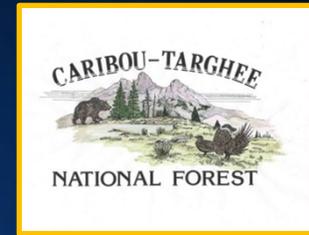
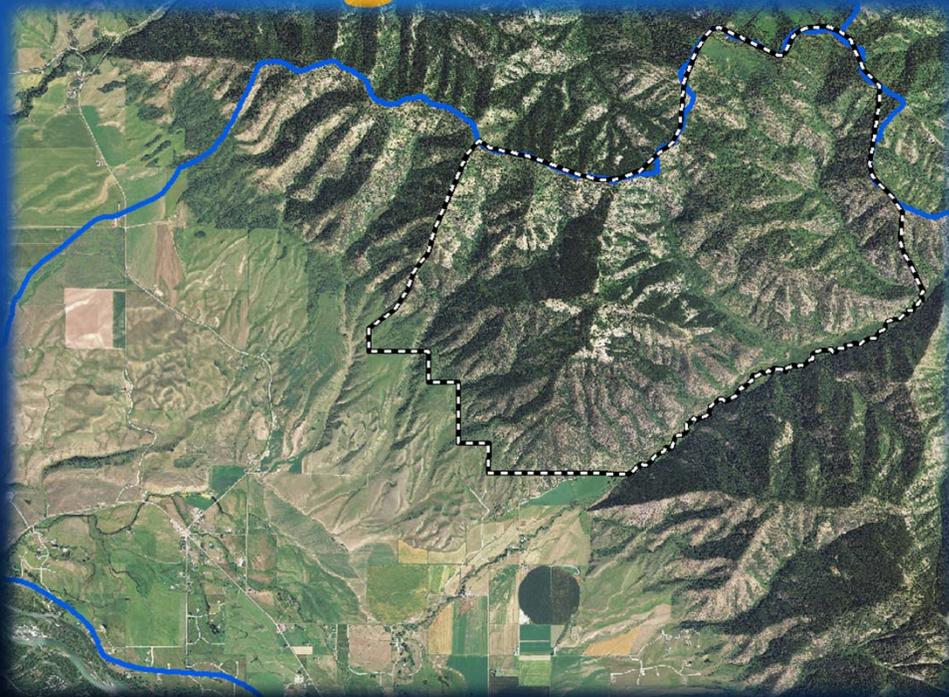




