

# Weaver Creek Watershed



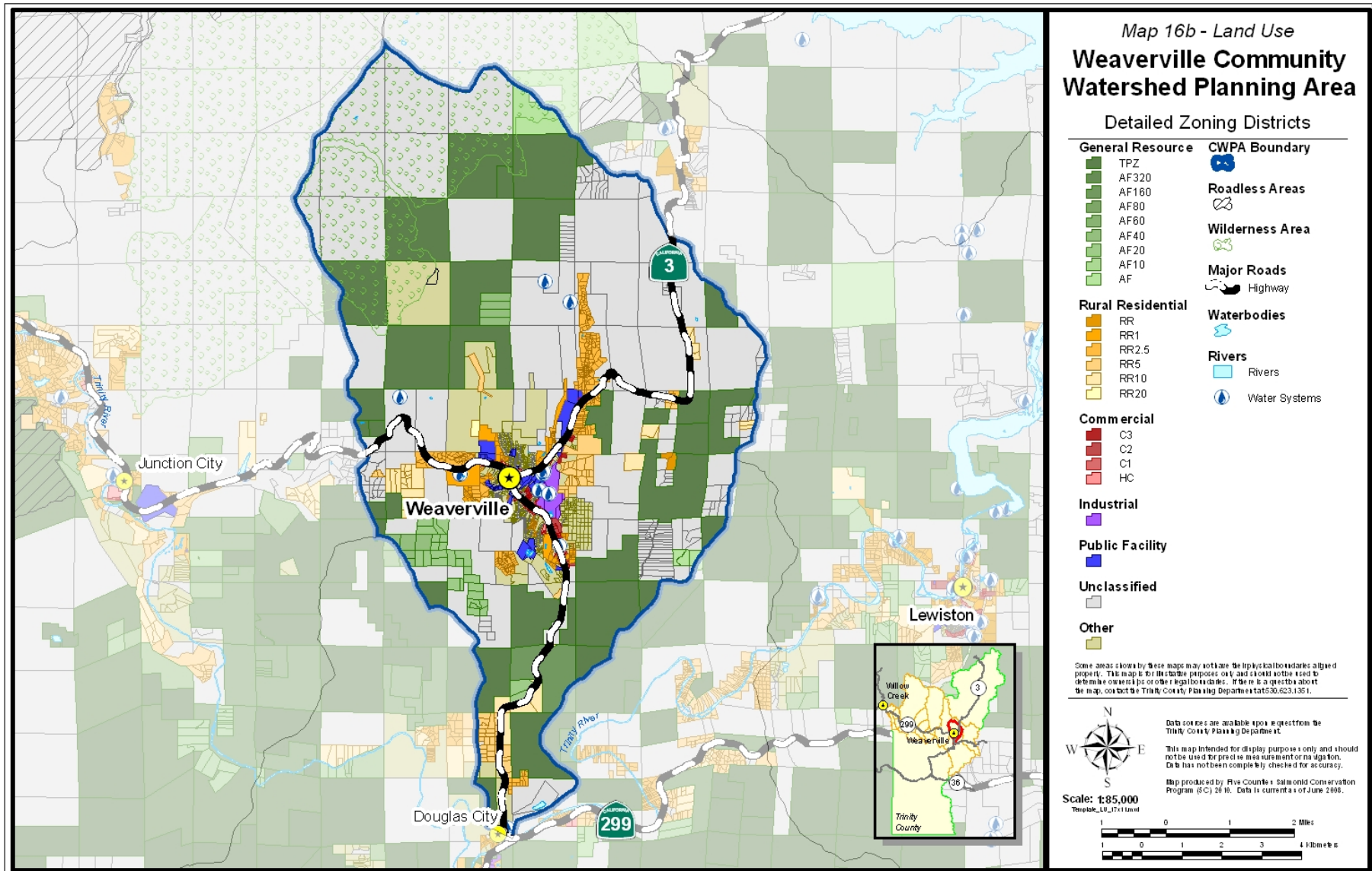


# Weaver Creek Watershed





# Weaver Creek Watershed





# **Salmon Challenges:**

**Mining Legacy**

**Urban Development**

**Climate Change**

**Fire & Flood**

**Migration Barriers**

**Dams**

**Fish Kills**

**Loss of Wood**

**Roads & Sediment**









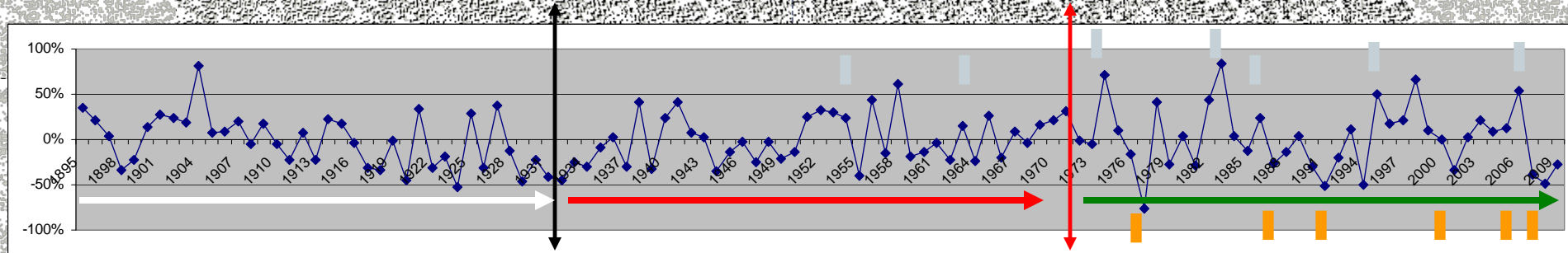




