TU’s White Mountain Restoration Projects

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TROUT UNLIMITED

Every River
Needs A Champion

Thompson-Burro Meadow Project overview

- **Reconnect streams to floodplain**
  - **200 log jam structures**
  - **70 sod plugs**
- **128 acres of wet meadow restoration**
- **3.5 miles of stream restoration**
- **Elk Exclosure; 16,000 linear feet of fence**
- **Riparian planting**

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CAT
321D
12

Monitoring post project; 10 years

1. **Water temperature**
2. **Groundwater level**
3. **Water quality**
4. **Flowtography station**
5. **Macroinvertebrate**
6. **Trout populations**

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Hayground Creek Meadow Restoration

We are constructing an exclosure on ~65 acres of wet meadow habitat around ~.75 miles on Hayground Creek. After the exclosure is constructed, we will plant native vegetation along the riparian corridor.

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Paradise Creek Aquatic Organism Passage (AOP) Project

- Located in the Salt River watershed on WMAT lands.
- This project aims to improve fish passage along 9.3 miles of quality Apache trout habitat currently restricted by three undersized culvert barriers.
- The current culverts don't allow Apache trout to freely move throughout the system during periods of drought or spring run-off (velocity barrier).
- The new culverts are open-bottom culverts that allow you to build the stream channel right under the road, eliminating the barrier to trout at any life stage.
- Reconnecting stream habitat for all life stages of Apache trout will create resilience to drought and fires.

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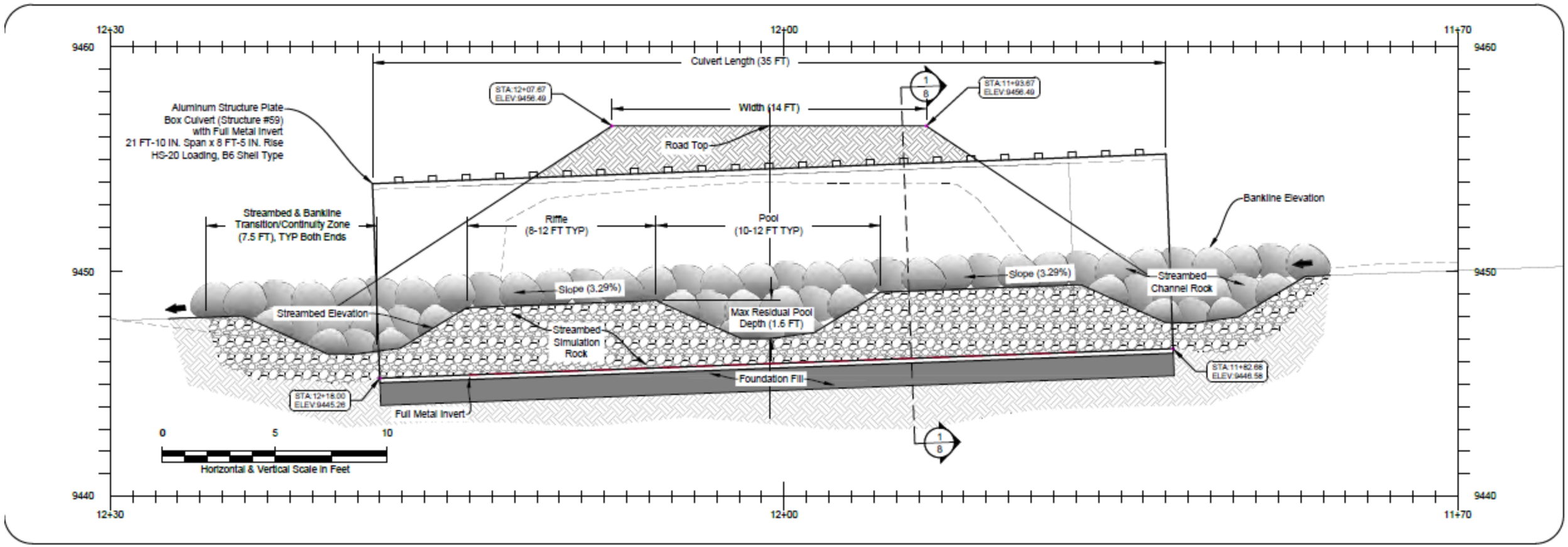
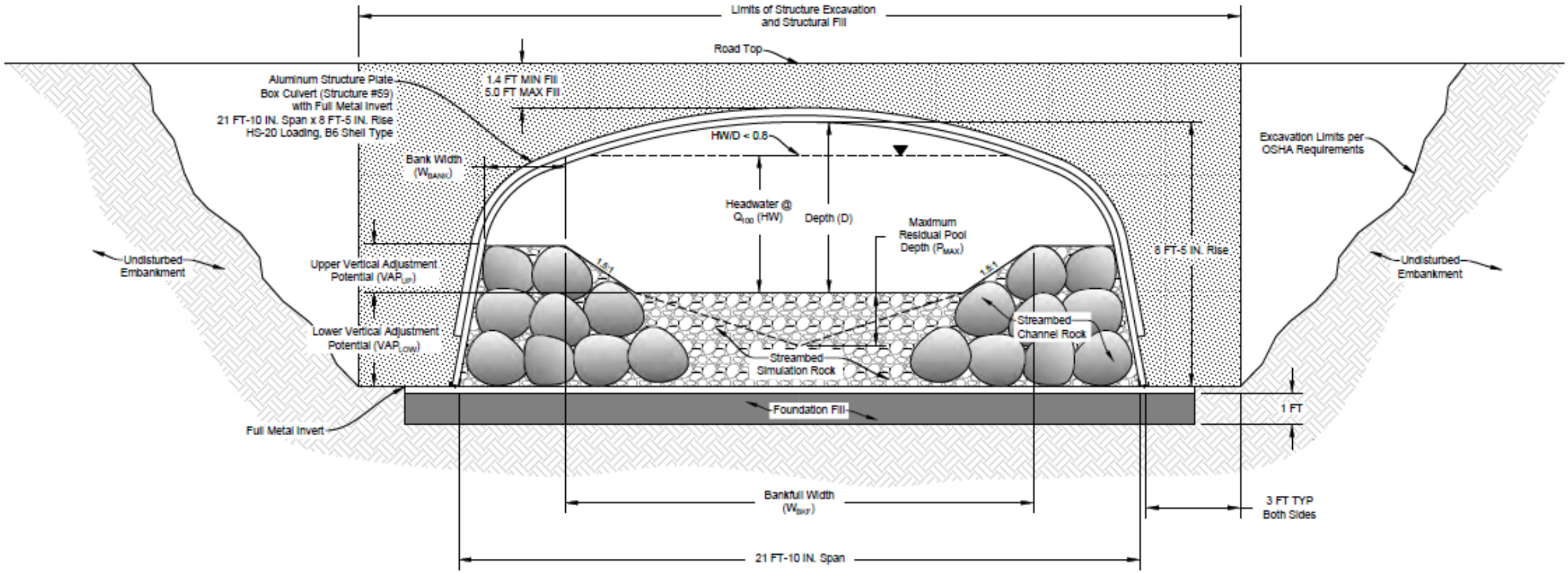

