

Partnering with Beaver for Restoration in
the Grouse Creek Watershed:
Coordinated Resource Management
Group Update

Scott Shahverdian
Anabran Solutions
Utah State University



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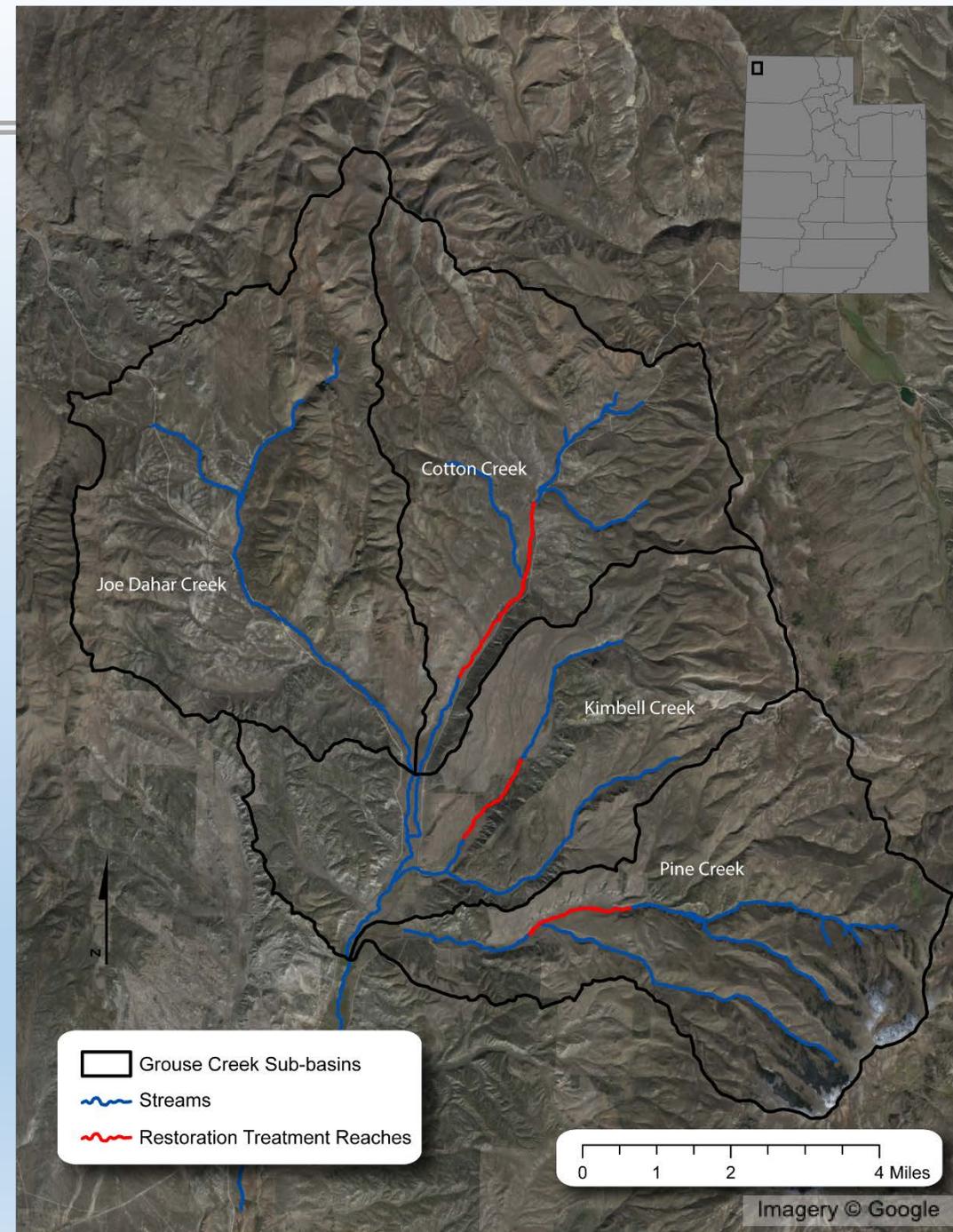
Review: Where have we been?

Restoration Goals

Demonstrate that cheap and cheerful stream restoration can benefit working grazing lands, sage grouse, and riparian and stream health

Objectives

- Increase last season stream flow
- Increase extent of mesic habitat for sage grouse
- Improve forage for cattle
- Improve riparian areas



Review: Where have we been?