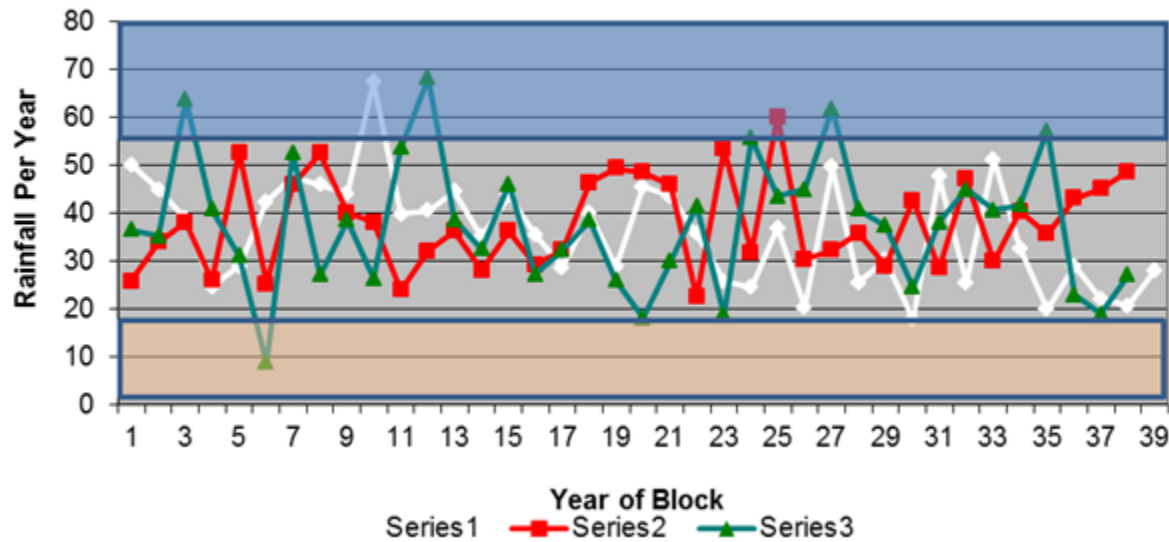




# Weaverville Climate Variability



Graph 1. Weaverville Rainfall 1895-2009 In 37 Year Blocks



# Oregon Fire, 2001





# Oregon Fire, 2001 & Browns Fire, 1994







# Migration Barriers







# Migration Barriers



Sidney Gulch





