



**THIS MAN CAN STOP FIRE AND POLICE LAYOFFS**  
CLICK HERE TO TELL ASSEMBLYMAN ACHADJIAN TO PROTECT PUBLIC SAFETY AND STANDUP FOR CALIFORNIA.



Contact us | Customer Service | Subscribe | iTribune | Place an ad | Coupons | Today's ads |

SIGN IN | BECOME A MEMBER

**SanLuisObispo.com**  
THE TRIBUNE

SEARCH



News Archives Web Search powered by YAHOO! SEARCH

HOME NEWS CRIME OPINION SPORTS ENTERTAINMENT SLO GUIDE OBITS CARS JOBS REAL ESTATE CLASSIFIEDS

BREAKING LOCAL STATE BUSINESS NATION/WORLD WEIRD NEWS CRIME VIDEOS SPECIAL PROJECTS CAMBRIAN

You are here: News - Local  
Published: Sunday, May. 29, 2011  
Updated: 1:46 pm Sunday, May. 29, 2011

## Tribune special report: Big Sur's big dig at Alder Creek landslide

The massive slide at Alder creek is among the worst Caltrans has seen on the scenic stretch of Hwy. 1, and clearing it is a slow and delicate job

Share 23 | 7 | Like 23 | Text size

PHOTOS: Man vs. beef in Los Osos  
POW of the Japanese: Los Osos woman's extraordinary saga of World War II  
Tribune special report: Big Sur's big dig at Alder Creek landslide  
FBI confirms Morro Bay bank robber was 'Geezer Bandit'  
Suspected drunken driver hits power pole on Los Osos Valley Road, police say

Suspected drunken driver hits power pole on Los Osos Valley Road, police say  
21 comments · 1 hour ago  
Letters to the Editor 5/29  
129 comments · 57 minutes ago  
Letters to the Editor 5/30  
45 comments · 15 minutes ago  
PHOTOS: Man vs. beef in Los Osos  
22 comments · 8 minutes ago  
POW of the Japanese: Los Osos woman's extraordinary saga of World War II  
12 comments · 30 minutes ago

**Radiology Associates**  
**(805) 928-3673 - Santa Maria**  
**(805) 779-7900 - Pismo Beach**  
**(805) 434-0829 - Templeton**  
**Call or Walk In Today!**  
[www.rasloimaging.com](http://www.rasloimaging.com)  
**Lowered Cash Rates**  
**for osteoporosis screening**  
**during the month of May** Replay



By David Middlecamp | [dmiddlecamp@thetribunenews.com](mailto:dmiddlecamp@thetribunenews.com) | [purchase prints](#)  
Some 200 feet above sea level on the steep slopes of the Alder Creek slide, Tracy Lemke shovels dirt using the Spider, a nimble piece of equipment designed for difficult terrain. In the background, Highway 1 heads north to Gorda. [Click for more photos »](#)

By Tad Weber | [tweber@thetribunenews.com](mailto:tweber@thetribunenews.com)

As John Duffy prepares for work, the Caltrans engineering geologist dons his lime-green vest and white hard hat, then slips into his black rock-climbing harness.

His workplace these days is the massive landslide that for six weeks has blocked Highway 1 at a lonely spot where Alder Creek flows into the Pacific Ocean 65 miles north of San Luis Obispo.

SIMILAR STORIES:

Caltrans officials are aiming to reopen the highway by mid-June. But that deadline seems daunting when one confronts all the

TELL ASSEMBLYMAN ACHADJIAN TO:  
**TAKE A STAND FOR PUBLIC SAFETY**

- Highway 1 closure at south end of Big Sur to last a week
- Mudslide keeps Big Sur closed off for a week
- Big Sur highway closure to last a month at south end, but north end to reopen
- Highway 1 slide leaves bike race in jeopardy
- Driving through Big Sur on Hwy. 1 is still tough as cleanup continues

**Alder Creek slide blocking Highway 1**  
**Alder Creek slide isn't getting businesses down**

material that must be removed.

The only way for Duffy and other workers to get up the landslide to their equipment, precariously perched hundreds of feet above the highway, is by using anchored climbing ropes. They navigate steep trails carved into the uneasy hill of loose rock and dirt.

The slope is 40 percent and greater.

"All the work on the mountain is by rope and climbing gear," Duffy said one day last week. To initially access the slide, "we had to build 600 feet of goat trails," he recalled with a laugh. "I won't long forget the access trails on this one. They were a leg burner."

An initial, small landslide happened at Alder Creek on March 27. Caltrans was able to remove it and reopen the road April 6. But on April 14, a much bigger part of the mountain gave way in a new landslide.

In the days immediately after the second slide, Duffy and other Caltrans geologists and engineers surveyed the site. Then they and a specially trained contractor work force started an excavation project that they believe will get the roadway reopened as fast as possible while minimizing environmental impacts.

