



GRAND COUNTY

**WATERSHED
RECOVERY**

USDA – NRCS Emergency Watershed Protection Program for the East Troublesome Fire

April 8, 2021 Town Hall



EWP Sponsor Leads

For **Grand County**

- Katherine Morris, Water Quality Specialist

For **Northern Water**

- Kyle Whitaker, Colorado River Programs/Water Rights Manager

Topics

- Overview of East Troublesome Fire (ETF) Emergency Watershed Protection (EWP) Program
 - Program Timeline
 - Sponsor Areas
 - NRCS EWP Decision Process
 - EWP Treatments & Practices
- Implementation Overview
- What to Expect Next

Emergency Watershed Protection (EWP)

- NRCS offers financial and technical assistance for various activities under EWP Program:
 - **Remove debris** from stream channels, road culverts and bridges;
 - reshape and **protect eroded streambanks**;
 - correct damaged or destroyed drainage facilities;
 - establish vegetative cover on **critically eroding lands**;
- The EWP Program **cannot be used**:
 - to address problems that **existed prior** to the disaster;
 - to improve the level of protection above the existing level at the time of the disaster;
 - for projects' operation and maintenance;
 - to repair private or public transportation facilities or utilities;
 - to install **non-essential** restoration work that will not reduce or eliminate adverse impacts from the natural disaster;



Emergency Watershed Protection (EWP)

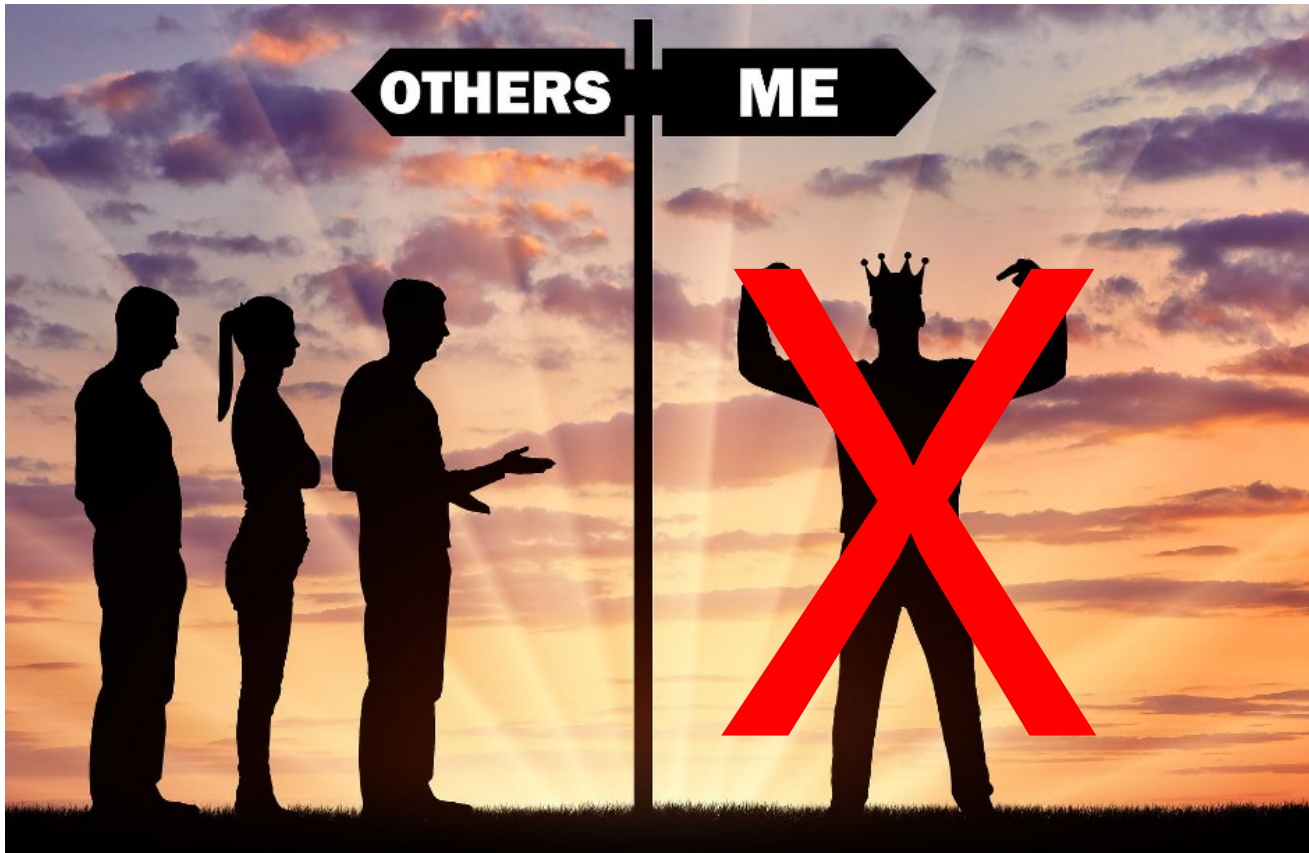
- If Funded, all projects must:
 - Demonstrate a reduced threat to **Life & Property**
 - Be Economically Feasible
 - Be Environmentally Sound
 - Be Socially Sound
 - Be designed to acceptable engineering standards