# Migration Barriers



**Garden Gulch**



# Migration Barriers



**Finley Gulch**



**Little Browns Creek**

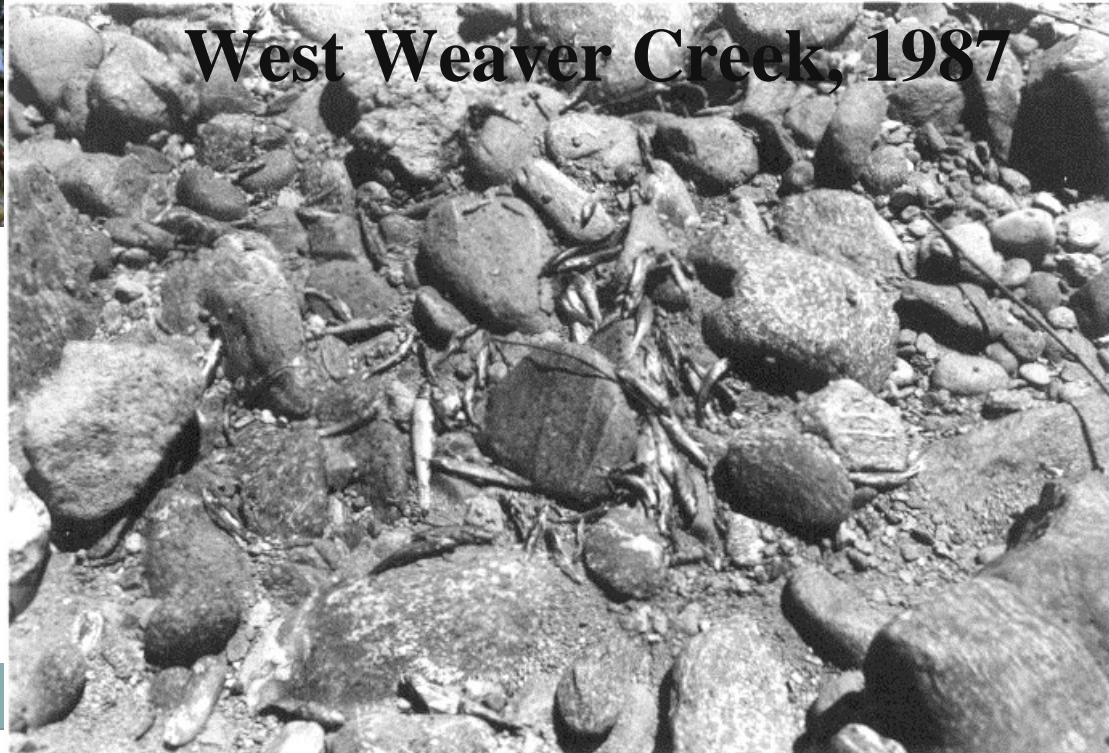


# Fish Kills

**Little Browns Creek, 2010**



**West Weaver Creek, 1987**





# Dams

Garden Gulch

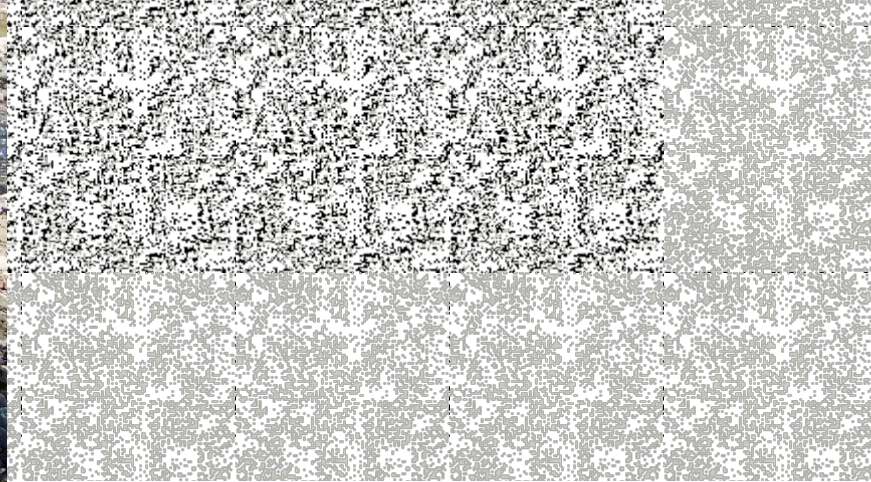
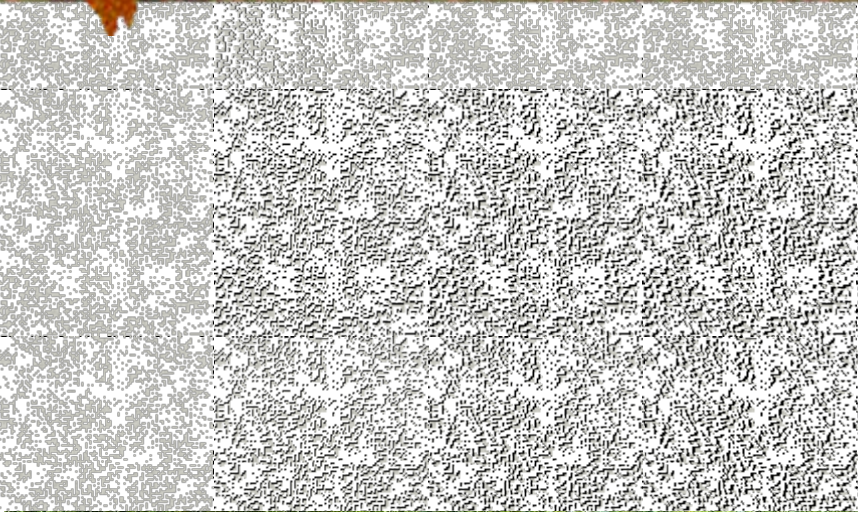


