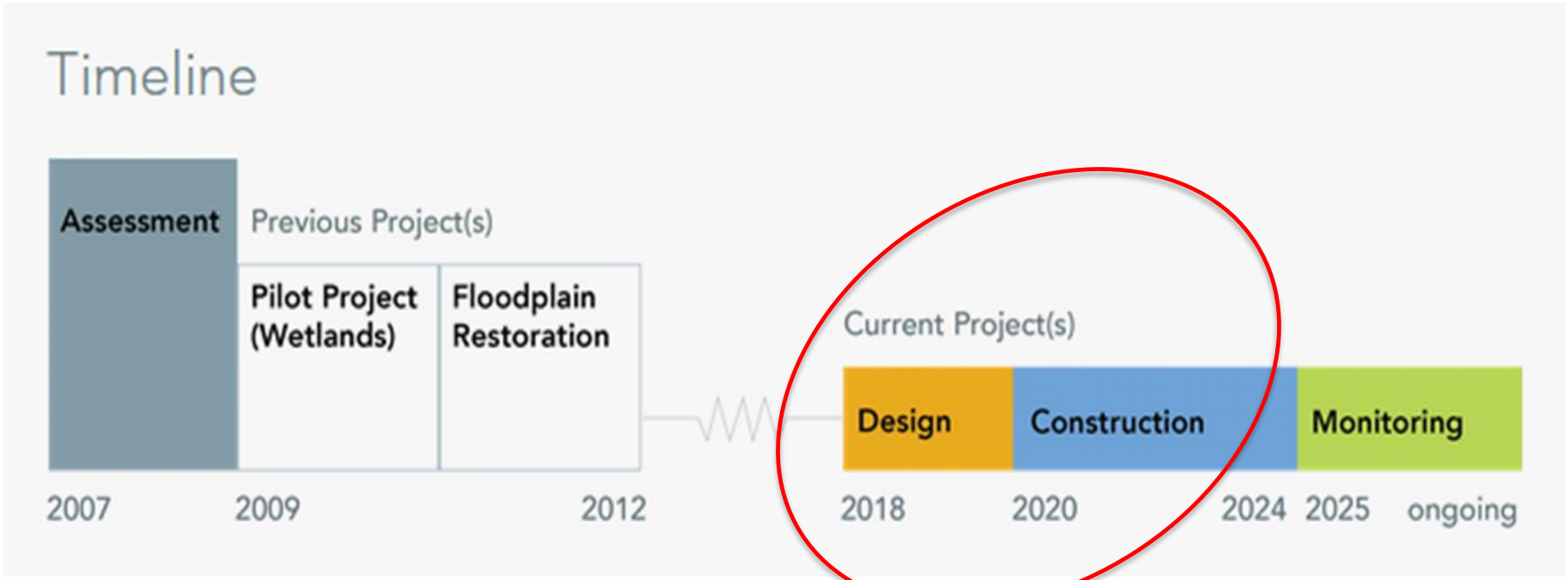
River Run Consulting

- Opportunities
  - Channel stabilization
  - Road/drainage improvements
  - Wetland restoration

Beth Christman



Timeline



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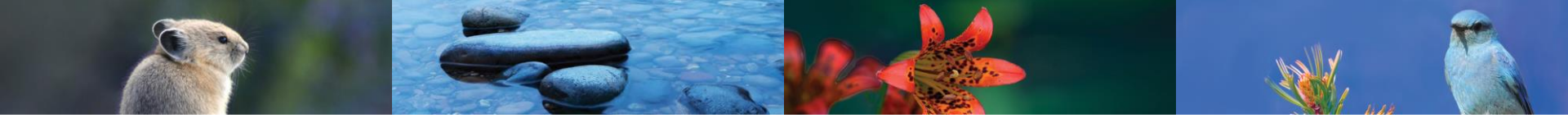
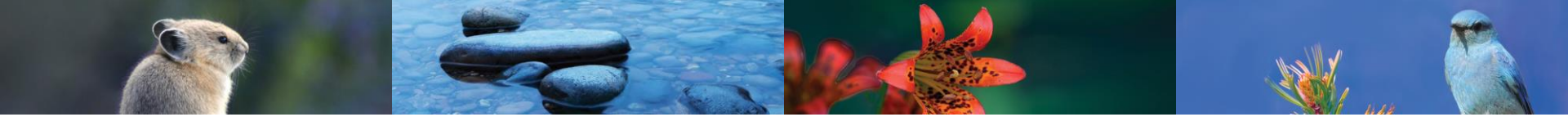


Restoration Goals

- Restore wildlife habitat
- Revegetate degraded areas
- Incorporate native, drought tolerant plantings
- Preserve sustainable recreational values

CA State Parks



CA State Parks

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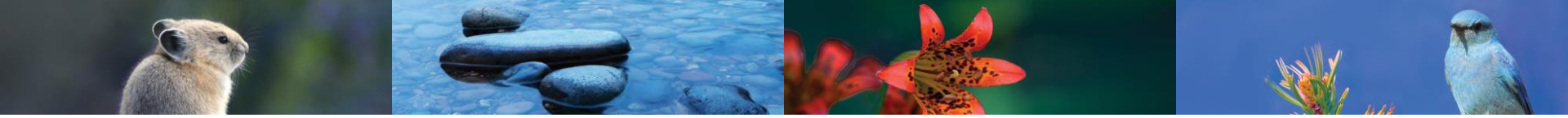

Gravel Mining Impacts

Impacts	Opportunities
Compacted soils, nutrient deficient	Restore & improve soil health and increase soil infiltration.
Degraded vegetation	Increase wetland vegetation and species diversity. Sediment filtration.
Lack of wildlife habitat	Restore habitat for both aquatic and terrestrial wildlife – foraging, nesting & protection.

