

# Daylighting Secret Canyon



Secret Canyon Beltline Crossing  
April 2000



Secret Canyon "Daylighted"  
December 2000





The Beltline was the World's Longest Conveyor Belt, built in 1938 to carry rock to build Shasta Dam. The Beltline Road ran parallel to the conveyor belt, and was constructed in a straight line by filling in many tributary streams along the way.

Secret Canyon is a small tributary of Sulphur Creek in Redding, CA. A 1998 Watershed Analysis revealed that it had the potential to dump 4000 cu. yds of sediment into the partially restored Sulphur Creek and then into the vital salmon spawning grounds of the Sacramento River.

The culvert under the road fill was 60+ years old, clogged, and rusting out.





Sacramento Watersheds Action Group (SWAG), and the Sulphur Creek CRMP collaborated with Shasta College and the city of Redding to request grant funding from the Department of Water Resources Urban Stream Restoration Program.

DWR provided \$15,000 in funding with SWAG, Shasta College, and the City of Redding providing in-kind donations of labor and equipment.

Permitting took 2 months and work began on October 1, 2000.





Shasta College Students in the Heavy Equipment program and the Watershed Restoration Practicum used this project as a hands-on laboratory.

Bulldozers and an excavator were used to remove the road fill and replace it on the cutslope it came from.



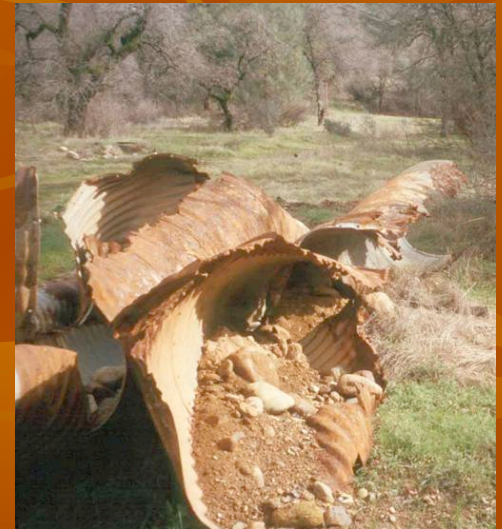
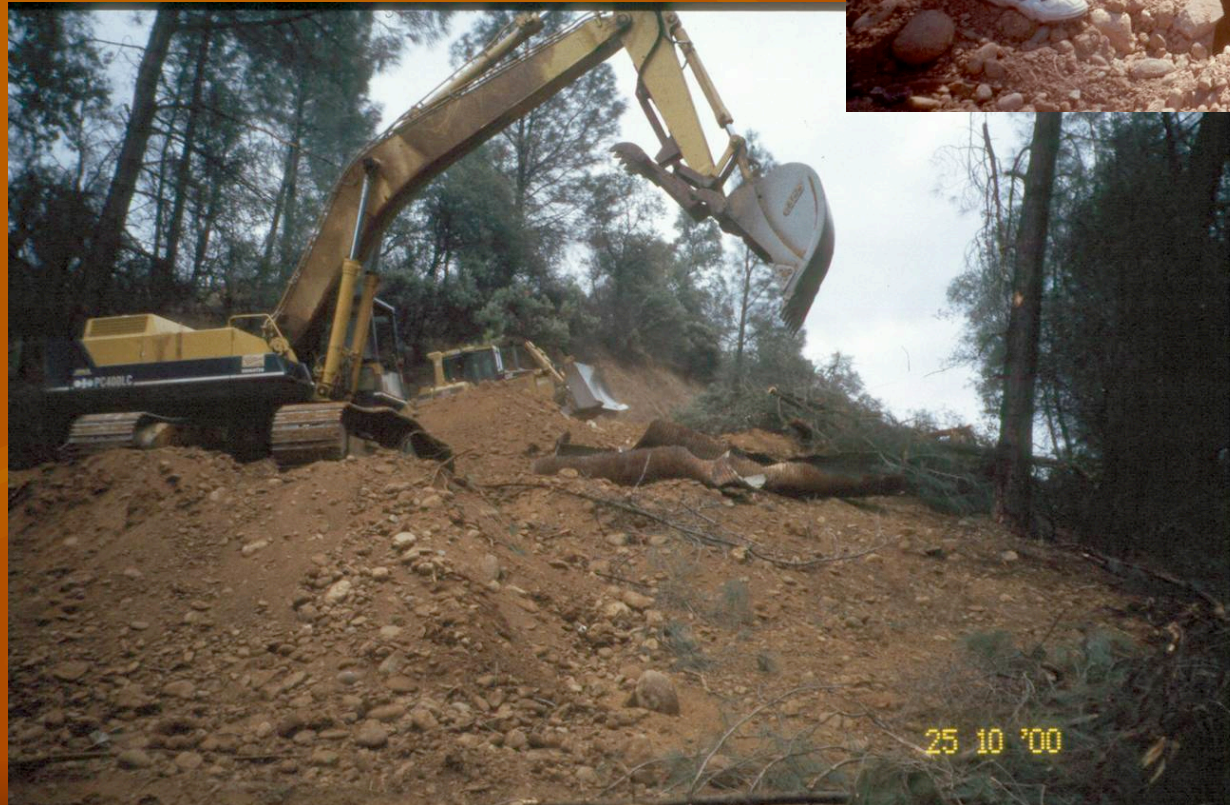




The total amount of fill removed from the crossing was about 10,000 cu. yds. The 3 bulldozers worked for 21 days, and the excavator for 4.