Installing streamflow gages May 2016



Pilot construction
October 2016



Pilot observations
April 2017



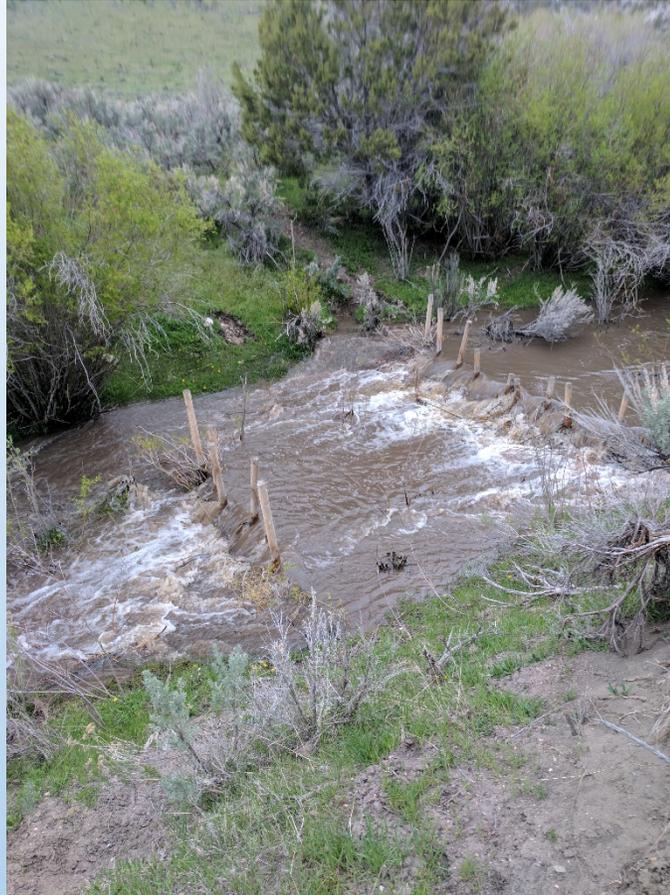
Full construction
June 2017



- **May 2016** – Streamflow gaging installed
- **September 2016** – Pilot restoration design developed for Pine Creek, Kimbell Creek and Cotton Creek
- **October 2016** – Pilot restoration implemented with construction help from the Utah Conservation Corps
- **May 2017** – Full-scale restoration design developed
- **June 2017** – Full-scale restoration design implemented
- **September 2017** – Utah Beaver Management Plan updated
- **October 2017** – Live-trapping and beaver relocation

Observations from the pilot restoration: what happened?

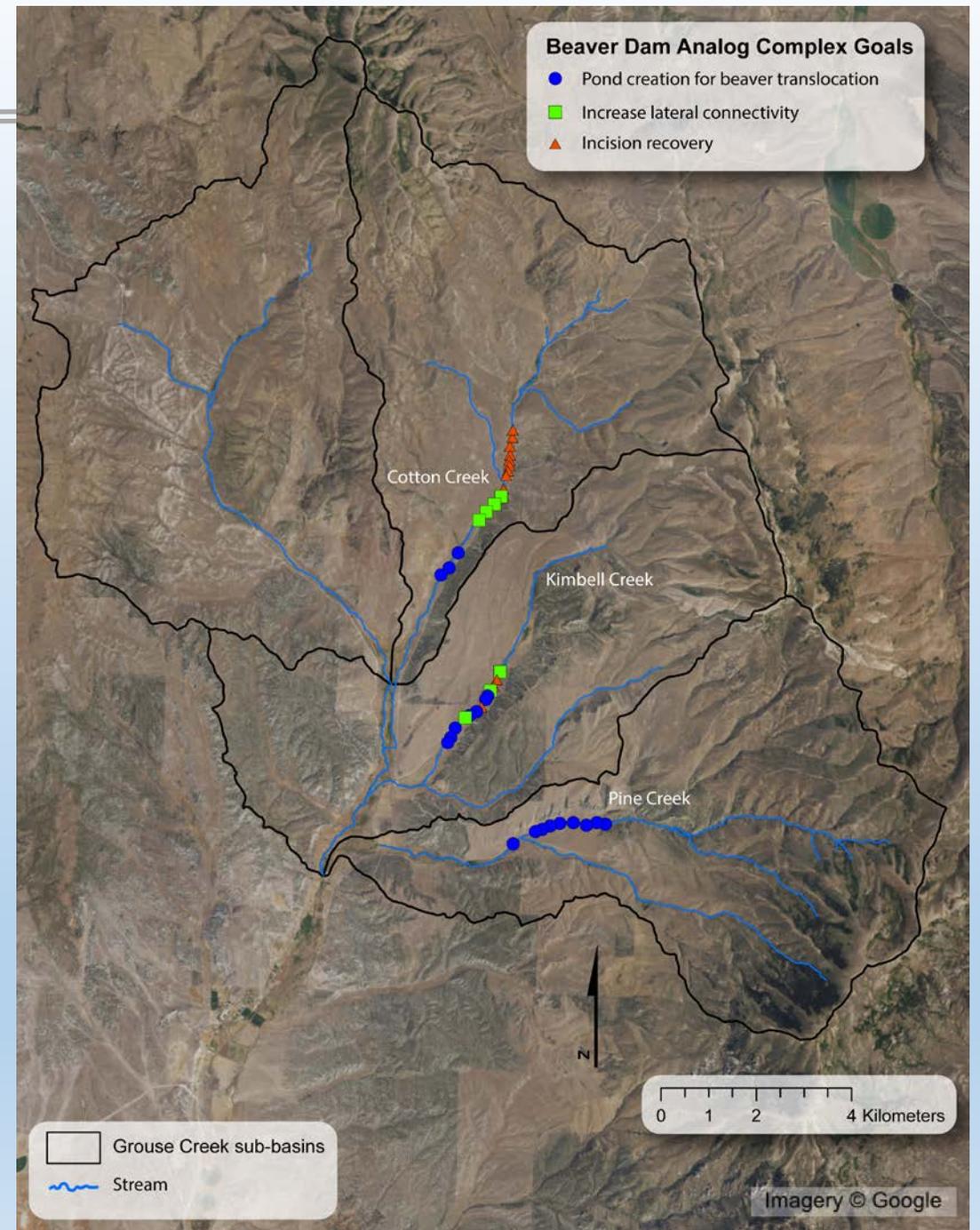
- Structures built without posts withstood runoff
- Structures in confined areas were prone to end-cuts and channel widening
- Structures built using sagebrush and juniper were as effective as those built with willow