CA State Parks

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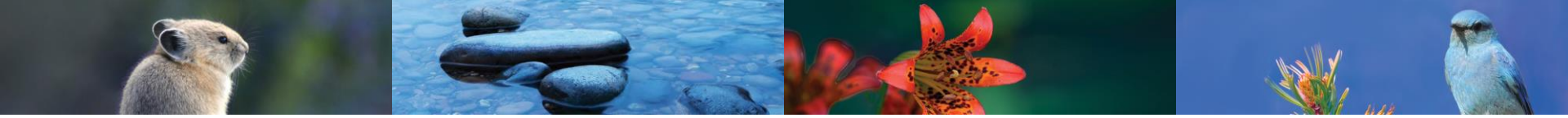
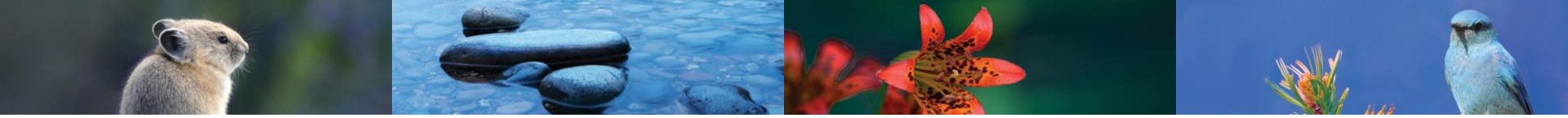


Pre Restoration Conditions

CA State Parks



What Components Will Lead to Success?

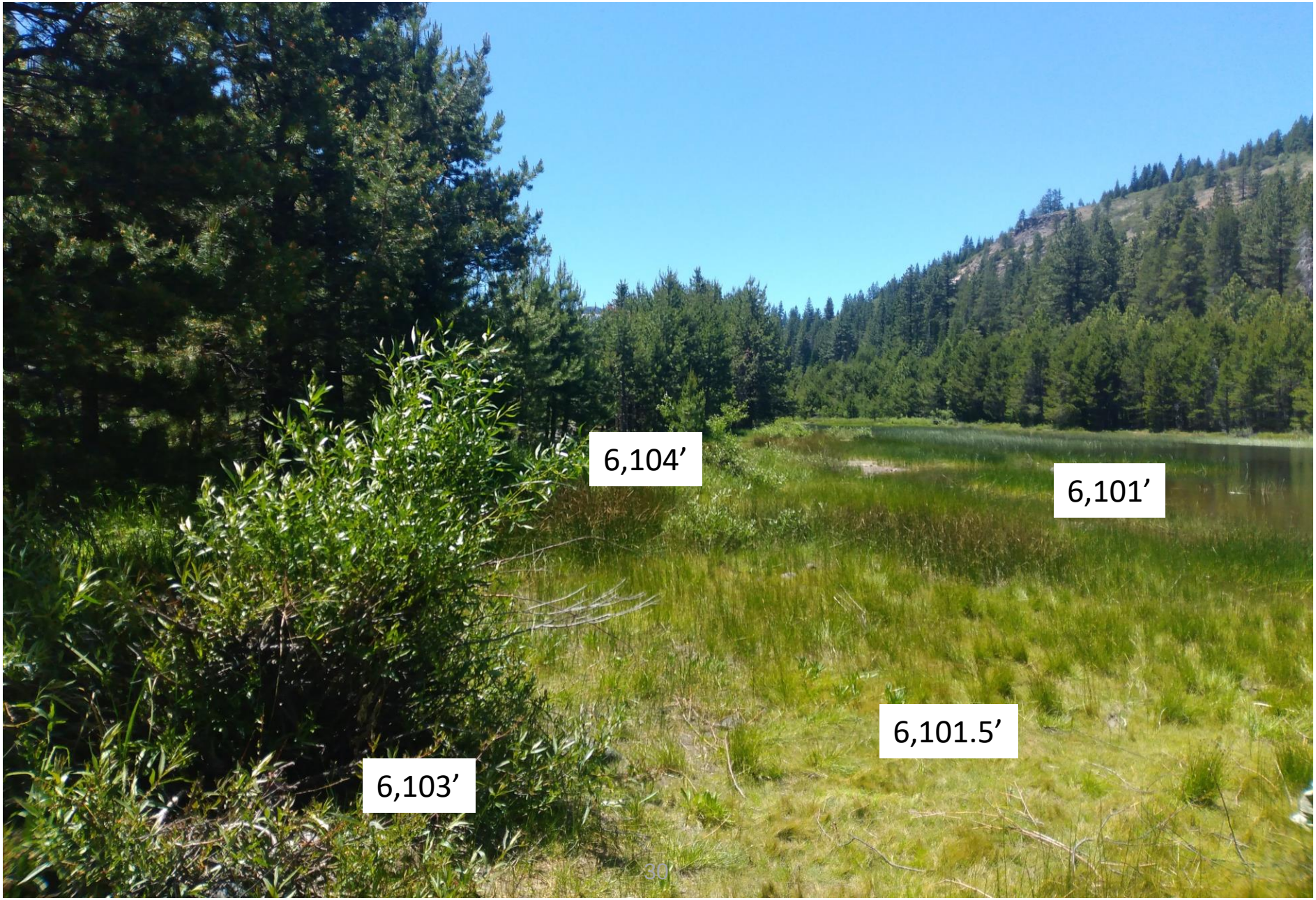
What factors limit vegetation growth & productivity?