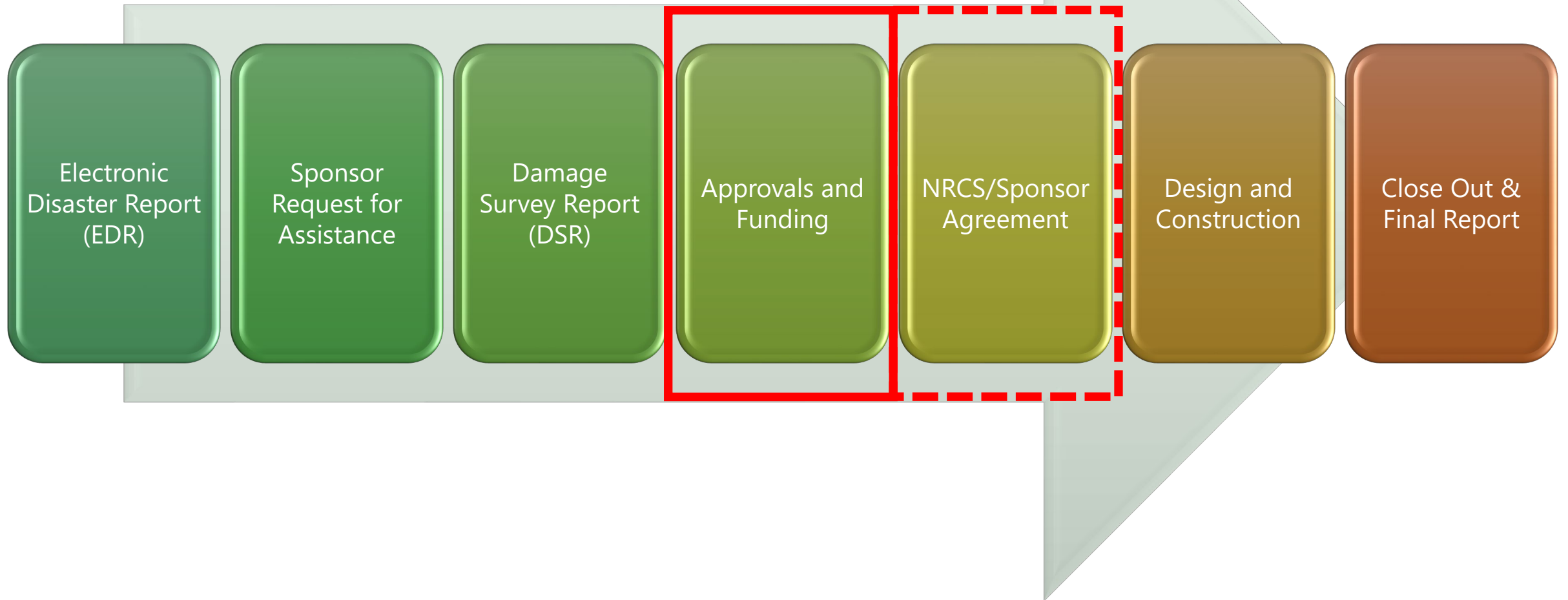
EWP SPONSORS

