

Holding Back Snowpack



BIG HOLE
WATERSHED COMMITTEE
Conservation Through Consensus.

Pedro Marques
Executive Director
pmarques@bhwc.org



Holding Back Snowpack
Watershed Resilience from
the Top Down

Social Resilience from the
Bottom Up

May 2016



May 2020



N. Fork California Creek

May 2020



N. Fork California Creek



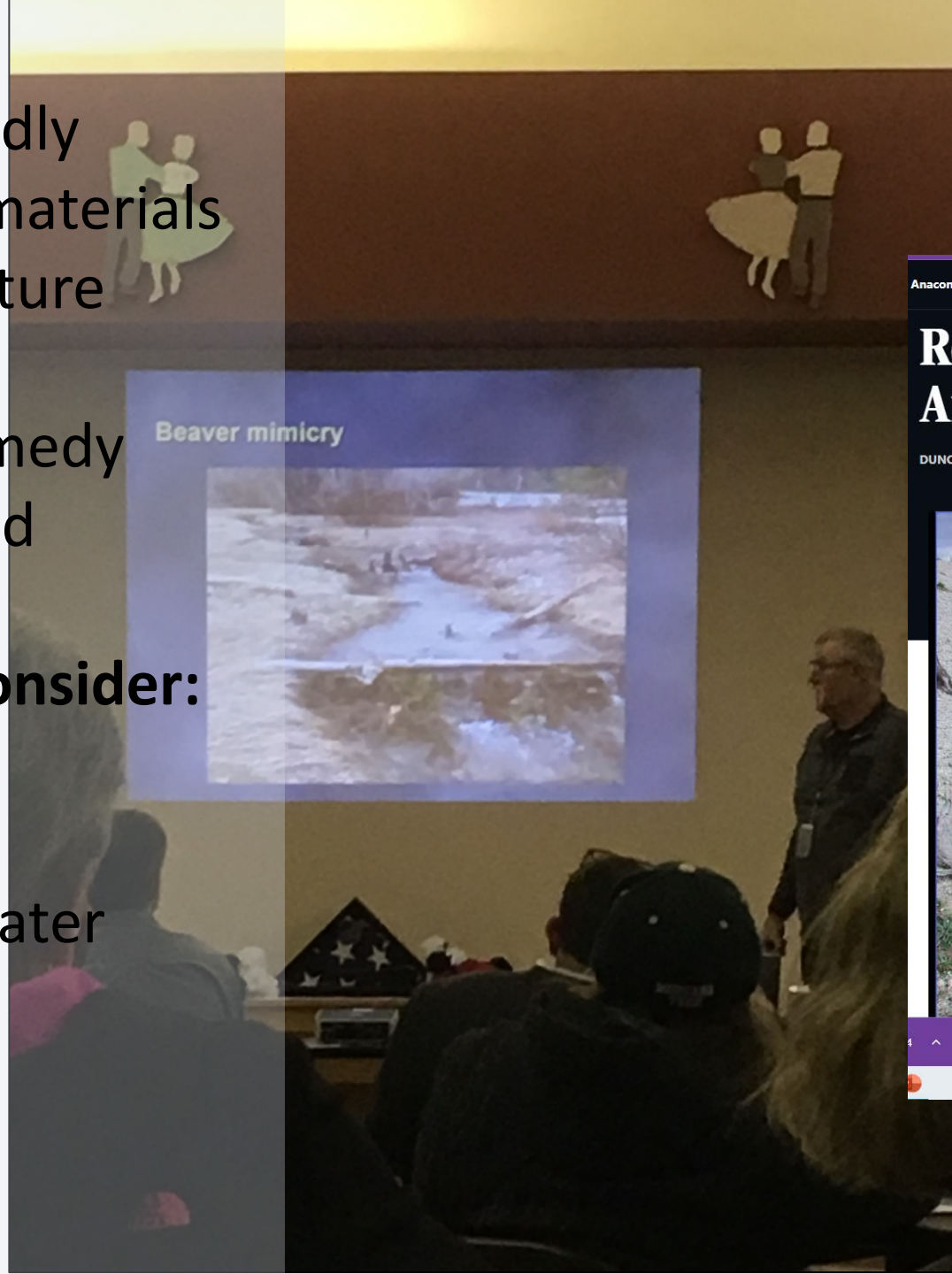
Slow the water, connect the floodplain, soak the soil



- Volunteer-Friendly
- Uses available materials
- \$50-\$200/structure
- Iterative
- Accepted as remedy under Superfund

Make Sure to Consider:

- Permitting
- Fish Passage
- Downstream Water Users



E. Fork Divide Creek



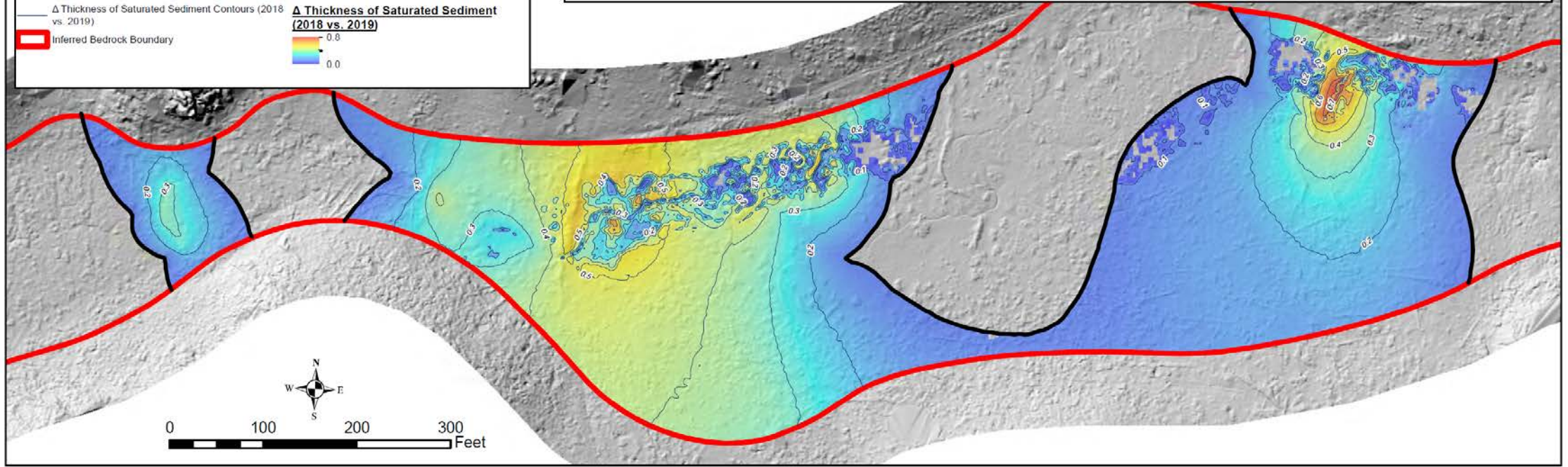
Be the Beaver.... And hope they come back. (No transplanting in MT)



Legend

- Δ Thickness of Saturated Sediment Contours (2018 vs. 2019)
- Δ Thickness of Saturated Sediment (2018 vs. 2019)
- Inferred Bedrock Boundary

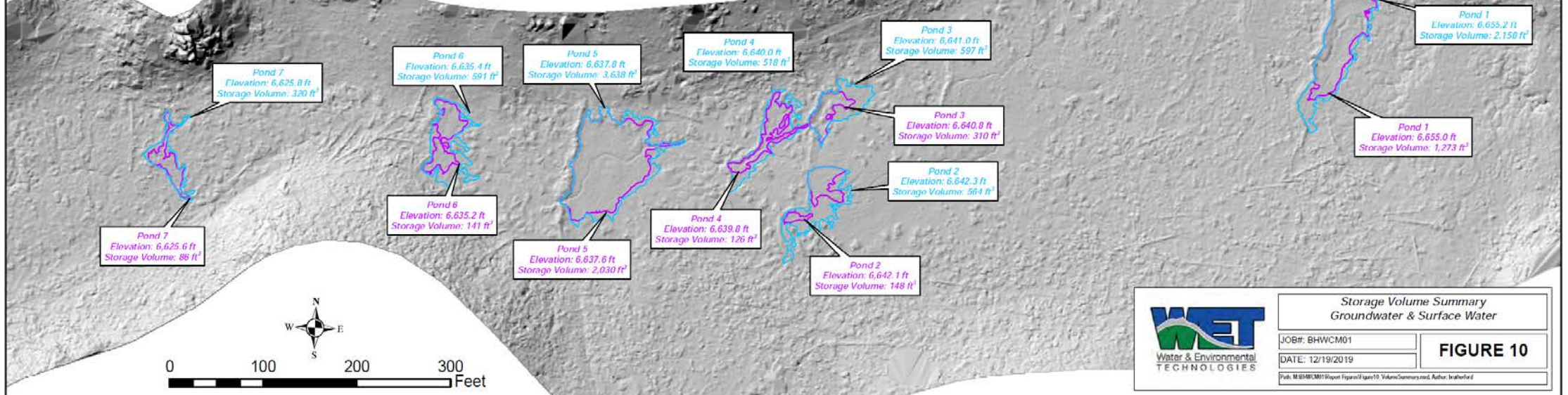
Average Total Groundwater Storage Increase (July - October 2019) = $\Delta(\text{Saturated Volume}) \times \text{Storativity} = 70,158 \text{ ft}^3 \times 0.125 = 8,800 \text{ ft}^3$



Legend

- Maximum Level (5-28-2019)
- Estimated October-July 2019 Average Level

Total Surface Water Storage Increase (05-28-19): 8,400 ft³
 Average Total Surface Water Storage Increase (July - October 2019): 4,100 ft³