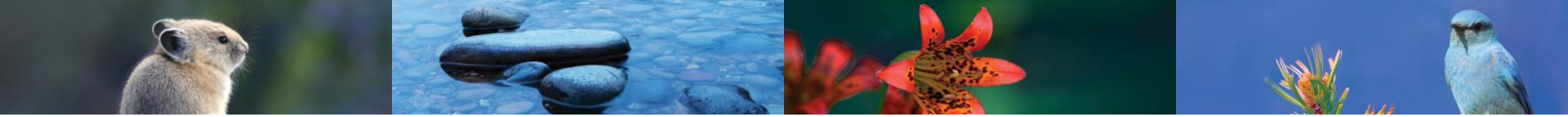
- Water level (ground and surface)?
- Soil Texture/compaction?
- Soil Nutrients?

Wildscape Engineering INC

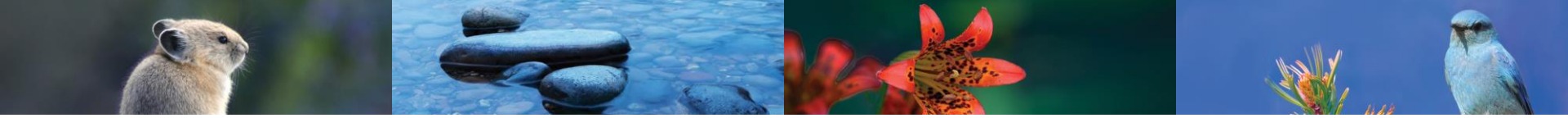
Elevation:

E. Swain





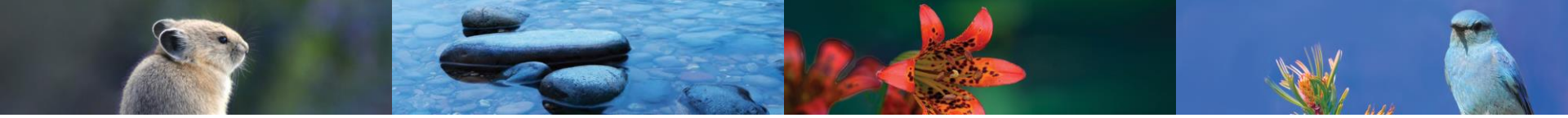
Groundwater Monitoring



2020 Restoration

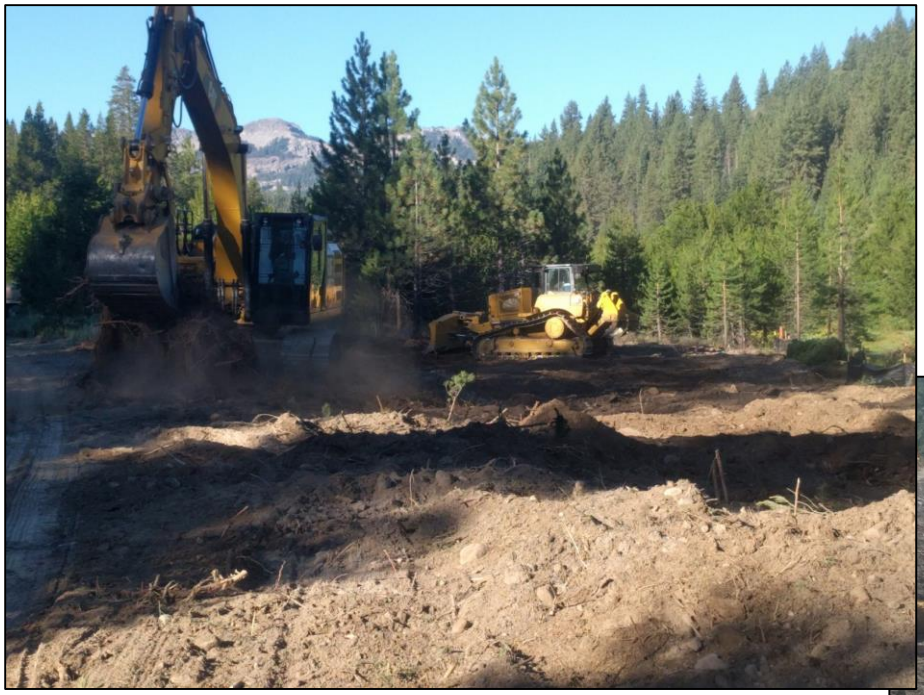
E. Swain

E. Swain



2020 Restoration

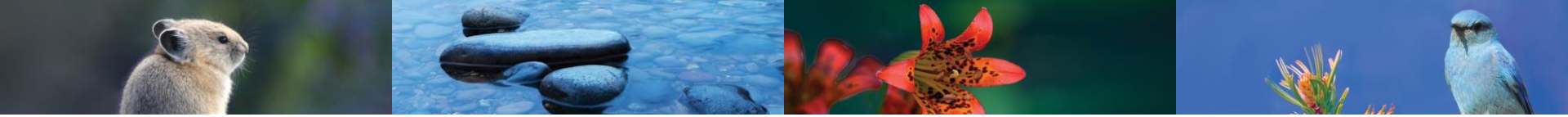
E. Swain



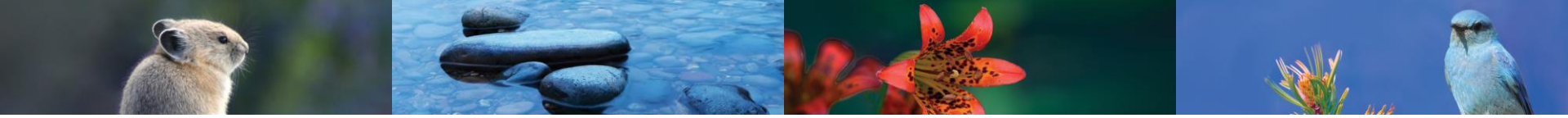
E. Swain

2020 Restoration:

E. Swain



Next steps:



Wildlife Habitat Benefits:

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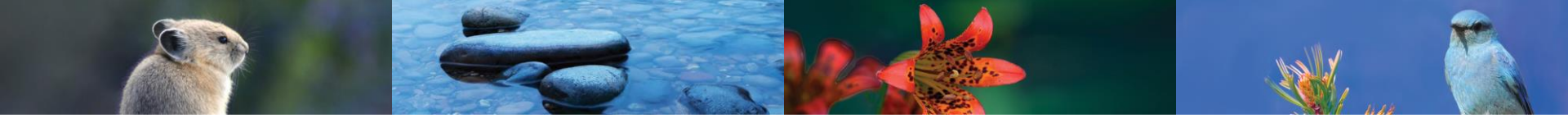
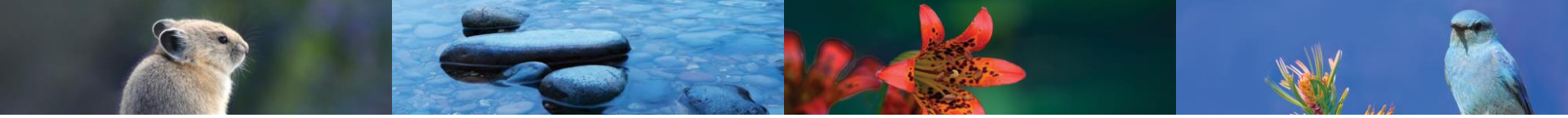


Stream Restoration

Wildscape Engineering INC



Thank you!

Project Partners:

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CALIFORNIA STATE PARKS
SINCE 1864

Funders:

Donors to the Truckee River Watershed Council

MARTIS FUND

CALIFORNIA
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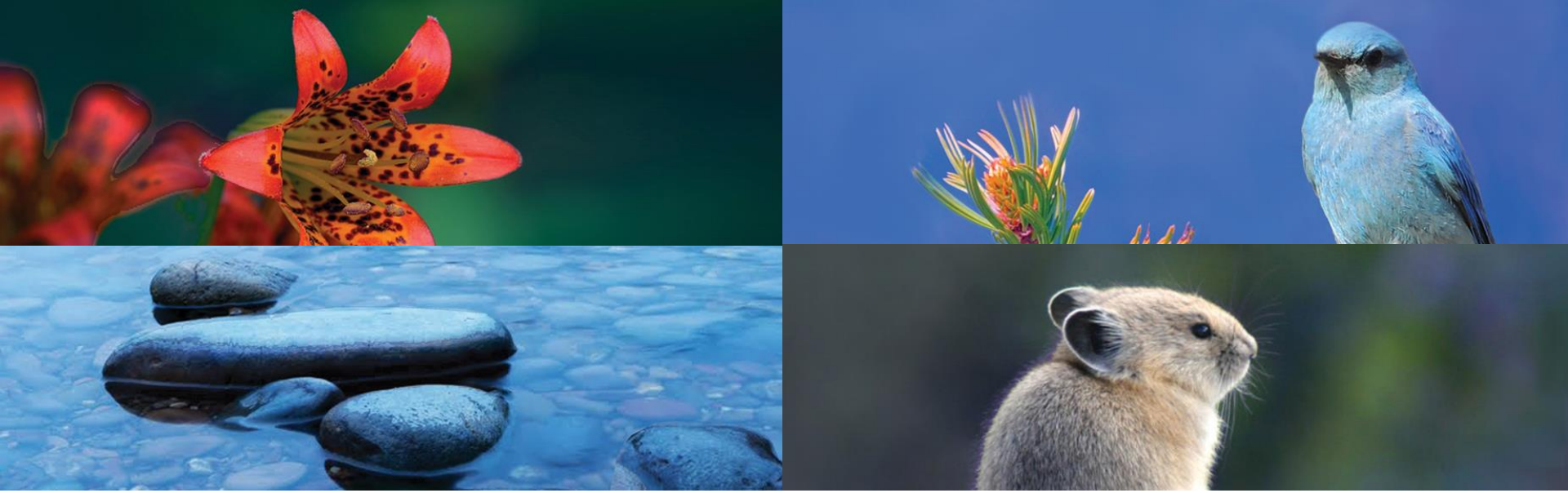
REGIONAL WATER QUALITY CONTROL BOARDS