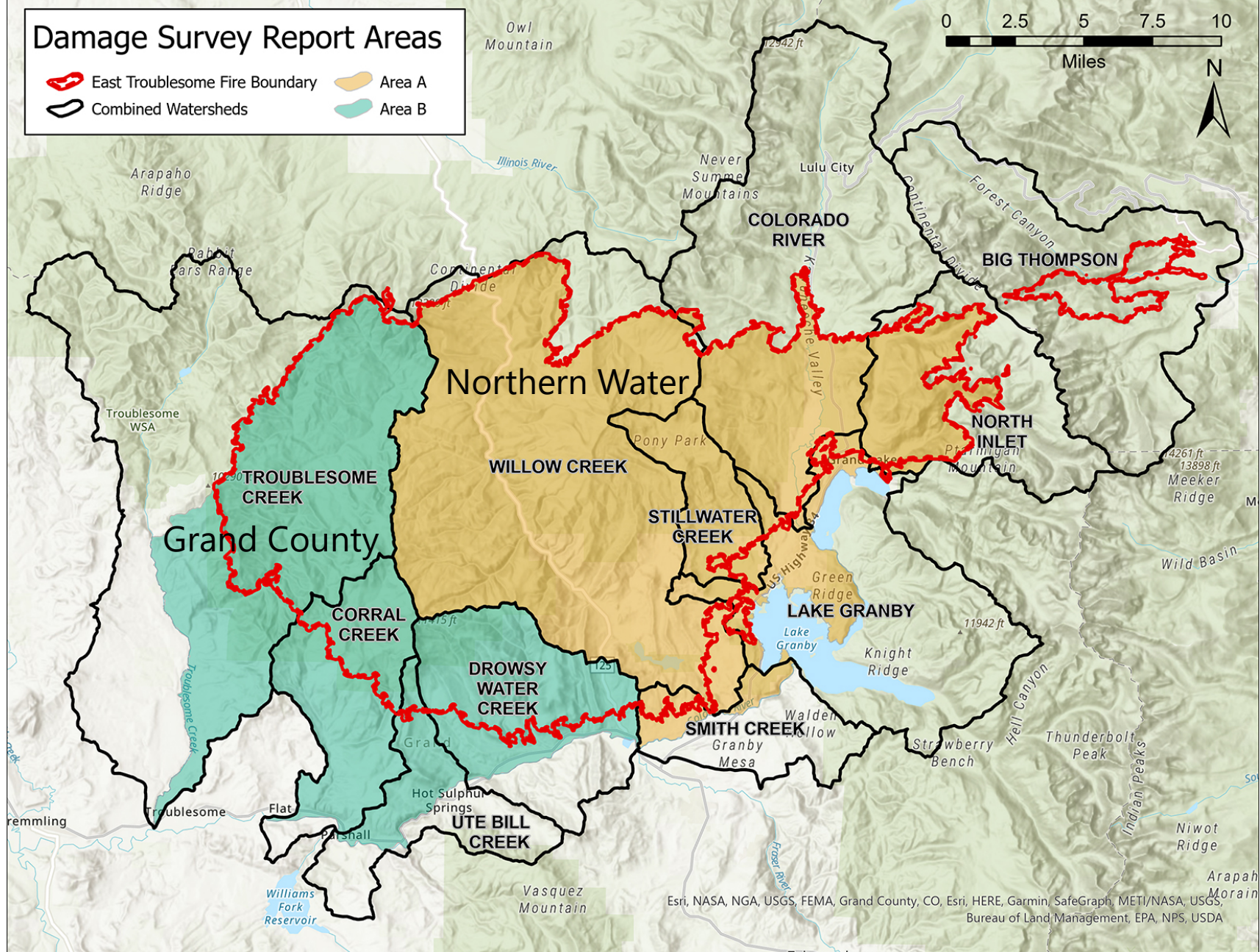
Northern Water (Area A)

Grand County (Area B)

