Tecolote Creek AOP/Instream Habitat Improvement Project

Fisheries Division

Project Contacts

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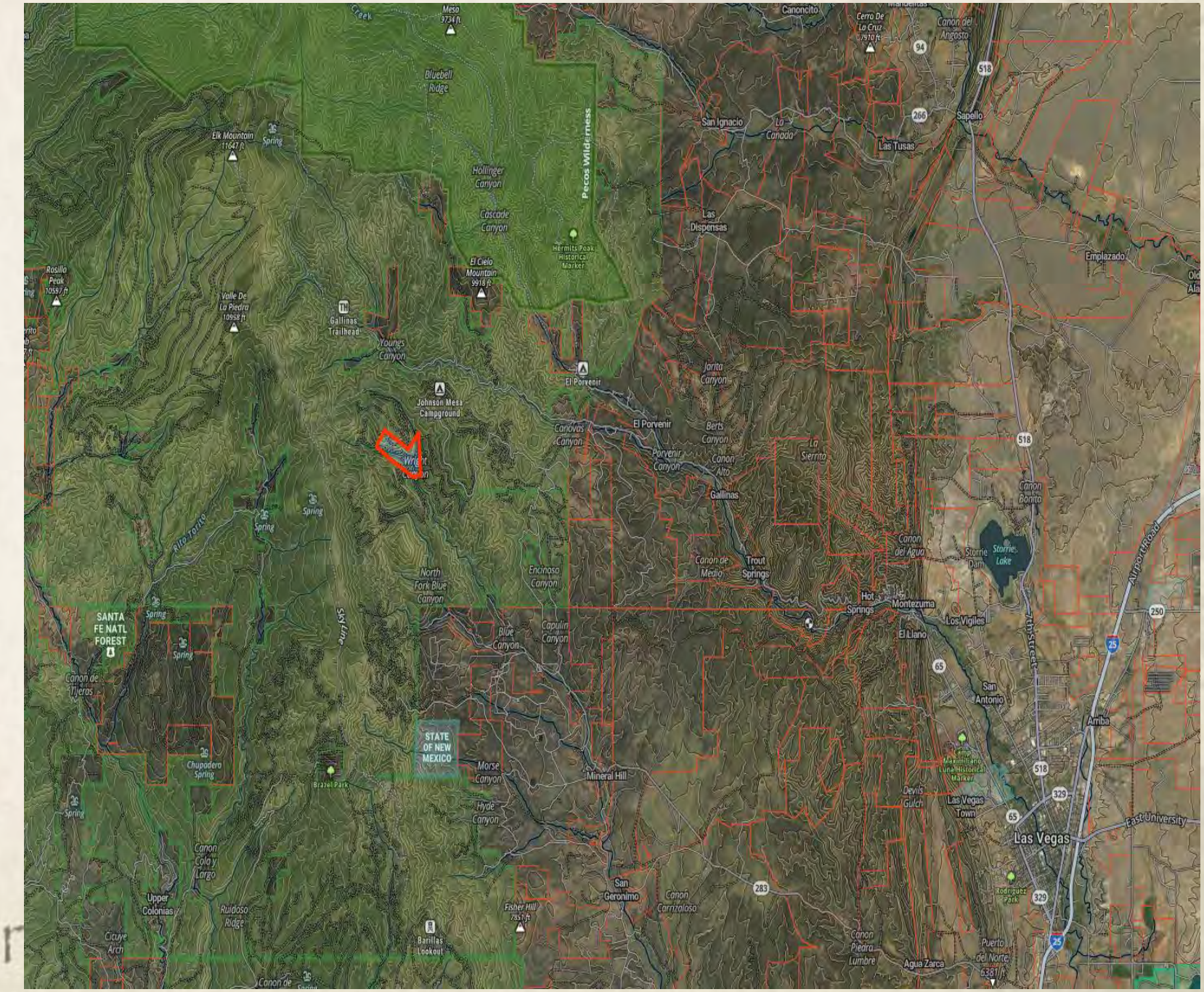
Project Location