East Weaver Creek





# Swimming Dams Weaver Creek









# Road and Pad Erosion



**China Gulch Road, 2000**



# Road and Pad Erosion



**China Gulch Road, 2000**



# Even Large Animals!



**Sidney Gulch, 2012**







# Sidney Gulch



1986



# Sidney Gulch



1990



# Sidney Gulch



**2001**





# Sidney Gulch





# Sidney Gulch



2006



# West Weaver Creek



2010





# East Weaver Creek



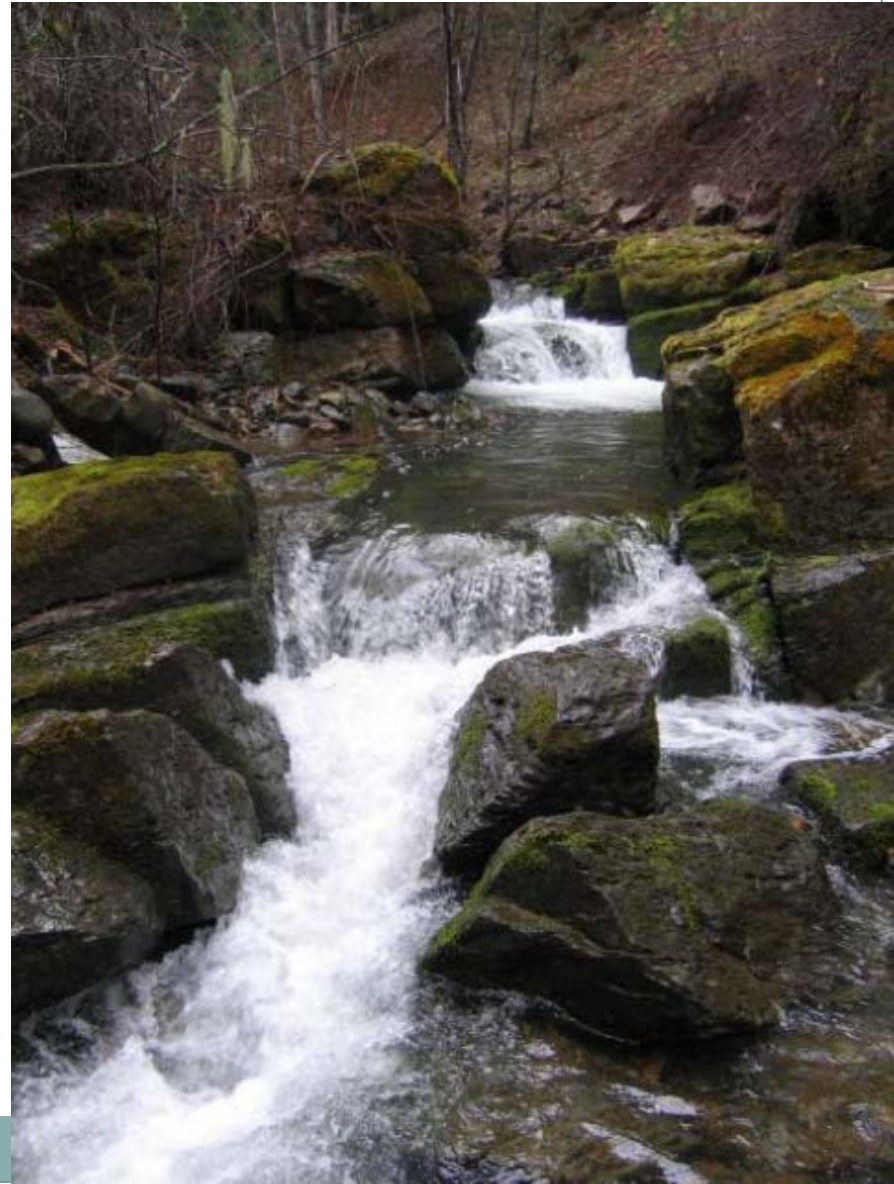
2012



# Little Browns Creek



**2005**





# Little Browns Creek, 2010





# Finley Gulch









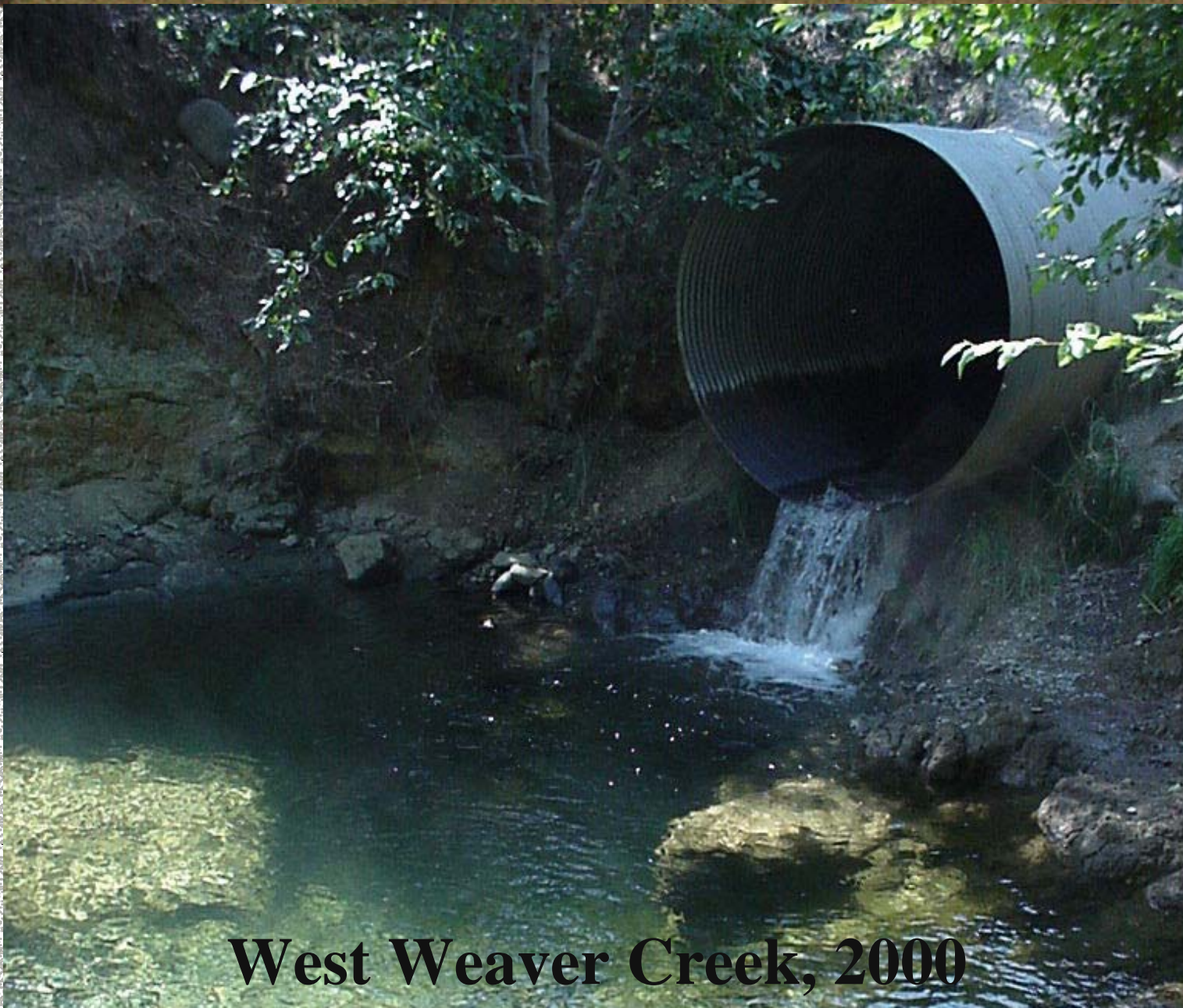


Sidney Gulch Urban Stream Plan, 1990  
Flood Hazard Zone, 1990  
Formation of Five Counties, 1997