Perazzo Meadows – What have we learned?

10+ Years of Data

Beth Christman, Director of Restoration Programs

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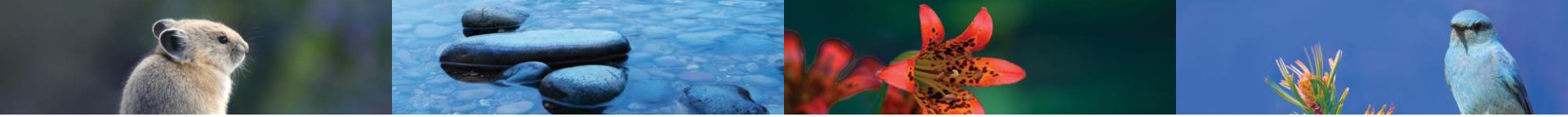

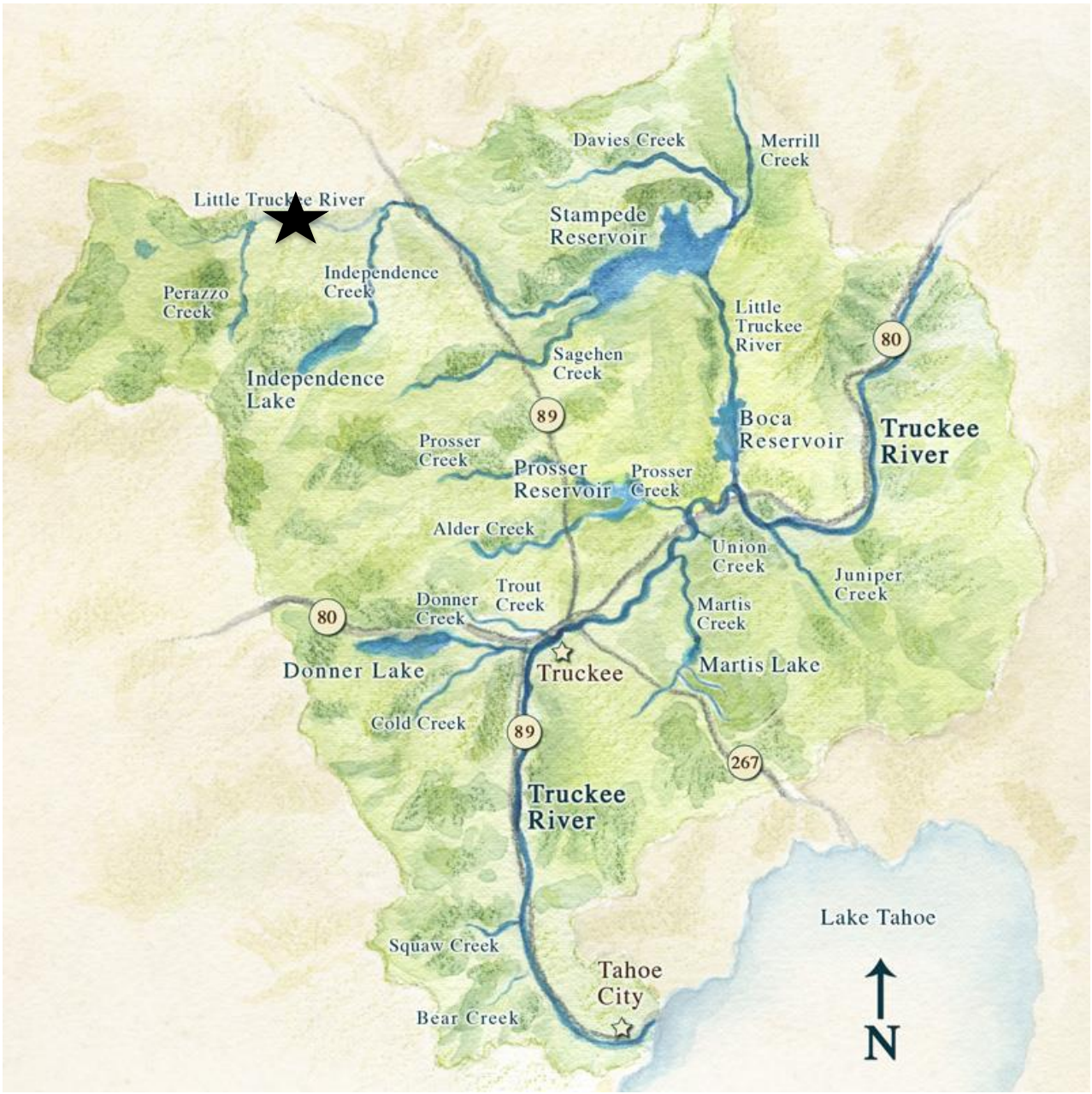