- Santa Fe National Forest, Pecos-Las Vegas Ranger District



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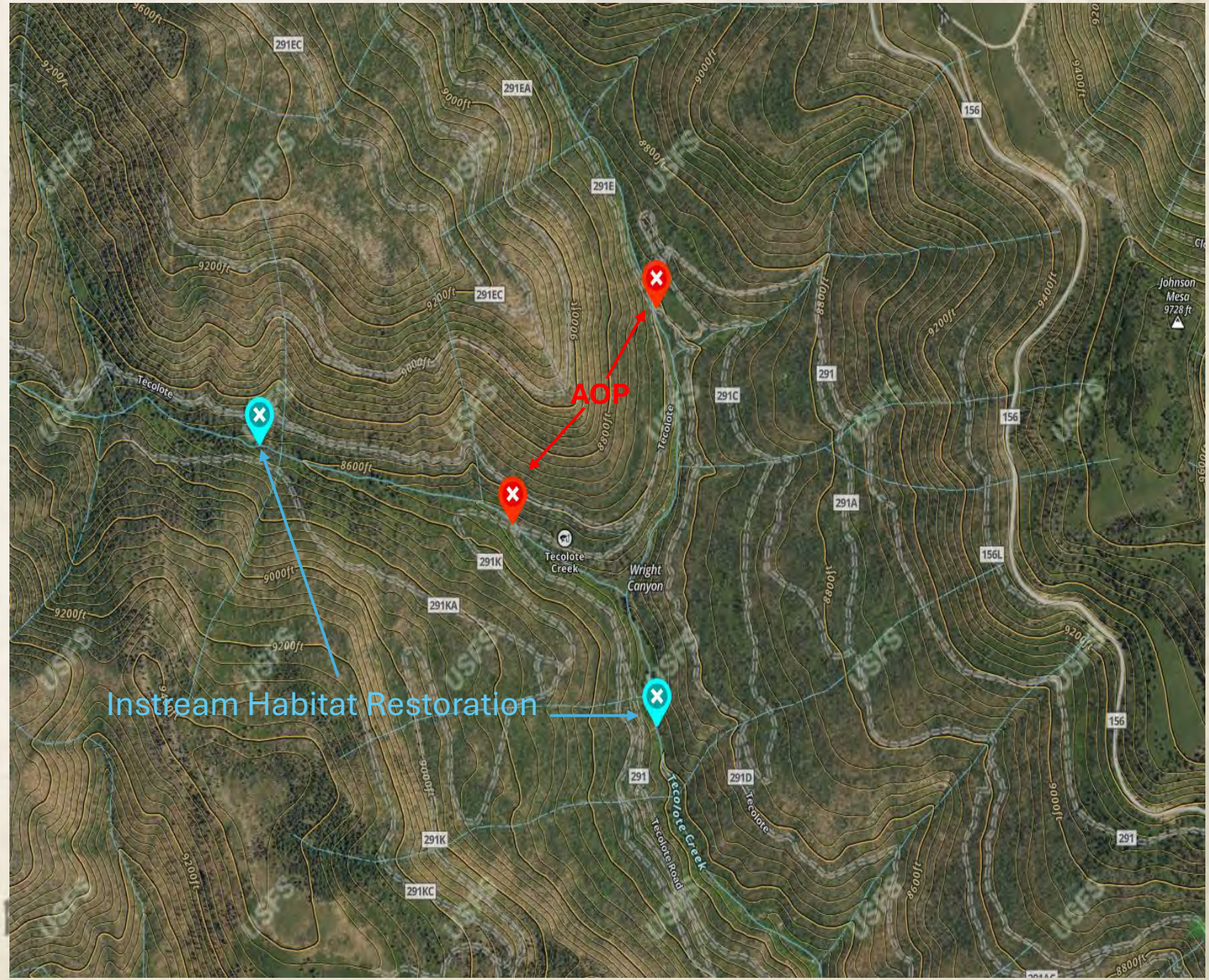
Project Location

- Instream Habitat Coordinates
  - Downstream (35.68587, -105.47907)
  - Upstream (35.69179, -105.49171)
  - ~ 1 River Mile
- AOP Coordinates
  - North (35.69466, -105.47909)
  - South (35.69012, -105.48366)