# Migration Barrier Removal



**West Weaver Creek, 2000**





# West Weaver Creek, 2006





# Little Browns Creek



**2007**



**2010**

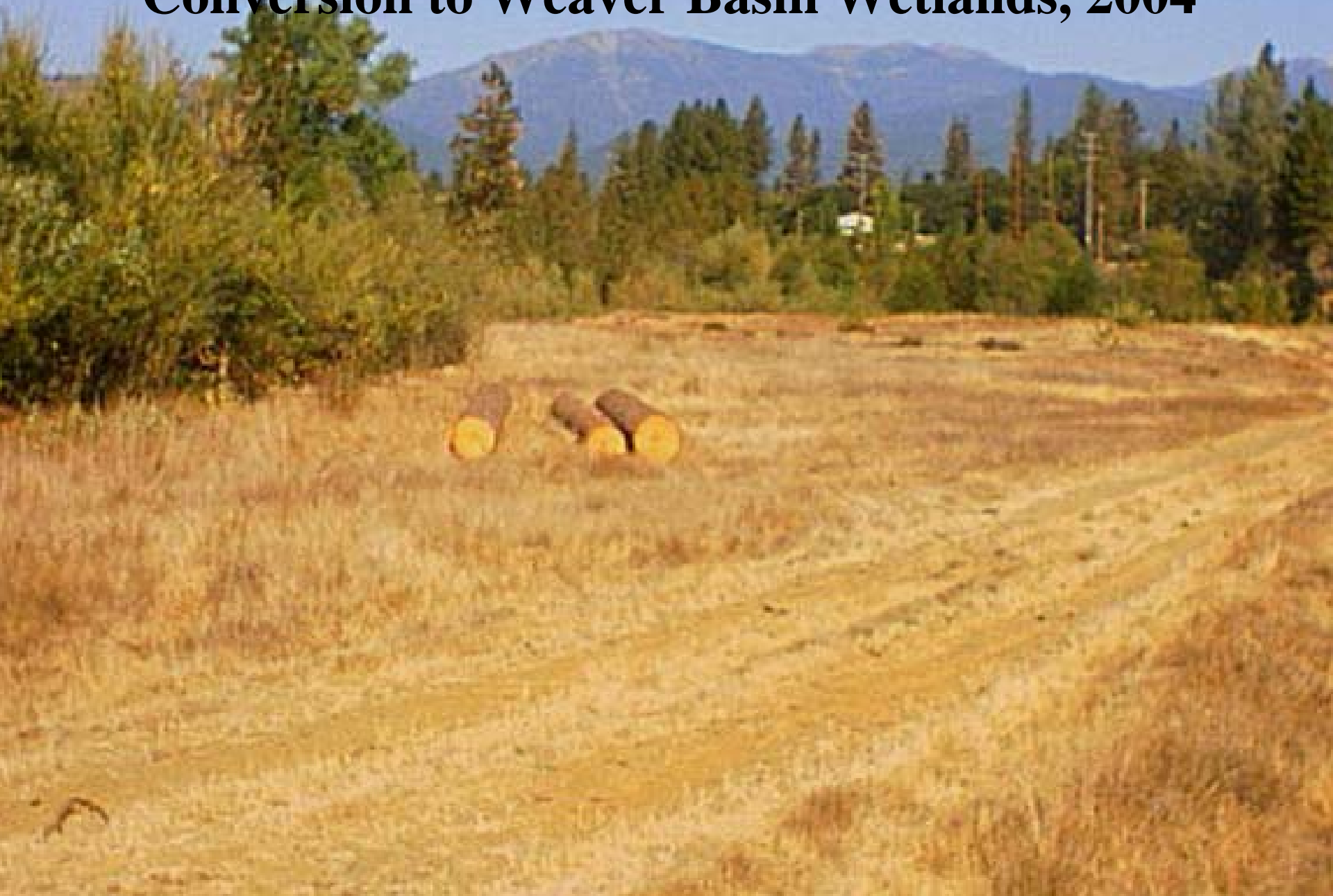


# Finley Gulch, 2009 & 2011



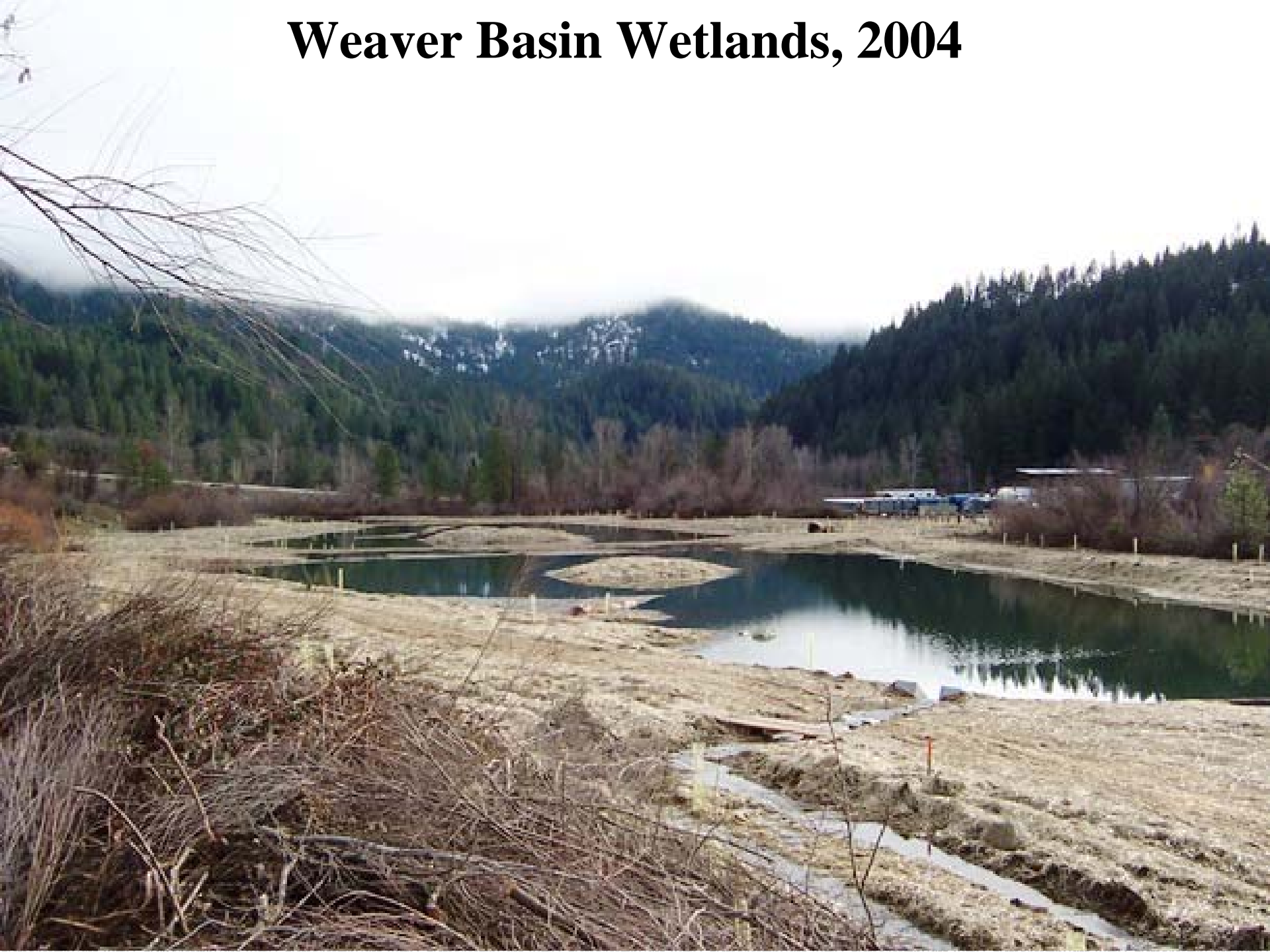


# **Trinity Alps Industrial Park Floodplain Conversion to Weaver Basin Wetlands, 2004**





# Weaver Basin Wetlands, 2004





# Weaver Basin Wetlands, 2009





# Weaver Basin Wetlands





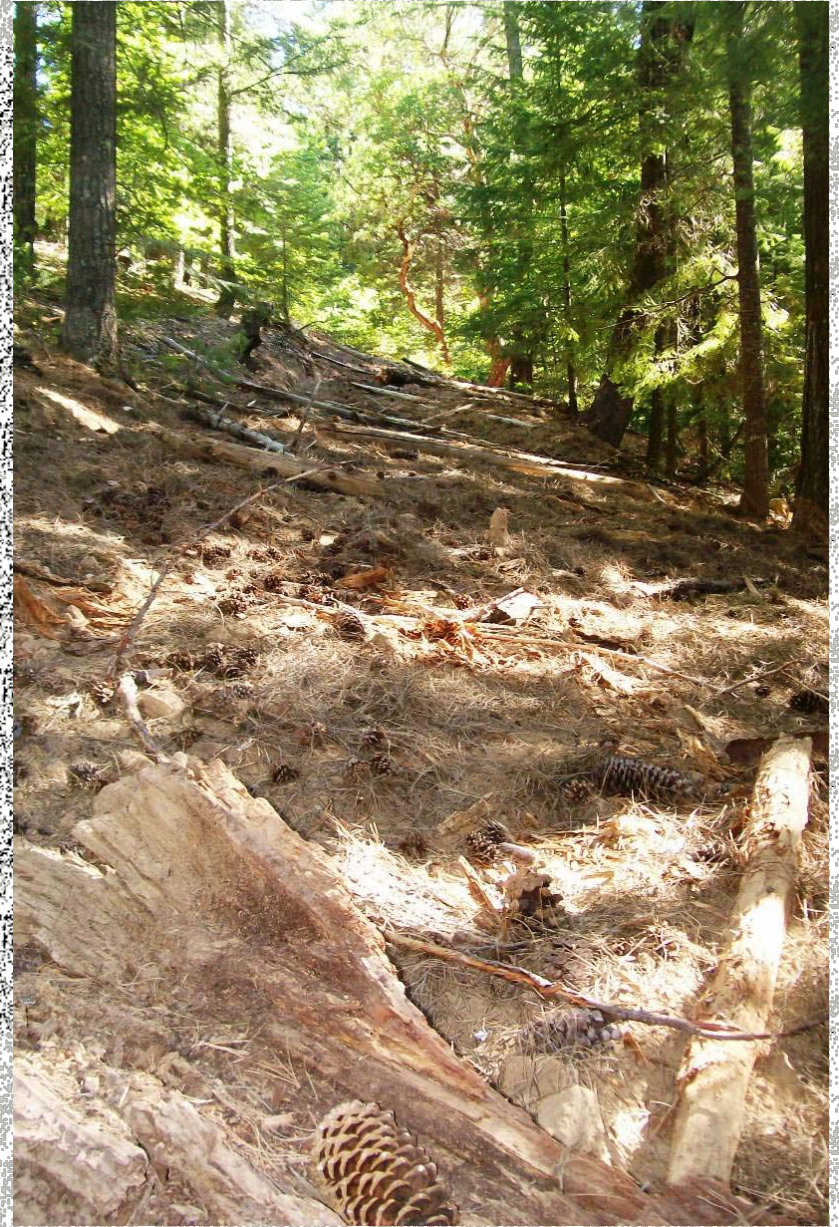