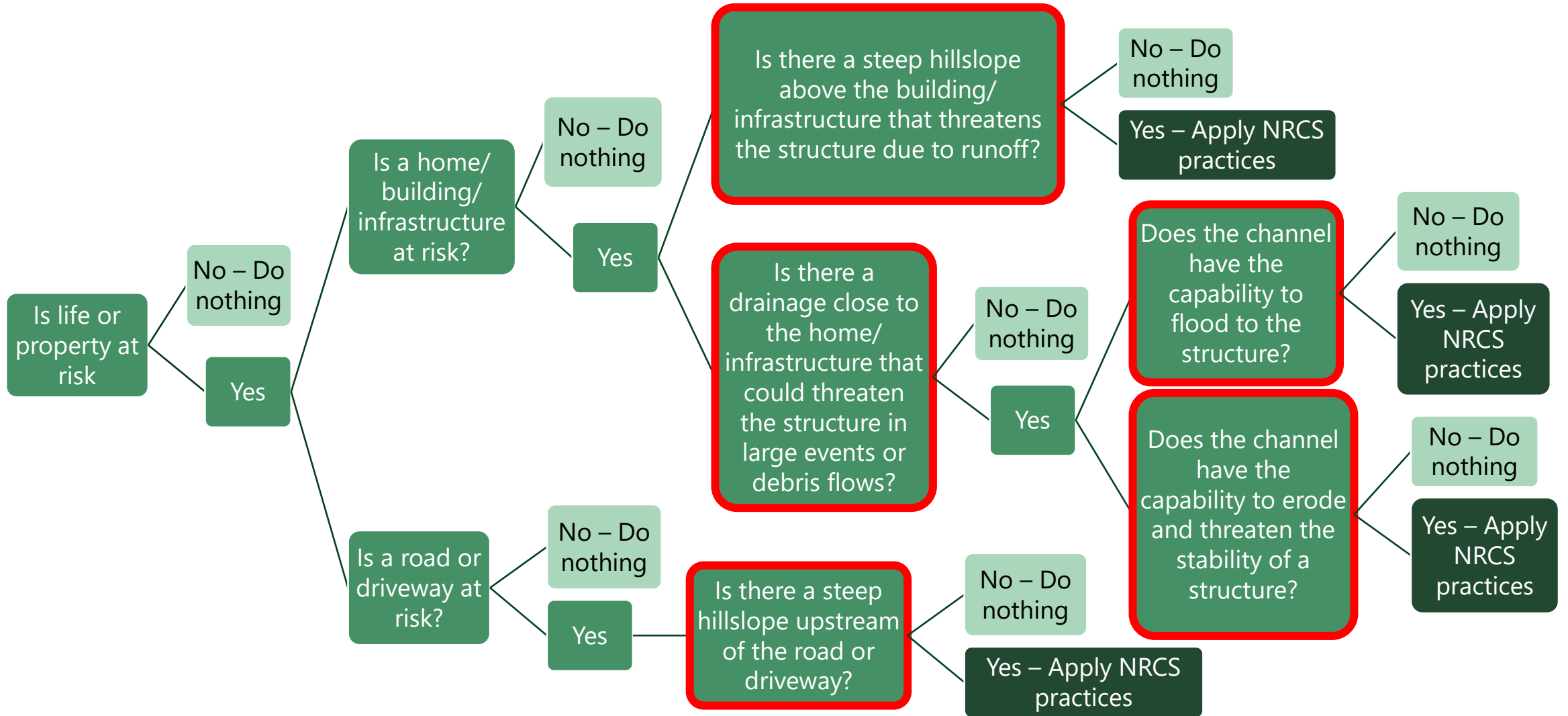


EWP Process Overview





EWP Decision Tree



EWP Treatment Practices

Erosion Control

- Seeding/Mulching
- Log Erosion Barriers
- Mastication
- Bank Stabilization

Sediment/Debris Control

- Debris Removal
- Debris Booms
- Sediment Basins
- Sediment Removal

Flood Protection

- Flood Barrier Bags
- Overflow Channels

Other

- Emergency Warning System
- Ditch/Canal Improvements
- Road & Bridge Protection
- Trash racks