# Caribou-Targhee NF Palisades Ranger District

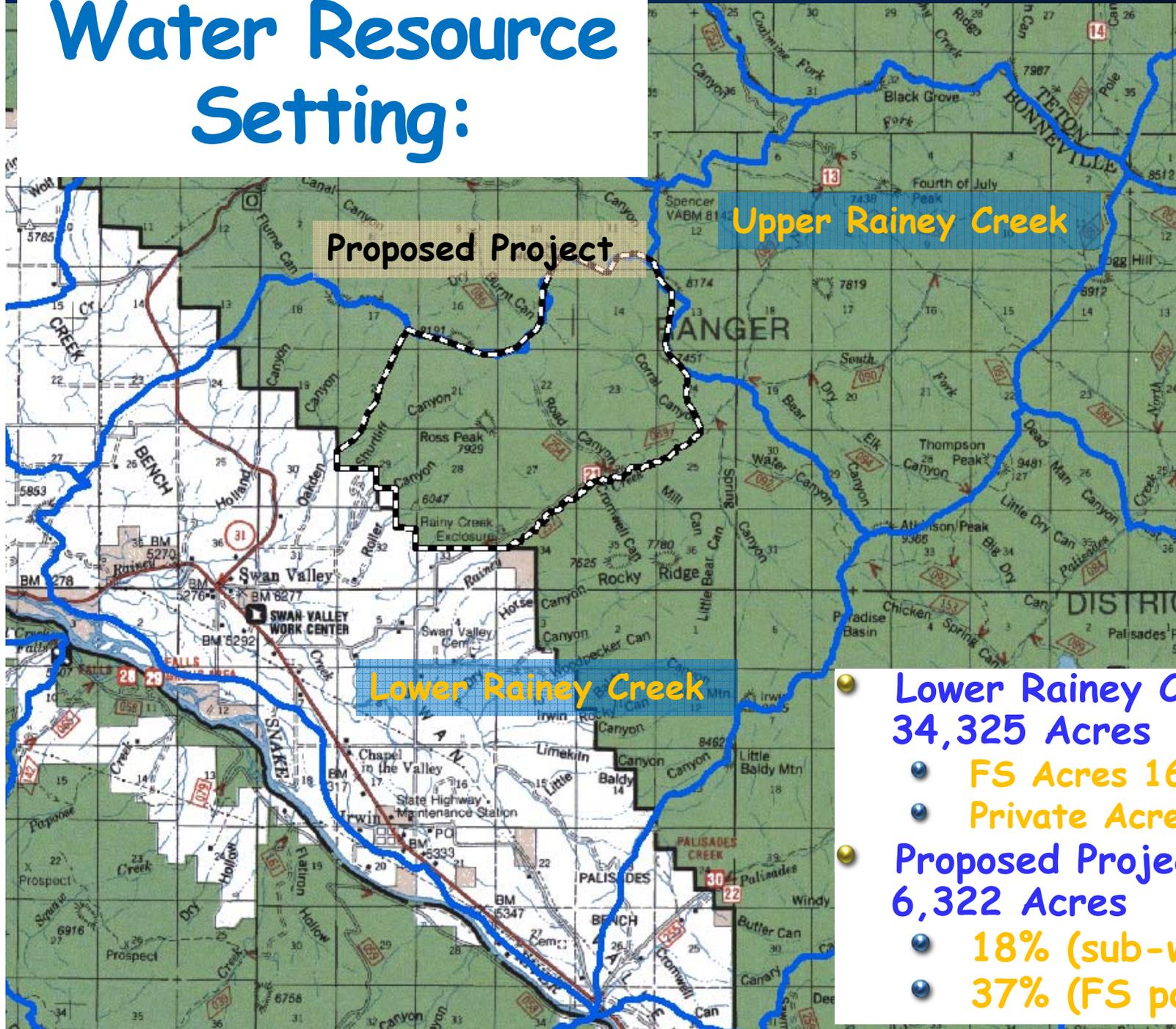


## Rainey Creek Vegetation Restoration



**Louis Wasniewski**  
Forest Hydrologist

# Water Resource Setting:



Upper Rainey Creek

Proposed Project

Lower Rainey Creek

Lower Rainey Creek - 34,325 Acres

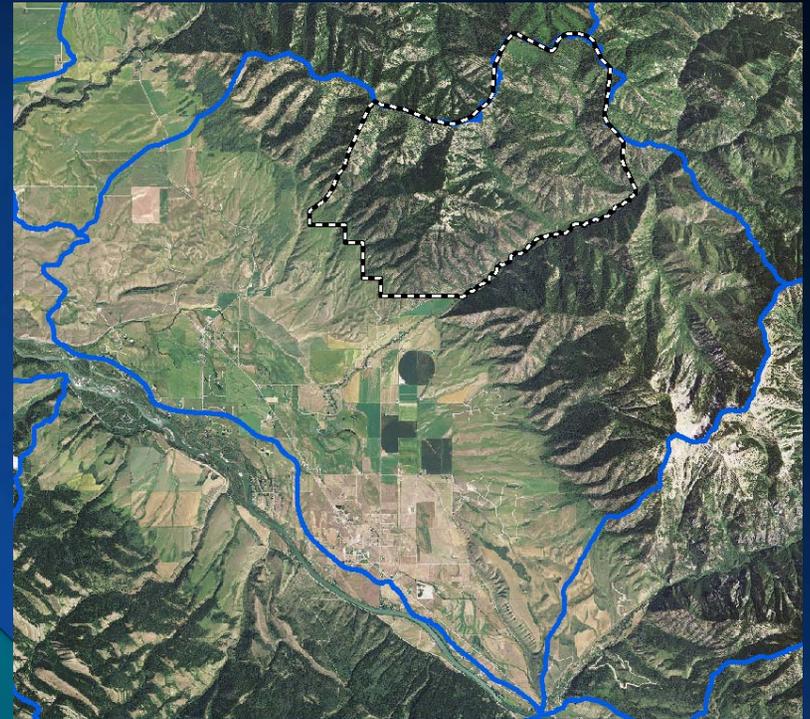
- FS Acres 16,886 (49%)
- Private Acres 17,439