# Roads Restoration







# Road Decommissioning





# Large Wood Routing





# Stream Channel Restoration

## Roughened Channel





# Stream Channel Restoration

## Roughened Channel





# Stream Channel Restoration





# Stream Channel Restoration

## Large Wood Placement





# Stream Channel Restoration





# Stream Channel Clean Up





# Forest Thinning & Fire Restoration





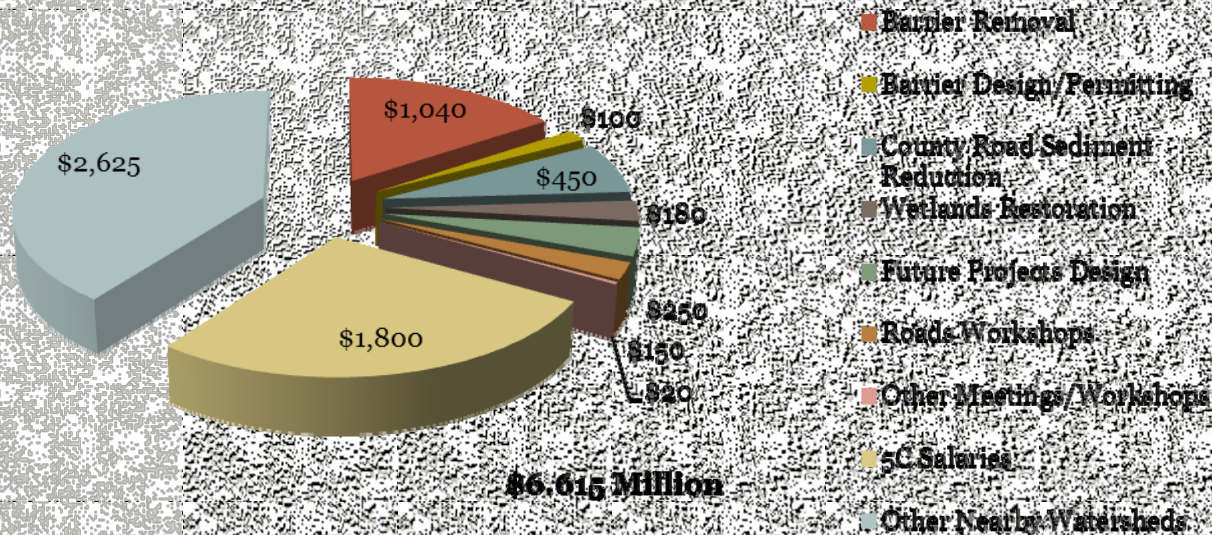
# Beaver Dams





# Restoration Economy

## 5C Restoration Dollars In Weaver Creek and Adjacent Watersheds



Labor  
Structures  
Equipment Rental  
Concrete  
Hotels/Lodges  
Asphalt-concrete  
Gravel/Road Base  
Rock Slope  
Protection  
Restaurants  
Office Supplies  
Lumber  
Hardware  
Straw/Mulch  
Trees/Shrubs/Seed



# Restoration Economy

## Hypothetical Economics of Fisheries and Water Quality Expenditures (In Millions)