Finally, after many days,  
the culvert was spotted!  
Spirits were high as the  
excavator pulled out the  
culvert.







Brushlayering with  
Straw Wattles were  
installed to provide  
habitat and bank  
protection.







January 2001



Shasta College Students also installed  
Brushlayering with Rock and Log Toe  
protection.



In March, 2001, the  
willows began to sprout.





April 2000

# Cutslope Restoration



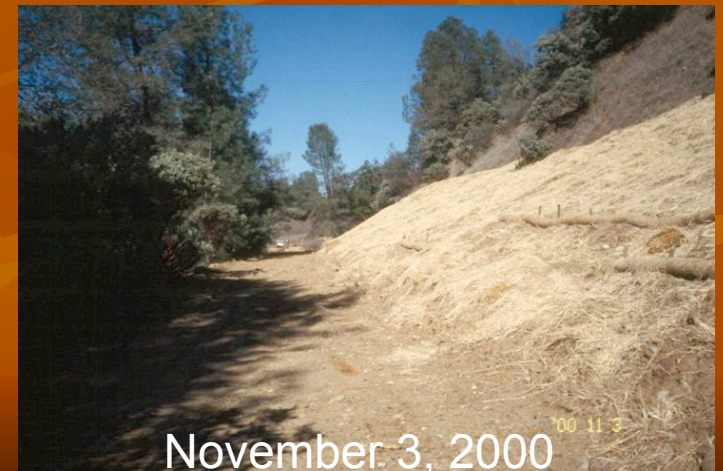
October 3, 2000



October 8, 2000



October 27, 2000



November 3, 2000



# Community Planting Day



About 50 volunteers joined in the community planting day, enjoying the donated Starbucks coffee as they planted native vegetation.





# The Wildlife Returns!



Immediately after work was completed, deer and other wildlife were seen enjoying the restored habitat!





In January 2001, heavy rains came, and part of the restored cutslope slumped. Shasta College students installed various biotechnical measures to solve the problem.



Willow Wattle with Brushlayering



"Live Smiles"



Other techniques used were Slope Staking, and Live Pole Drains.





September 9, 2000



October 26, 2000



September 6, 2002



October 31, 2000

View looking West.

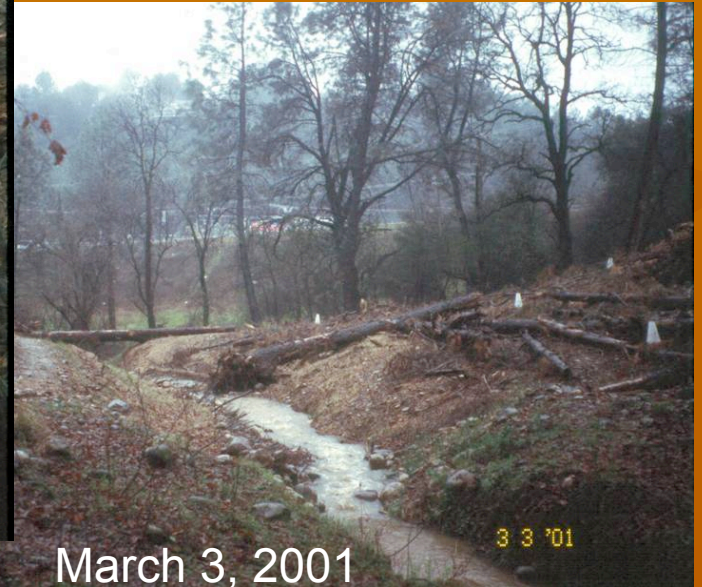




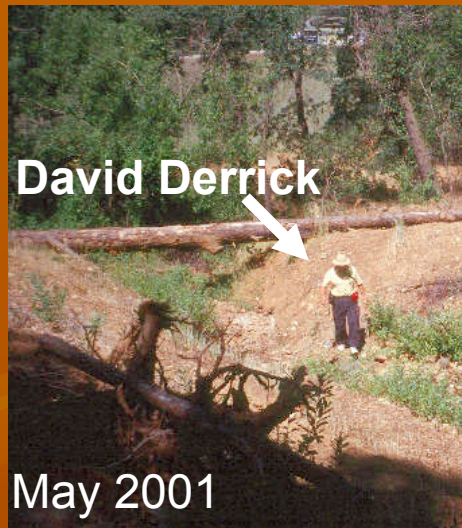
April  
2000



October 26, 2000



March 3, 2001



David Derrick

May 2001



July 2001



September 6, 2002

**The Secret  
Canyon  
Stream**





## View to the East





# Acknowledgments

- Sacramento Watersheds Action Group
- Shasta College
- Sulphur Creek CRMP
- City of Redding
- McConnell Arboretum at Turtle Bay
- Department of Water Resources, Urban Stream Restoration Program
- CA Department of Fish and Game