12+30
12+00
11+70
9460
9450
9440
Culvert Length (35 FT)
STA:12+07.67
ELEV:9456.49
Width (14 FT)
STA:11+93.67
ELEV:9456.49
Aluminum Structure Plate
Box Culvert (Structure #59)
with Full Metal Invert
21 FT-10 IN. Span x 8 FT-5 IN. Rise
HS-20 Loading, B6 Shell Type
Road Top
Bankline Elevation
Streambed & Bankline
Transition/Continuity Zone
(7.5 FT), TYP Both Ends
Riffle
(8-12 FT TYP)
Pool
(10-12 FT TYP)
Slope (3.29%)
Slope (3.29%)
Streambed
Channel Rock
Streambed Elevation
Max Residual Pool
Depth (1.6 FT)
Streambed
Simulation
Rock
Foundation Fill
STA:11+82.68
ELEV:9446.58
STA:12+18.00
ELEV:9445.26
Full Metal Invert
0
5
10
Horizontal & Vertical Scale in Feet



1 / - Aluminum Box Culvert at Road-Stream Crossing
Typical Section at Riffle, Constriction, & Pool

NTS

Deep Creek AOP (culvert replacement)

- Located in the Salt River watershed on WMAT lands.
- This project aims to improve fish passage along 10.1 miles of quality Apache trout habitat currently restricted by eight undersized culvert barriers.
- The current culverts don't allow Apache trout to freely move throughout the system during periods of drought or spring run-off (velocity barrier).
- The new culverts are open-bottom culverts that allow you to build the stream channel right under the road, eliminating the barrier to trout at any life stage.
- Reconnecting stream habitat for all life stages of Apache trout will create resilience to drought and fires.
- Repair headcuts on the service road that runs adjacent to Deep Creek.

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Lower Reach Road Erosion: Existing Conditions Map

J Lower Reach Road Erosion: Typical Culvert Damage & Headcut

K Lower Reach Road Erosion: Typical Road Damage & Headcut

L Lower Reach Road Erosion: Downstream Sediment at Culvert #1

Boggy, Centerfire, and Home Creek Wet Meadow Restoration

- Low-tech process-based restoration (LTPBR) techniques to increase floodplain storage, restore stream function and natural flow regimes, address erosion processes, restore channel stability, increase surface water-groundwater exchange and floodplain connection, and make the landscape more resistant to impacts from wildfire and drought.
- Elk exclosure around stream and riparian area.
- This is a multi-year, multi-phase project. Utilizing upland forest thinning management with lowland wet meadow restoration.