Erosion Control

Seeding



Areal Mulching



Mastication



Erosion Control

Straw Wattles/Bales



Log Erosion Barrier



Sediment and Debris Control

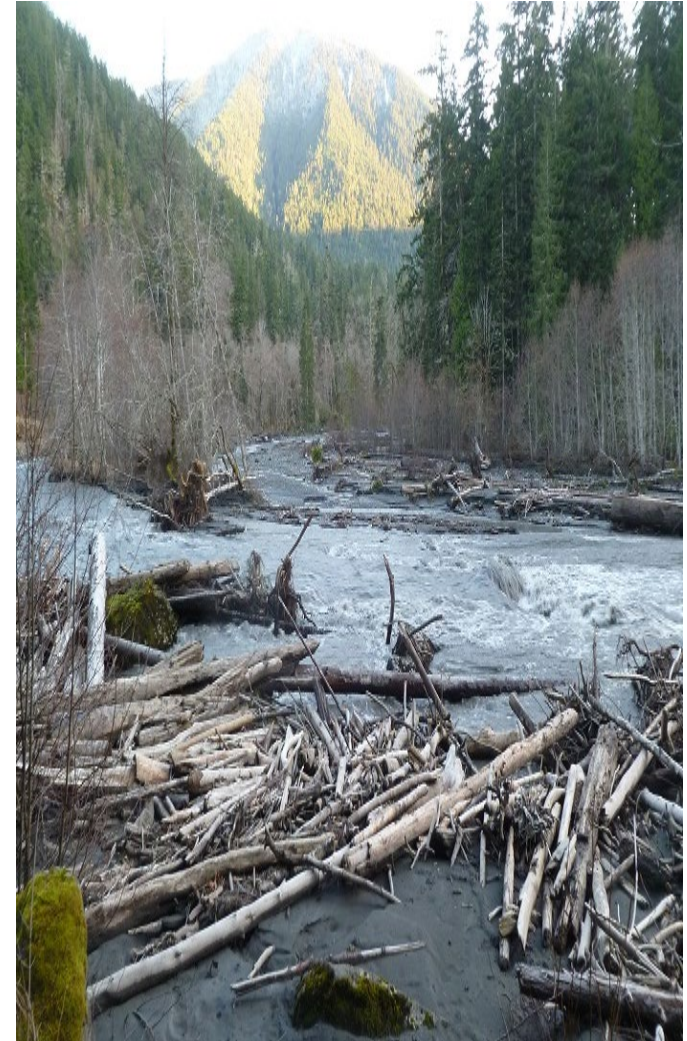
Debris Booms



Sediment Basins



Existing Debris Removal



Flood Protection

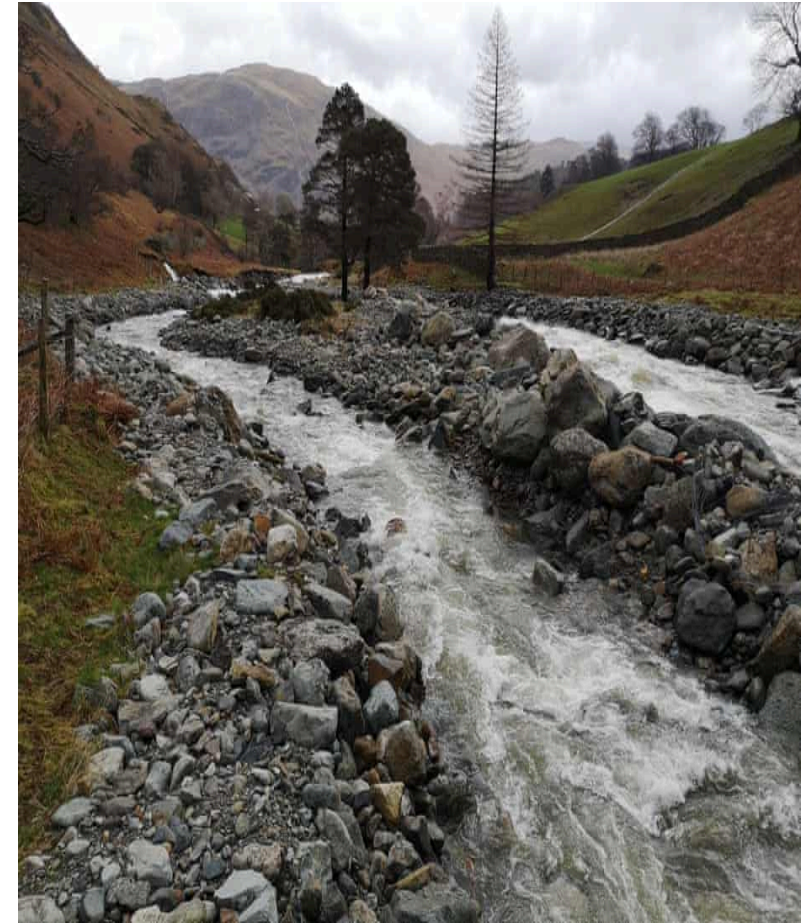
Flood Barrier Bags



Flood Barrier Bags



Overflow Channel



Other Protections & Practices

Road Armoring



Bridge Trash Rack



Emergency Warning System



Other Protections & Practices

Culvert Trash Rack



Steel Debris Barrier



Steel debris barrier before flood (TJ Burr, NRCS, 6/25/2020)

Construction Funding

Phased Implementation

Spring



Fall/Beyond

EWP Treatments & Practices

Emergency Warning System
Pre-existing Debris Removal
Seeding/Mulching/Mastication
Debris Management/Removal
Sediment Basins
Hillslope Erosion Control
Streambank Stabilization
Overflow Channels
Road Protection
Structure Protection (Flow/Sediment)
Reservoir Sediment Management

Low/Limited



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High/Significant

Further Analysis/Design

Engineering Funding



Self-Serve Station Concept





Self-Serve Station Concept



Contact Information

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