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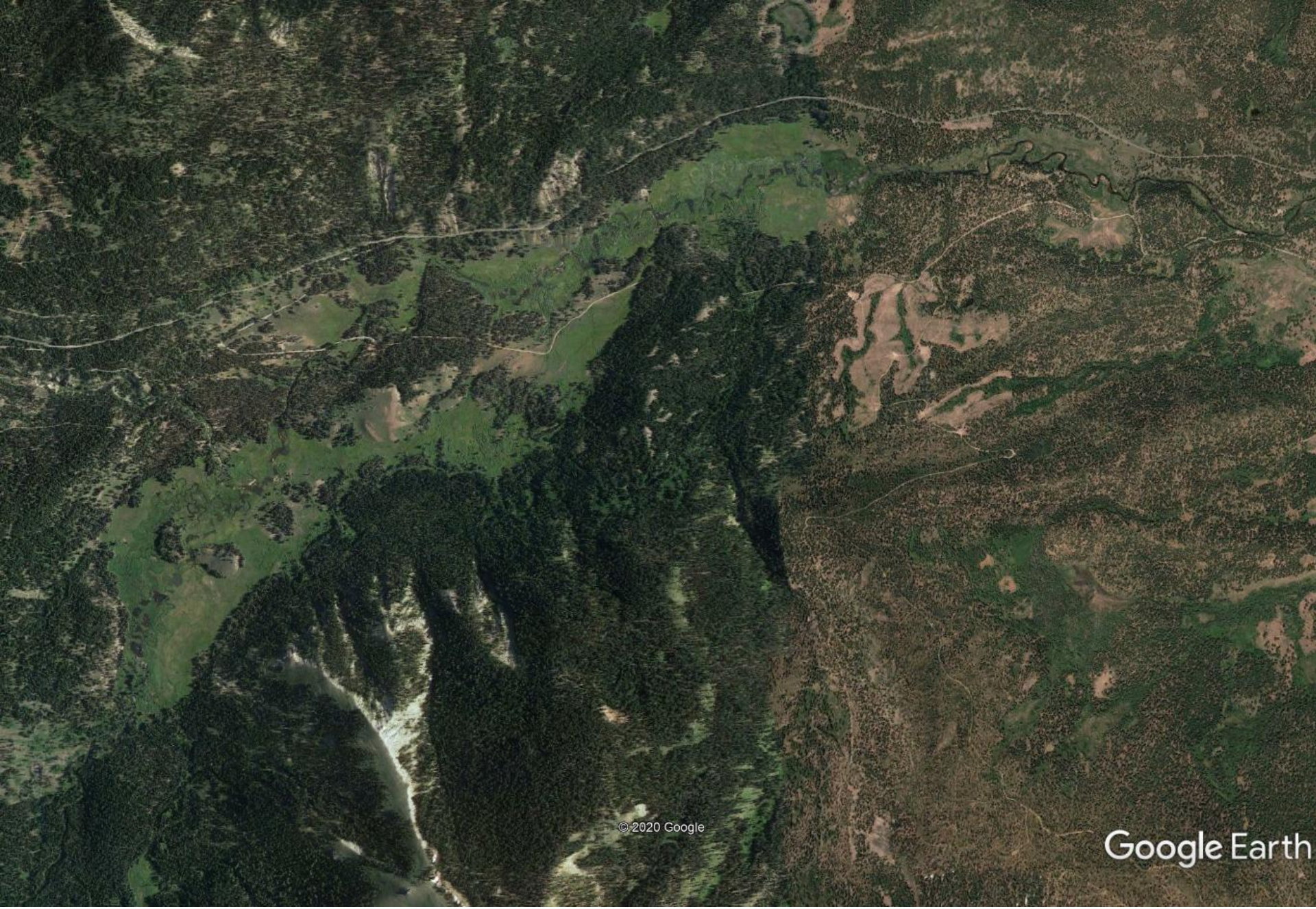
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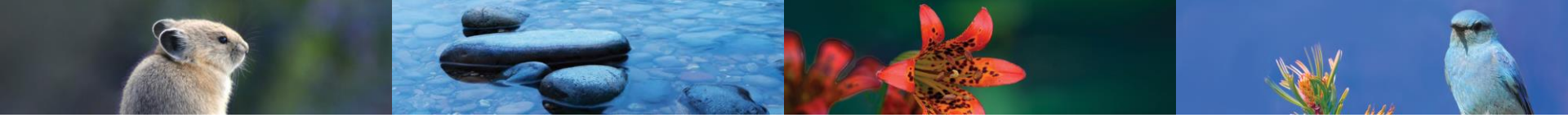
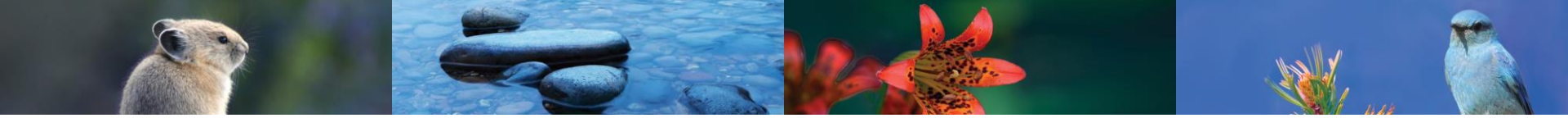
Google Earth