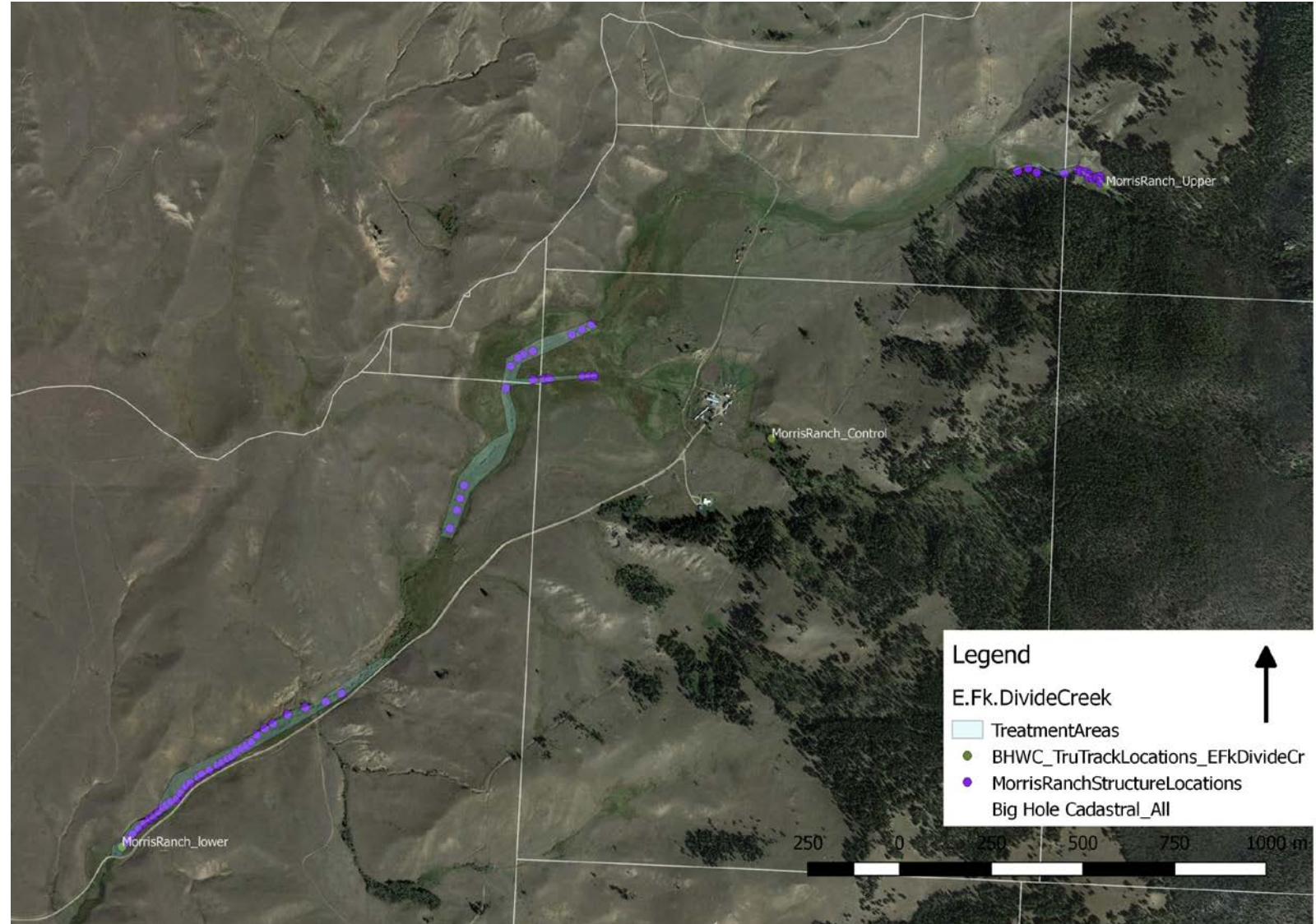
Storage Volume Summary
 Groundwater & Surface Water

WET
 Water & Environmental
 TECHNOLOGIES

JOB#: BHWCM01
 DATE: 12/19/2019

FIGURE 10

Path: M:\BHWCM01\Report\Figures\Figure10_VolumeSummary.mxd, Author: bradford



Spreader Dikes or Mechanized Beaver Dams



- Adaptation from low-head treatment wetlands
- Shift ecological trends in one effort
- Activate floodplains to soak soils
- Sediment retention, wildlife habitat, natural water storage



BHWC Restoration Project NDVI Average Values



● Fall Pre Project Average

● Spring Pre Project Average

● Fall Post Project Average

● Spring Post Project Average

STATE OF MONTANA BEAVER PLAN

- MT Beaver Working Group
- FWP and Utah State- Mapping of all beaver
- BRAT MODEL overlay
- ID Translocation Areas
- 1 NEPA Process for all beaver relocation
- Training locals to:
 - Capture
 - Quarantine
 - Move



BHWC.org

YouTube:

- Holding Back the Snowpack
- Life in the Land: Big Hole Valley



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