Boggy: 3.4 mi of stream/ riparian planting, 5.9 mi of fence

Home: 1 mi of stream, 2 mi of riparian planting, 1.76 mi of fence

Centerfire: 4.4 mi of stream/ riparian planting, 8.25 mi of fence

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Black River Rapid Restoration Potential Assessment- DRAFT

For Trout Unlimited
March 2026

Applied Science & Engineering

3.1 Assessment Area

The assessment area encompasses the reaches of Home Creek, Centerfire Creek, and Boggy Creek authorized for in-stream structure under the EA (Figure 3-2). All three reaches lie within USGS HUC-8 15060101 (Black River). Boggy Creek is classified as a tributary to Centerfire Creek, which together flow into the mainstem Black River. Home Creek is a tributary to the West Fork Black.

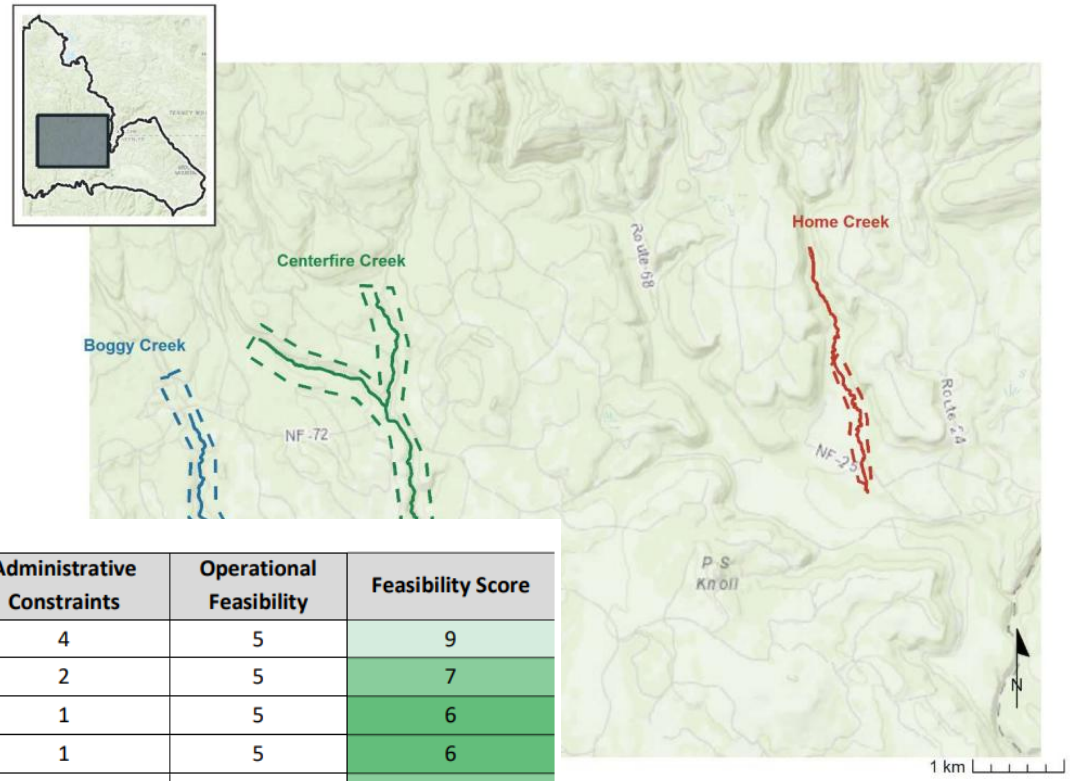

Table 8-3. Reach Prioritization Matrix: Assessment Area Summary

Reach ID	Classification	Trout Value	Response Potential	Landscape Nexus	Benefit Score	Administrative Constraints	Operational Feasibility	Feasibility Score
Boggy 1–3	Type A	5	5	3	13	4	5	9
Home 3	Type A	2	4	5	11	2	5	7
Home 4	Type B	2	4	5	11	1	5	6
Home 5	Type B	2	4	5	11	1	5	6
Centerfire 2–3	Type A	3	4	4	11	3	4	7
WF Centerfire 2–3	Type A	3	5	3	11	5	5	10
EF Centerfire 1–2	Type A	3	5	3	11	5	5	10
Boggy 4	Type C	5	1	3	9	4	3	7
Home 1–2	Type C	2	2	5	9	2	4	6
Centerfire 1	Type C	3	1	4	8	3	4	7
Centerfire 4	Type C	3	1	4	8	3	3	6
WF Centerfire 1	Type B	3	2	3	8	5	1	6

Color hue scales with score. Results have been organized by Benefit Score. The interactive workbook has been provided as an attachment to this report. EF – East Fork; WF – West Fork

Bear Wallow Wilderness Fish Barrier Removal

- A non-functioning river-rock masonry fish barrier and associated gabion structures occupy the active channel of Bear Wallow Creek within the Bear Wallow Wilderness
- Although ineffective, it still poses a barrier to the movement of Apache Trout throughout this system.
- A new barrier was constructed on San Carlos Tribal lands approximately 1 mile downstream at the confluence of the Black River.
- TU and agency partners are looking to remove the barrier in the Fall of 2027.