J. Dvorsky



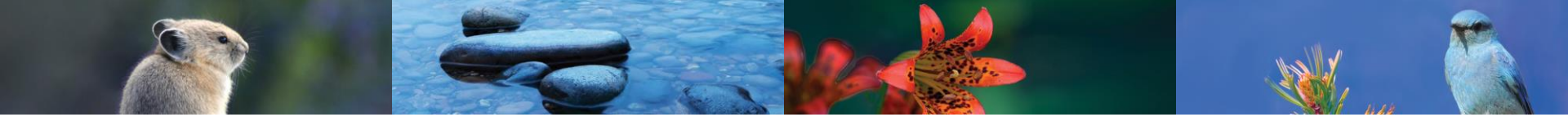
Perazzo Meadows Restoration Timeline

Task	Timeframe
Assessment & Design	1999 – 2008
Upper Meadow Restoration	2009
Middle Meadow Restoration	2010
Lower Meadow Restoration	2019
Monitoring	2009 – 2021+



Monitoring

- Birds
- Hydrology
- Aquatic Habitat
- Vegetation
- Remote Sensing
- Soil Carbon



Willow flycatcher

- Meadow obligate
- Found in < 80 Sierra meadows

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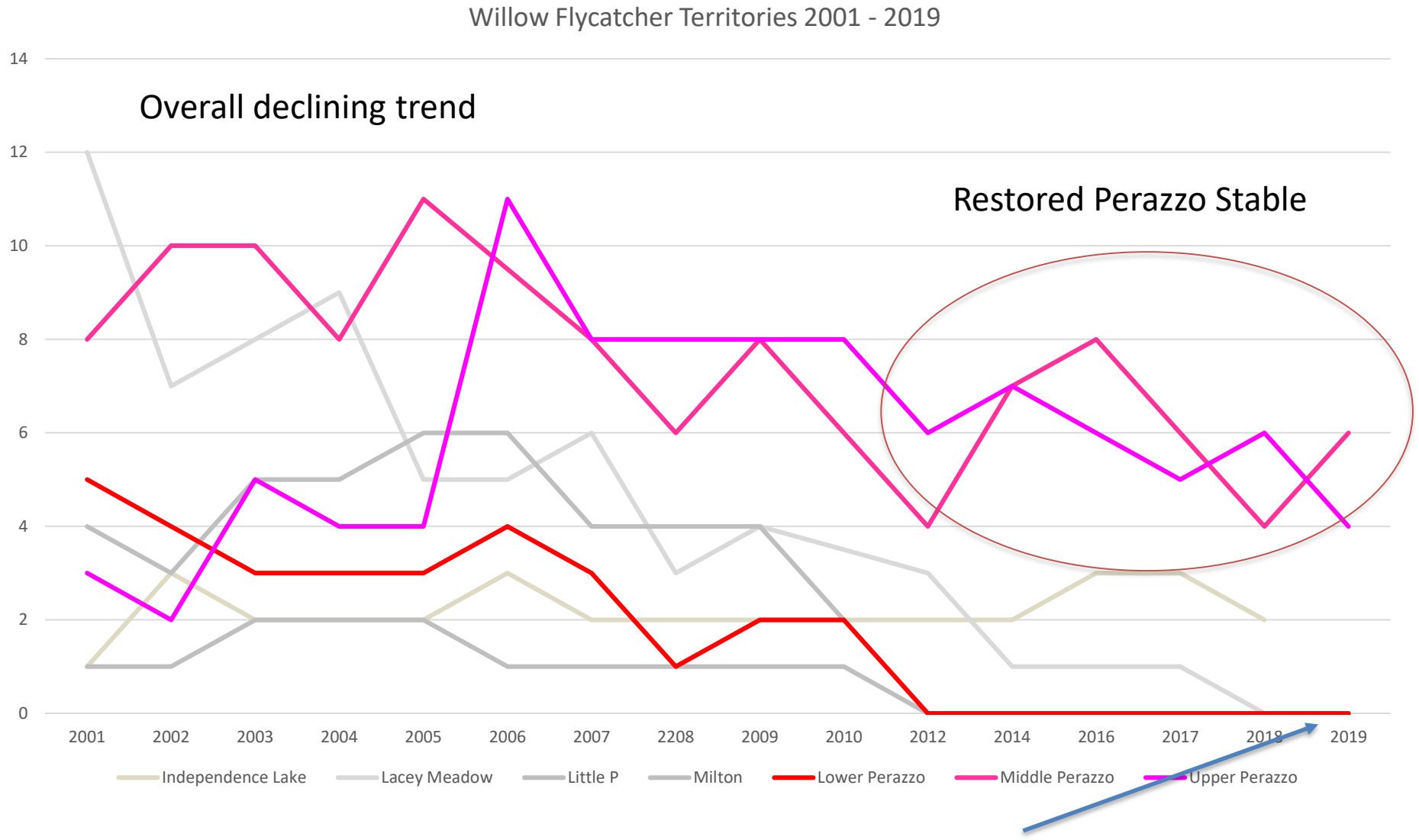
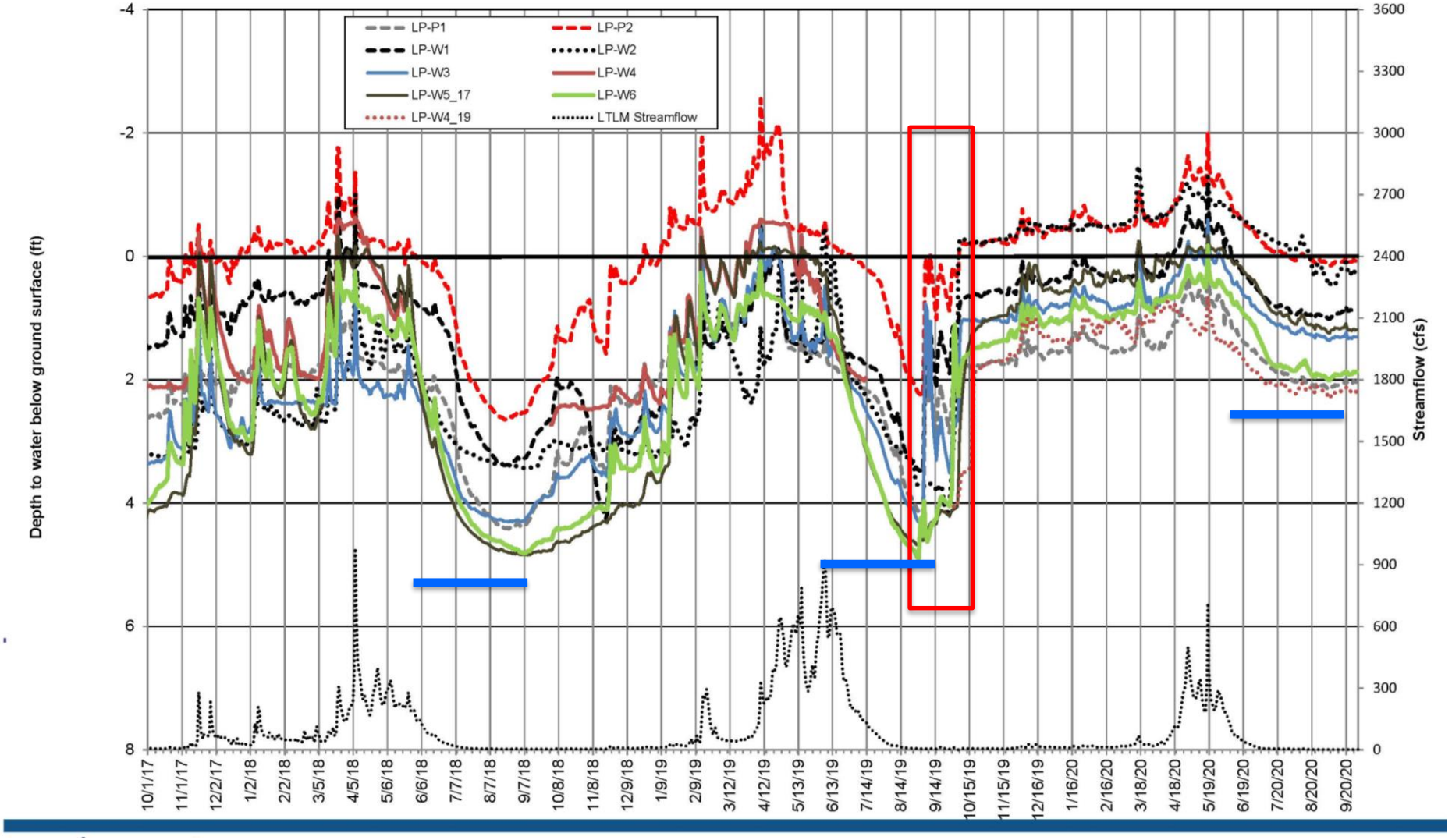
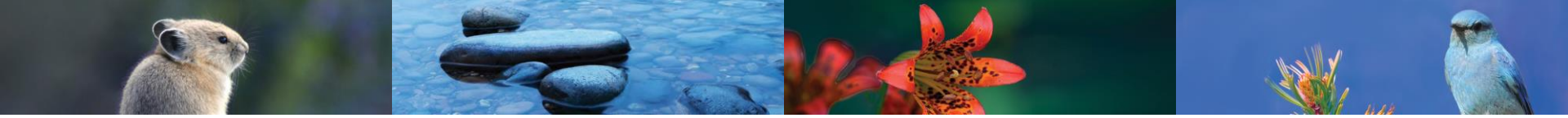


Will restoration of Lower Meadow help?

Groundwater results





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