Proposed Project - 6,322 Acres

- 18% (sub-watershed)
- 37% (FS portion)

# Relevant Direction

- Targhee RFP (USFS, 1997)
  - Forest wide Standards and Guidelines.
    - Standards and Guidelines for fisheries, water, and riparian resources
    - Maintain and Improve or Restore Water Quality, Stream function etc.
    - Hydrologic Disturbance – 30%
  - Subsection Direction
    - Big Holes subsection direction
  - Management Prescriptions
    - Aquatic influence zone (AIZ) prescription
- Clean Water Act (CWA)
- Idaho Water Quality Standards - DEQ
- Executive Orders: Floodplain Management (11988) & Protection of Wetlands (11990)



Provides Protect or Improvement of Water Resources

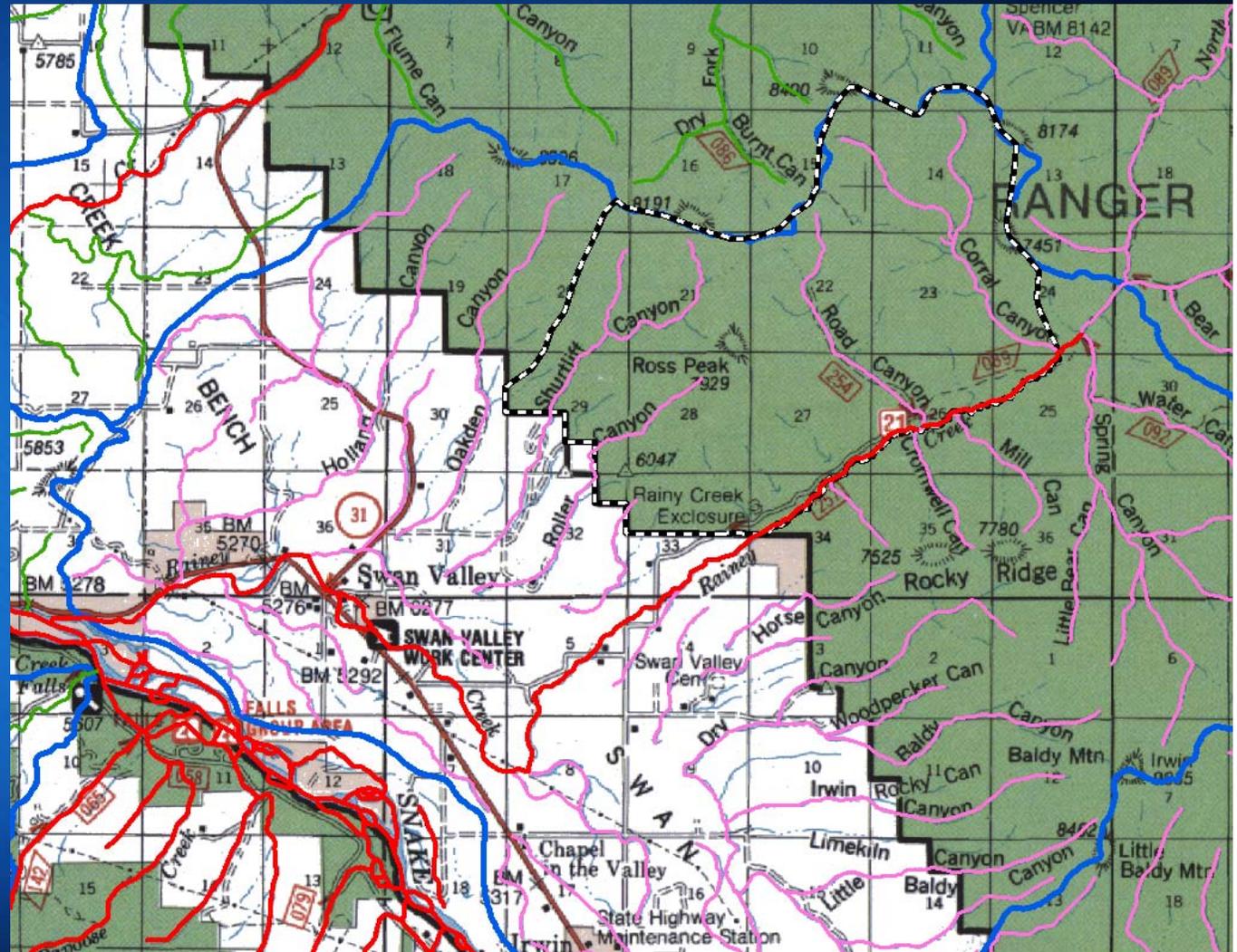
# Idaho DEQ 303(d) Impaired Waters

## DEQ - 2010 Integrated Report

- Fully Supporting
- Not Assessed
- Not Supporting

### Rainey Creek

- Beneficial uses  
Cold Water  
Aquatic Life &  
Primary Recreation  
Contact
- Listed Pollutant  
Escherichia coli  
(e-coli) &
- Combined  
Biota/Habitat Bio-  
assessments



# Hydrologic Disturbance

(30% Disturbance Guideline)



## Current Condition

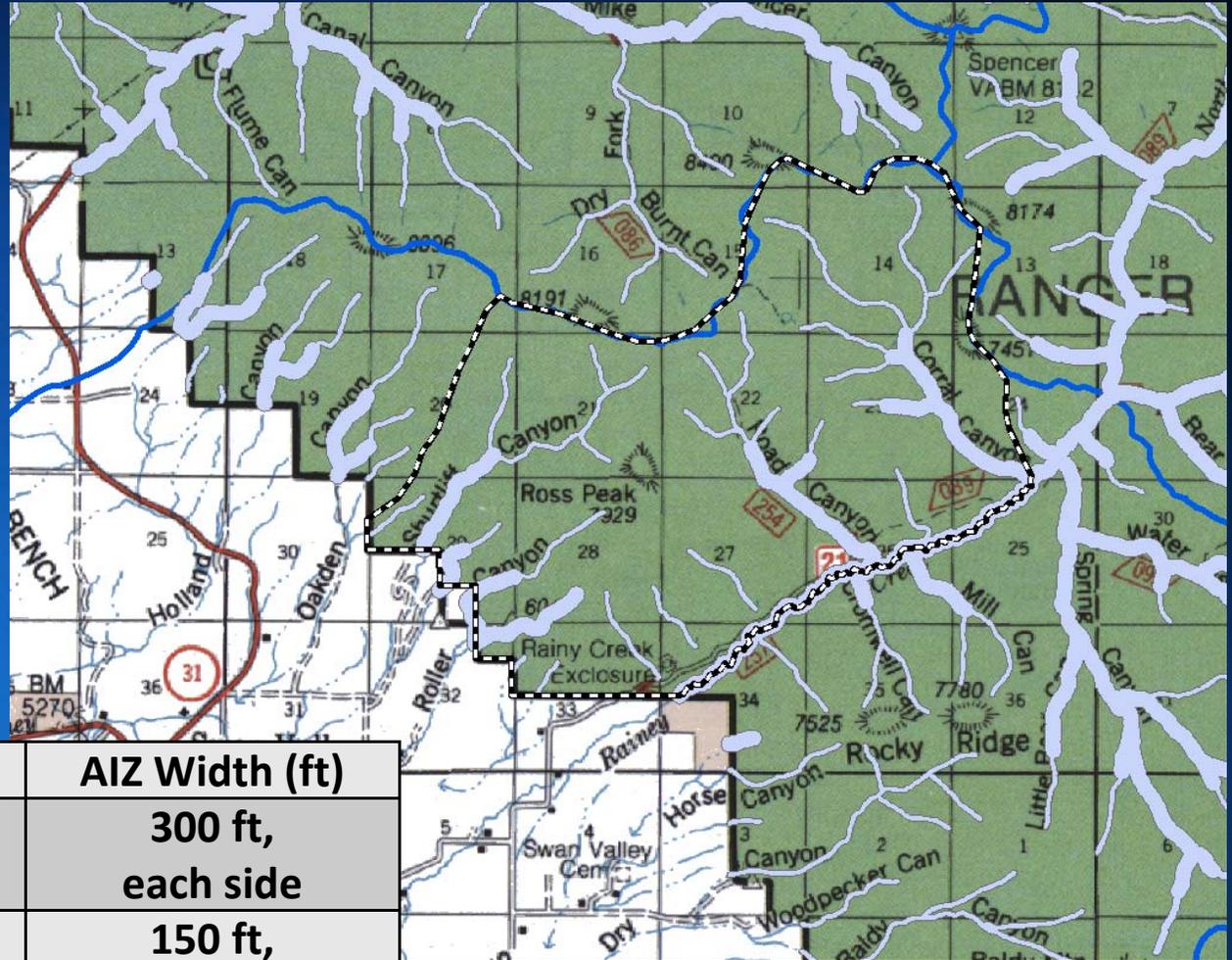
- Lower Rainey Creek Sub-Watershed
  - 1,886 (11.2%) Hydro-Disturbed Acres
  - (1987 Spring Canyon Fire)