Restoration Implementation

Summary

- 3 weeks of construction in June 2017 with the Utah Conservation Corps
- **114 structures** built in Pine Creek, Kimbell Creek and Cotton Creek
 - Pine Creek: 9 complexes; 21 structures
 - Kimbell Creek: 13 complexes; 47 structures
 - Cotton Creek: 16 complexes; 46 structures
- All complexes and individual structures designed to achieve specific objectives
- Design and Implementation report and Adaptive Management Plan to be completed by October 1st.
- Beaver live-trapping and relocation planned for Fall 2017



Restoration Implementation: Example - Pine Creek

Objective – Create pond habitat for beaver relocation

Methods

- Utilize a combination of juniper and willow
- Building BDA without post reduces time required to move hydraulic post pounder

Before



After



Construction



Construction

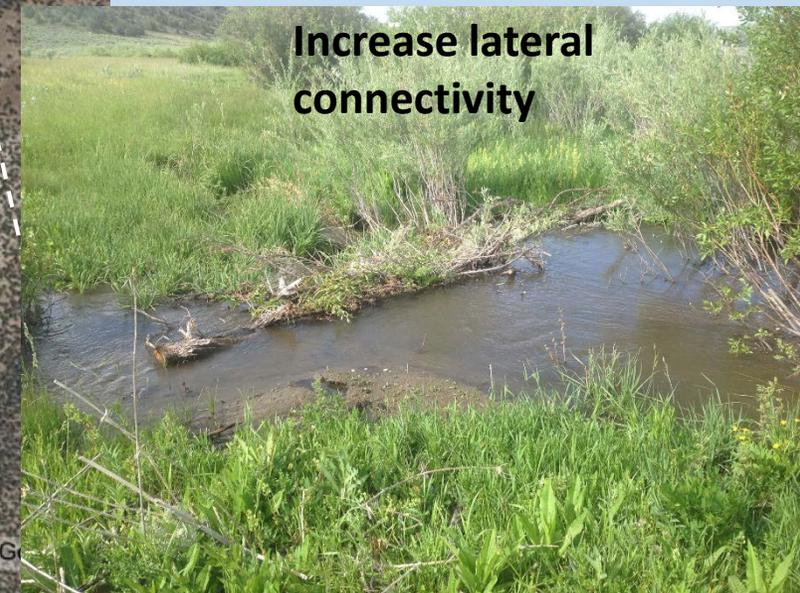
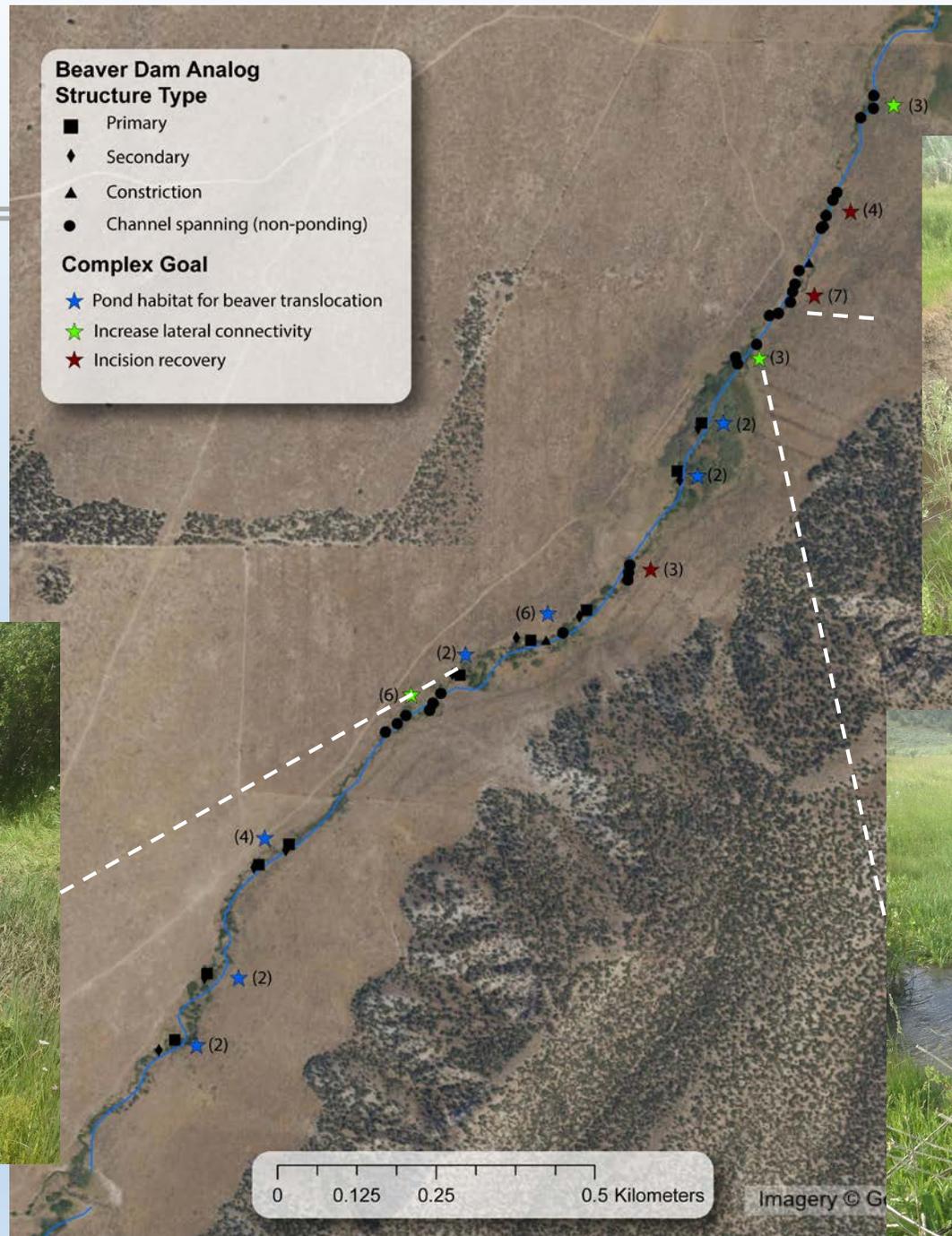


Restoration Implementation

Kimbell Creek

Complex Goals

Determined by site-specific geomorphic and riparian conditions



Restoration Implementation

Relocating Beavers

- Restoration plan incorporates relocation of beaver to achieve restoration goals
- State of Utah and UDNR recently updated the Utah Beaver Management plan
- We are currently working with private trappers and UDWR to live-trap beaver for relocation to Grouse Creek restoration sites
- An Adaptive Management Plan is currently being developed to help address potential risks beaver relocation may pose and outline a framework for decision making.

UTAH BEAVER MANAGEMENT PLAN 2010 – 2020



Thank you!

An aerial photograph of a landscape. A dirt road runs diagonally from the top left towards the center. The terrain is covered with low-lying, scrubby vegetation in shades of green and grey. There are some larger, denser green patches in the lower left and center. The overall scene appears to be a rural or undeveloped area.

Questions?

Contact me:
Scott Shahverdian
smshahve@gmail.com