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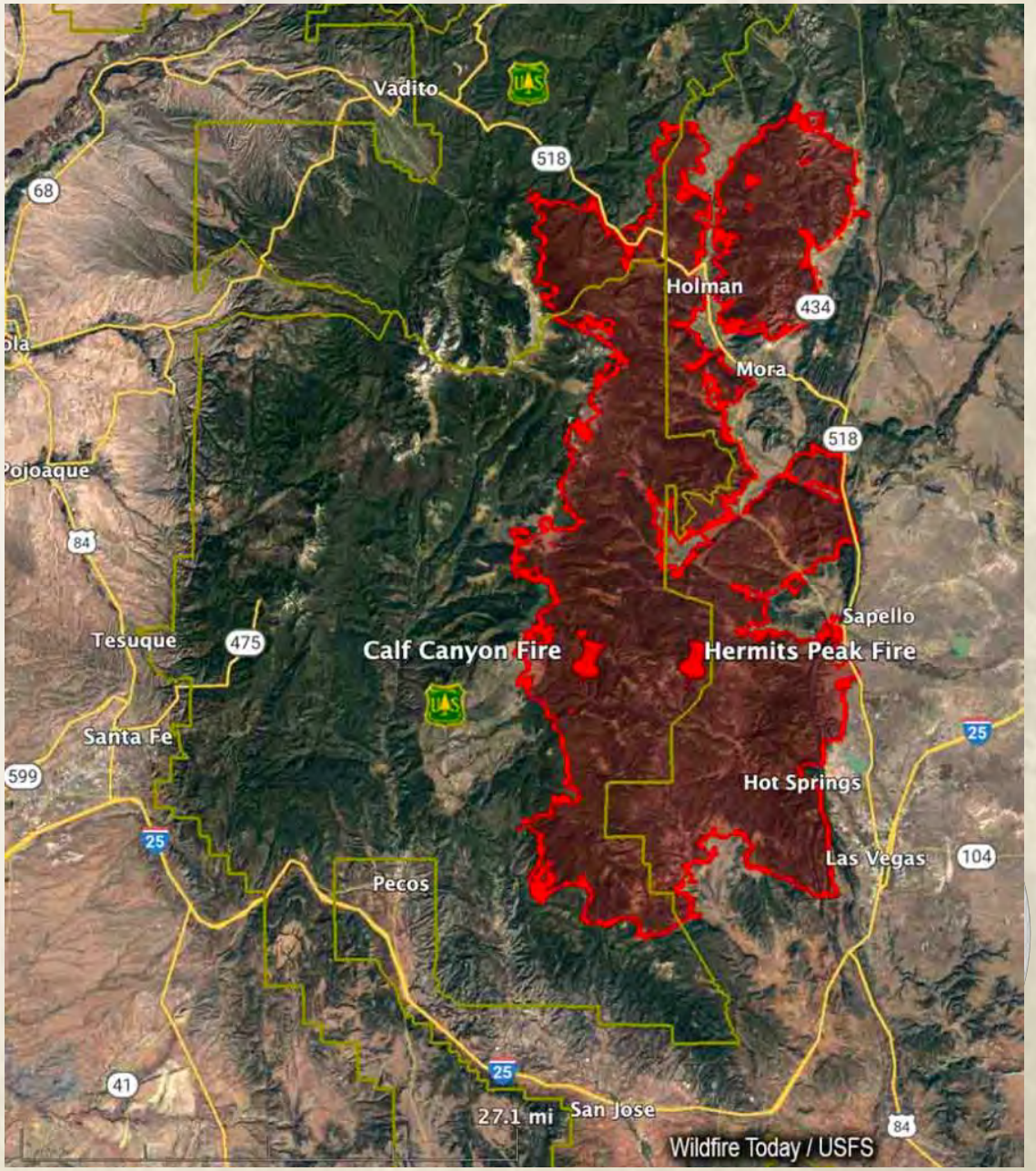
Project Background

- 2022 Calf Canyon/Hermits Peak Fire burned 341,500 acres
- Brook Trout occupied Tecolote Creek prior to the fire
- Historically occupied by Rio Grande Cutthroat Trout
- Currently no fish are present in Tecolote
- Both AOP's are nonfunctional due to post fire flooding
- SFNF is continuing maintenance for public hunting and fishing access
- Natural waterfall barrier downstream



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Project Purpose

- **Restoring Aquatic Habitat**
  - Improving channel stability
  - Restore pool frequency and depths
  - Restore natural cover and shading to regulate water temperature and maintain adequate dissolved oxygen levels
  - Increase resilience to future disturbances
  - Erosion control
  - Nutrient management
  - Provide suitable habitat for amphibians (e.g., northern leopard frog)
- **Repatriation of Rio Grand Cutthroat Trout (Pecos Strain)**
  - Increase distribution to 11 streams
- **Instream Structure Types**
  - Root wads
  - Rock/timber sills
  - Rock/log veins
  - Boulder clusters
  - Willow Pole Planting

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Project Purpose

Restore AOP's

- **Mimicking Natural Channels:**
  - Replicate the physical characteristics of the natural stream within the crossing structure, including channel dimensions, substrate, and bed material.
- **Promote fish passage:**
  - By replicating natural stream conditions, stream simulation aims to ensure that fish and other aquatic organisms can easily navigate through the structure.
- **Restore Ecological Processes:**
  - Stream simulation strives to restore ecological processes, such as sediment transport, debris passage, and hydraulic conditions, within the passage structure.
- **Reducing Maintenance Needs:**
  - Stream simulations are designed to have larger sizes, which decreases the likelihood of plugging and overtopping, ultimately reducing long-term maintenance needs.
- **Secure Public Hunting, Fishing, and Recreational Access**
- **Open road access for continued restoration within the burn scar**

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Project Summary

Habitat Stamp Funds

Instream Habitat Restoration and AOP Designs -$100,000

U.S. Forest Service Funds

Instream Habitat Restoration and AOP Implementation- Cost ?

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NEW MEXICO WILDLIFE