The \$5 million project cannot be completed quickly enough for tourists lured to Big Sur. About 100 or so travelers drive up to the roadblock every day, most from overseas, unaware of the dead end.

The Memorial Day holiday weekend traditionally kicks off the summer season of driving along the iconic Big Sur coast, but not this year.

The closure has dashed other plans as well. Organizers of the Amgen Tour of California cycling race hoped for a May 19 stage down Highway 1 but had to scramble to find an alternate route.

"Believe me, we know the impact," Duffy said. To get the job done as quickly as possible, they're doing the excavation work 12 hours a day, seven days a week.

"We'll be here Memorial Day," he added.

**Different approach**

In 2001, Caltrans and state and federal geologists surveyed the most slide-prone roads in California.

The Big Sur section of Highway 1 was found to have had 1,100 landslides — some old and inactive, some newer but stable, some new and active. This stretch of highway, not surprisingly, was one of the most slide-prone in California.

Duffy has worked on his share of slides at Big Sur, and he puts this latest one on the top 10 list of all-time big slides.

The traditional method to clear a landslide would involve first bulldozing an access road to a point above the slide. That way, heavy equipment could drive to the top of the slide and start excavating loose material. Trucks would then haul away the dirt.

A painful legacy of such an approach, however, would be the access road: It would stand out for years like a scar.

Because the Alder Creek slide occurred in Los Padres National Forest, the U.S. Forest Service wanted Caltrans to minimize environmental impacts. So did the Monterey Bay National Marine Sanctuary, which manages the ocean along Big Sur.

So rather than create an access road, Caltrans and its contractor, AIS Construction, airlifted in excavators and bulldozers. The goal: To stay within the boundaries of the landslide itself, Duffy said.

About 10 days after the slide occurred, he said, a Chinook helicopter hovered over the top of the slide and lowered a specialized excavator known as a Spider. The machine's claw arms and legs can act independently and bend at a range of angles for a steady hold on sharp slopes.

An AIS operator rock-climbed up the landslide, got into the Spider and slowly but steadily excavated a flat spot so the helicopter could drop down the other equipment.

"The choreographer at the PAC (Performing Arts Center) would have been impressed," Duffy said.

**SanLuisObispo.com**  
**THE TRIBUNE**  
**OUR NEWS, YOUR WAY**

Be the first to know what's going on in San Luis Obispo County. Just tell us how you want to find out — we'll take care of the rest.

mail » Twitter » Facebook » iTribune » Subscribe » RSS »

**GET BREAKING NEWS ON YOUR CELL PHONE**  
 Sign up for breaking news alerts from SanLuisObispo.com and get the latest news sent to your cell phone via text message.

Type in your cell phone number  
 ( ) -

I accept the terms and conditions (click to view)

**Keep your phone handy!**  
 Upon hitting the Sign up! button, you will receive a message with a four-digit code at the end. Enter this number on the next screen and press the Confirm button.

**Sign Up!**

**careerbuilder.com**  
 Quick Job Search

Enter Keyword(s): Enter a City:

Select a State: California Select a Category: - All Job Categories

**SEARCH**

Advanced Job Search | Search by Category

**Top Jobs**

FIREFIGHTER CI  
 US-CA-San Luis Obispo  
 Engineer  
 US-CA-San Luis Obispo

Excavating then began in earnest. Workers started pushing loose material downhill while cutting down to bedrock, Duffy explained. Emergency permits issued by the Coastal Commission and Marine Sanctuary let Caltrans roll the loose dirt and rock to the ocean below.

"We are using state-of-the-art technology and some brave souls to work in a tricky environment," Duffy said.

Workers are in continual danger of loose rock hitting them. A constant watch is kept by a worker who sounds an air horn at the sight of flying rock. Even so, one inspector was struck by bouncing rock, breaking his arm. That is the most serious injury to date.

By the end of the project, Caltrans estimates that 30 to 40 percent of the material will remain on the beach. Duffy said the tides will eventually wash most of the material into the ocean.

The rest of the dirt will be hauled out once the pile has been pushed far enough down the slope so workers can safely scoop it up into trucks. The material will be taken to dump sites both north and south of Alder Creek. Some of the dirt will be used in a realignment of Highway 1 near the Piedras Blancas lighthouse.

### Still driving the coast

Despite the closure, motorists continue to drive north on Highway 1. They end up meeting Len Bjornson, a Paso Robles resident and the Winsor Construction worker who is stationed at the roadblock.

With unflinching good humor, Bjornson politely tells them the highway is closed and asks if they need directions to where they need to go. Many of those who stopped one day last week, such as Andrew Leonard of Vancouver, B.C., were trying to get to San Francisco.

