

Devil's Slide Bridges and Tunnels Project

An Overview and Timeline



1930's
Historical and archive photographs show construction and damage of Route 1



1996
Tunnel approved November 5, 1996



1992-2004
Biological surveys find California Red-Legged Frog, Peregrine on site



2005
Charthouse Mitigation Site created



2007
Charthouse Mitigation Site is colonized by California Red-Legged Frogs which successfully breed



2008
Bridges are finished and revegetation begins



1986
Martini Creek Alignment Proposed



A "New Pond" was created to provide extra breeding habitat for California Red-Legged Frog

2004
Final Wetlands Report & Final Mitigation & Revegetation Plan identifies 0.97 acres impact and proposes 5.09 acres of mitigation



Throughout tunnel construction Peregrines will be monitored during the nesting season to avoid potential impacts from construction



2011
Charthouse Mitigation Site transfers to a Public Land Trust

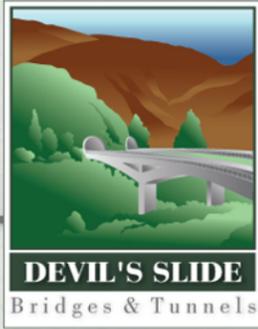


2006
Tunnel construction begins at the South Portals



2008
During the 2008 nesting season Peregrines breed and produce four offspring that successfully leave the nest





Devil's Slide Bridges and Tunnels Project

Shamrock Ranch & Wildlife Thriving at the Bridges



Pelagic Cormorant Colony near South Portal



White-Crowned Sparrow resting



Biologists monitor all migratory nesting birds on site including the White-Crowned Sparrow and Western Scrub Jay



Horses boarded at Shamrock Ranch



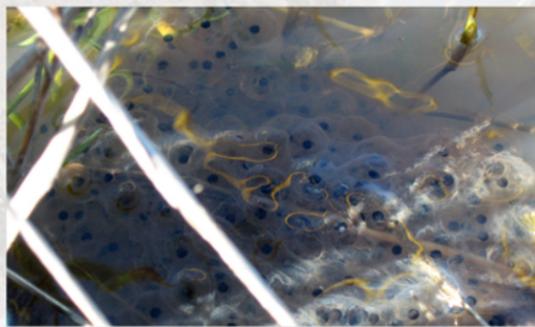
Shamrock Ranch



California Red-Legged Frog



The Devil's Slide Bridges under construction in 2008



California Red-Legged Frog Egg Mass



San Francisco Dusky-Footed Woodrat Home



Nearby coastal trails on Montara Mountain



Protected valley and land below



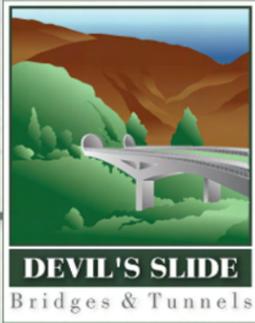
Bridges cross the Northern Reservoir – an Environmentally Sensitive Area with breeding California Red-Legged Frogs



California Newt



DISTRICT 4 | AV MULTIMEDIA GRAPHIC SVCS | CT1879 | DEVIL'S SLIDE_ECO | 092508



Devil's Slide Bridges and Tunnels Project

Southern Portals, Tunneling and Nearby Mountain



Peregrine Falcons

Peregrine Falcons nest on nearby cliffs. Adults return each year to raise their young. Biologists study their behavior to ensure construction activities do not interfere with their nesting.

Peregrine Falcons are powerful, strong, and fast in flight. They hunt medium-sized birds, swooping down from points high above. Unfortunately, pesticides almost wiped out the species in North America. They have made a recovery in the U.S.



In September 2007, crews broke ground at the southern portals. Today, crews have completed more than 1,500 feet of excavation in the northbound bore and more than 1,100 feet of work in the southbound. Each tunnel will measure 4,200 feet in length and connect with the bridges constructed at the northern end of San Pedro Mountain.



At the Devil's Slide Site, Biologists monitor the Falcons while they nest and raise their young. They are a California Endangered Species.



At Devil's Slide, four Peregrine Falcons successfully fledged during the 2008 tunnel construction season



An aerial view of the Operations and Maintenance Center under construction



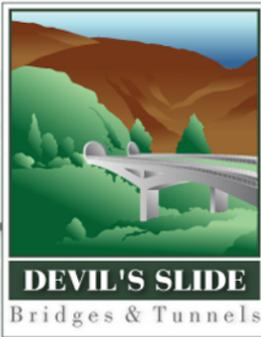
The project site, which includes tunnel canopies and an on-site Operations and Maintenance Center with vegetative roof planted with native species. This work will further promote a healthy ecosystem.



The County's only known remaining populations of Hickman's Potentilla was completely avoided by the tunnel project's design



Mission Blue Butterfly



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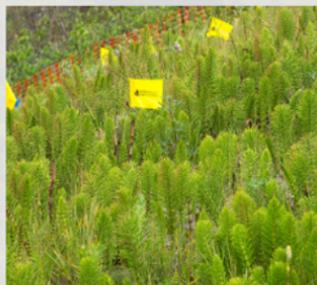
Offsite Wetland Mitigation Efforts



Twinberry
(*Lonciera involucrata*)



Red-flowering Currant
(*Ribes sanguineum*)



Horsetail (*Equisetum arvense*)



In San Mateo County, an off-site mitigation project restored additional land. This work was required by our regulatory partners. It reduces the environmental impact at the Devil's Slide Bridges and Tunnels Project. Also pictured, many local plants which grow in this area and on nearby Montara Mountain. Biologists worked to cultivate plant, and monitor native species with drought tolerant characteristics, while removing other invasive, non-native varieties.



Red Elderberry
(*Sambucus racemosa*)



Blue Eyed Grass
(*Sisyrinchium bellum*)



Irrigation system