## Guideline Constrains

- Proposed Project Boundary
  - 1,886 (11.2%) Hydro-Disturbed Acres
  - (1987 Spring Canyon Fire )
  - Approx. 18.8 % room for additional disturbance
  - Equates to 3,175 acres of the 6,322 proposed project area.

# Aquatic Influence Zone (AIZ)



| Water Type  | AIZ Width (ft)    |
|---|-------------------|
| Fish-bearing stream reaches                           | 300 ft, each side |
| Perennial non-fish bearing stream reaches             | 150 ft, each side |
| Lakes   | 300 ft            |
| Reservoirs, ponds, and wetlands greater than one acre | 150 ft            |
| Intermittent streams and wetlands less than one acre  | 100 ft, each side |

# Best Management Practices (BMPs)

“BMPs have been found effective at protecting water quality and minimizing erosion.”

- Compliance with the Clean Water Act (40CFR130.2(m))
- Idaho specifies that BMPs will be used for water quality protect of designated beneficial uses.

# Best Management Practices (BMPs)

## Specific Examples

- Ensure Aquatic Influence Zone (AIZ) buffering to act as a filter.
- Avoid storage of fuels and toxicants, or refueling within the AIZs unless there is no alternative.
- Consult the hydrologist or fish biologist during the burn plan preparation. Minimize burning within the AIZ to what is needed for riparian area enhancement.
- Avoid locating activity centers (e.g. bases, camps, helibases, staging areas, helispots, or hazardous material storage facilities) within the AIZ
- Keep hydrologic disturbance below 30% within the sub-watershed and avoid burning larger percentages of smaller drainages.
- Ground Fine Organic Matter: Generally strive to maintain fine organic matter over at least 50 percent of the area (RFP, III-6 & 7).  
(G)