"My plan was to drive Highway 1 all the way to the Bay Area," said Leonard, standing aside his Porsche Cayman S. "I was disappointed (at the closure), but there was not a lot of traffic past Hearst Castle, so that was a fun drive. Not that I was speeding."

Bjornson said European tourists take the closure better than Americans. "The people from Europe see the signs, but since they are here already, they come up as far as they can.

"It's the Americans who don't see the signs and scream and yell, 'Why don't you have signs?' " The drive from San Luis Obispo to Alder Creek reveals numerous closure signs, including ones that also advertise how North Coast businesses remain open.

Bjornson sighed. "It's Memorial Day weekend, so it'll be crazy."

### Alder Creek landslide

**Estimated volume:** 130,000 cubic yards, enough to cover 120 football fields a foot deep

**Estimated tonnage of rock and dirt:** 286,000, equal to 286,000 Volkswagen Beetles

**Length of slide:** 740 feet

**Width of slide:** 320 feet

**Cost of project:** \$5 million

**Estimated opening of Highway 1:** mid-June

SHARE THIS STORY:



#### About comments

Reader comments on SanLuisObispo.com are the opinions of the writer, not The Tribune. If you see an objectionable comment, click the "report abuse" button below it. We will delete comments containing inappropriate links, obscenities, hate speech, and personal attacks. Flagrant or repeat violators will be banned. See more about comments here.

**Add New Comment**

Login

Real-time updating is **enabled**. (Pause)

**Showing 2 comments**

Sort by newest first



zidar

This is a job for 100,000 Chinese with shovels and wheelbarrows.



Censorship\_is\_Unamerican

Nature bats last!

[Subscribe by email](#) + [RSS](#)

[Buy Work & Rescue Harness](#)  
Free Standard Shipping, low prices. Volume discounts available  
www.ksrescue.com

[The Rock](#)  
Keep Up With The Latest Gossip, Celeb News, & More On Wonderwall!  
wonderwall.msn.com

[Rock Climbing Singles](#)  
View Photo Profiles. Join Free. Local Singles into Rock Climbing.  
fitness-singles.com

Ads by Yahoo!

SITE MAP

News	Opinion	Sports	Entertainment	Living	Classifieds	Resources
<ul style="list-style-type: none"> <li>■ Obituaries</li> <li>■ Breaking News</li> <li>■ Local</li> <li>■ Business</li> <li>■ Tech</li> <li>■ State</li> <li>■ Nation/World</li> <li>■ Politics</li> <li>■ Environment</li> <li>■ Weird News</li> <li>■ Photos</li> <li>■ Video</li> <li>■ Special Projects</li> <li>■ Gas Prices</li> <li>■ Crime</li> <li>■ Traffic Report</li> </ul>	<ul style="list-style-type: none"> <li>■ Letters to the Editor</li> <li>■ Columns</li> <li>■ Blogs</li> <li>■ Caption Contest</li> </ul>	<ul style="list-style-type: none"> <li>■ Local</li> <li>■ Prep Sports Stats</li> <li>■ Outdoors</li> <li>■ College</li> <li>■ Baseball</li> <li>■ Football</li> <li>■ Basketball</li> <li>■ Hockey</li> <li>■ Motorsports</li> <li>■ Golf</li> <li>■ Tennis</li> <li>■ Olympics</li> </ul>	<ul style="list-style-type: none"> <li>■ Ticket</li> <li>■ Event Calendar</li> <li>■ Dining</li> <li>■ Wine</li> <li>■ Celebrities</li> <li>■ Movies</li> <li>■ Music</li> <li>■ TV</li> <li>■ Horoscopes</li> <li>■ Comics</li> <li>■ Sudoku</li> </ul>	<ul style="list-style-type: none"> <li>■ Health</li> <li>■ Fitness</li> <li>■ Travel</li> <li>■ Relationships</li> <li>■ Wedding</li> <li>■ Pets</li> </ul>	<ul style="list-style-type: none"> <li>■ Jobs</li> <li>■ Cars</li> <li>■ Homes</li> <li>■ Place an Ad</li> <li>■ Local Coupons</li> <li>■ National Coupons</li> <li>■ Display Ads</li> <li>■ Yellow Pages</li> <li>■ Special Sections</li> </ul>	<ul style="list-style-type: none"> <li>■ Visitor Guide</li> <li>■ My SLO County</li> <li>■ Contact Us</li> <li>■ Subscriber Services</li> <li>■ News in Education</li> <li>■ RSS Feeds</li> <li>■ E-Newsletters</li> <li>■ Archives</li> <li>■ Photo Reprints</li> <li>■ Yellow Pages</li> </ul>

[Terms of Service](#) [Privacy Policy](#) [About our ads](#) [Copyright](#)