# Watershed Improvement Program



Projects Designed to  
Improve Water Resource  
Conditions



# Palisades RD

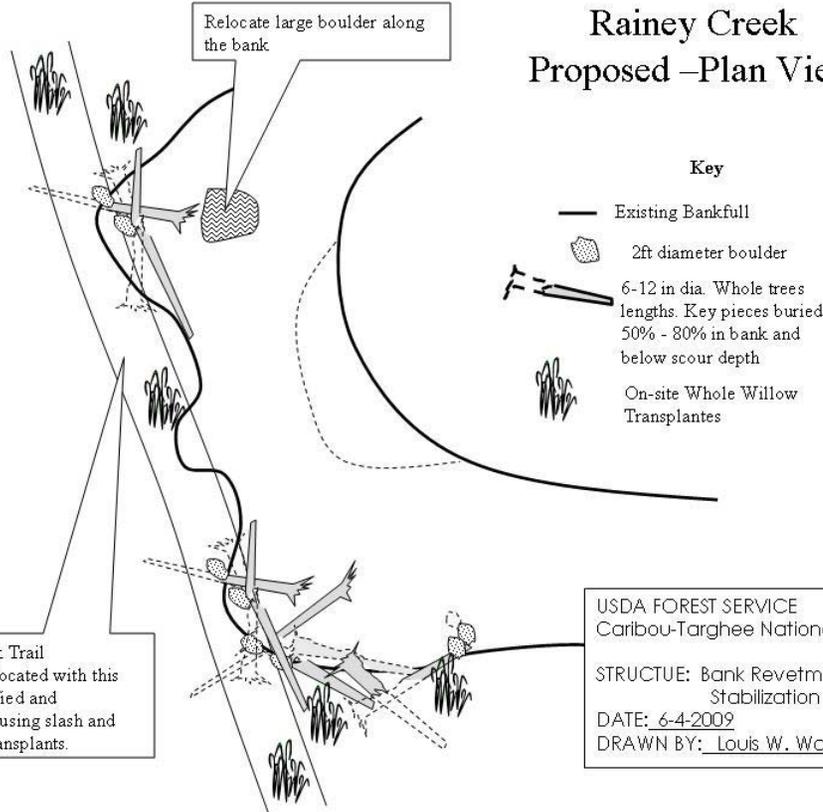
## Rainey Creek Trail Improvements

Rainey Creek Trail Washout  
Palisades Ranger District  
Location Map

Proposed Trail  
Rehabilitation Route

Rainey Creek Trail Washout

Rainey Creek  
Proposed - Plan View





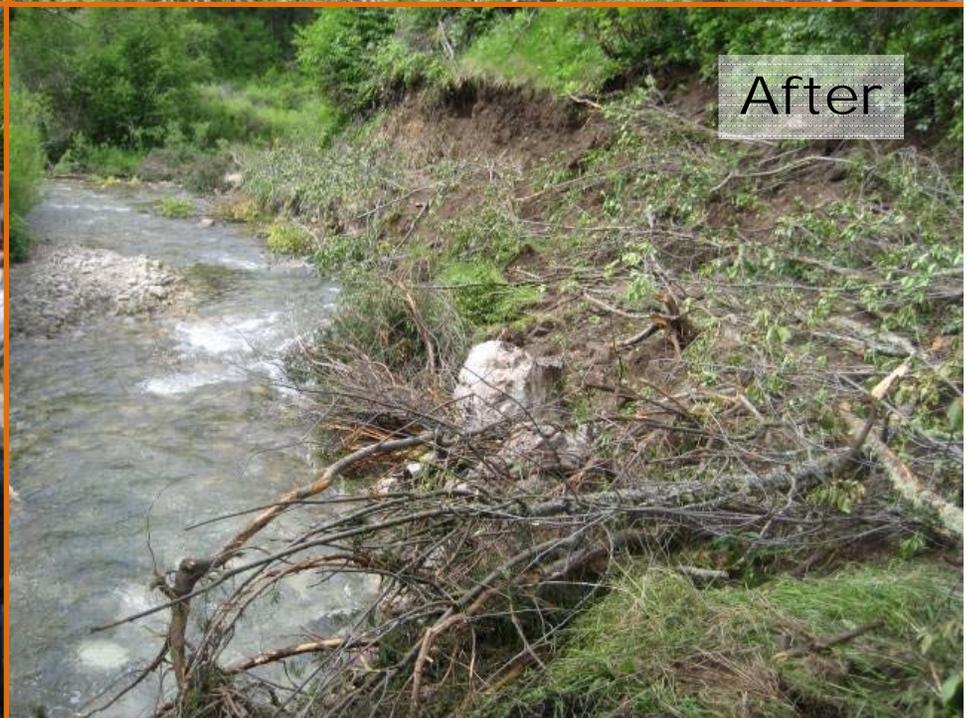
Before



After



Before



After

**Trailhead @ End  
of FSR 253**

**First Bank  
Stabilization  
Reach**

**Second Bank  
Stabilization  
Reach**

Upper Rainey Creek Road  
Stabilization (2012)

# Upper Rainey Creek Road Stabilization (2012)



# Questions!

