9 April 2008

If my foulies could talk, I'm sure they'd have expressed mixed feelings. Sure, they were grateful for finally breathing fresh air again after being packed away since sailing across the north Atlantic, but this was fresh water running off of them. "What is up with this?" I'm sure they'd ask if they could, "Where's the salt water? Where's the rolling swell? Where's the ocean? Aren't we supposed to be circumnavigating?"

I don't know how I would have broken it to them, probably slowly and gently. I would have started with how good they looked, clean and bright and yellow tastefully accented with dark blue set off by strategically placed reflective markers shining as bright as the headlights stopped along the remote gravel road. They looked good, very good, even if trapped on terra firma instead of their native endless seas.

With my day-glow yellow hood in place and my headlight strapped across my forehead shining out beneath it, I created a confident and commanding presence as I walked through the driving rain down the line of vehicles towards the deafening roar that lie ahead. So commanding, in fact, driver after driver rolled down their window and asked me, in a variety of equally incomprehensible Spanish language ways, what the heck was going on and exactly how long would it be before my crew had the bridge cleared and the road open again.

In reply, I repeated, in a variety of ways equally incomprehensible to them, in grotesquely butchered Spanish, that I was not in charge, did not command the Chilean highway system, and had absolutely no idea when the bridge would re-open. Based on their horrified expressions I was probably actually speaking the Spanish words meaning a cow's entrails would be spread across their car's interior, but, I took it as my mission to distribute confidence and positive thoughts through the dozen cars and trucks impatiently idling in line.

After each brief conversation I smiled confidently, nodded, and moved on towards what once had been a bridge over a minor creek on Chile's famed Carretera Austral, deep in the southern reaches of Chilean Patagonia. In my wake, car after car and truck after truck executed a three point turn and headed back through the black night, pounding rain, and washed out road punctuated with landslides the 160 kilometers (100 miles) back to the nearest town. I had no idea what could cause them to flee with such urgency.

When I reached the bottom of the hill I saw the track hoe stopped on the far side of the bridge. Since I'd walked down to inspect the situation upon our arrival it had made some progress on clearing the debris and had built a very narrow and precarious lane for itself across the still raging flood waters.

Through the inky blackness and sheets of rain I could barely see what was happening. I slowly discerned that the ground crew working with the hoe, nominally supervising and supporting it, was climbing on the exterior of the hoe's cab and chassis. After they were all aboard, the hoe made a slow traverse of the flood waters to our side of the rampaging river.

Once safely on solid ground the ground crew spilled off, wet as drowned rats, shivering cold, and visibly tired. The track hoe operator shut down the hoe and climbed out of the cab. He was dry, smiling and eating an apple. I think the operator and I were the only two people there who were warm and dry.

The ground crew was immediately surrounded by three Copec petroleum truck drivers and a few of the lead car and pickup drivers, all of them demanding an immediate assessment and estimate of when the road would re-open. The foreman was pessimistic, saying it could be days, at least two or three, before the road would re-open. The other ground crew were equally negative, nodding along with each growing estimation of the work required. The operator said nothing, just ate his apple, its rapidly decreasing size revealing a thin smile bordering on a smirk.

After a final grim shout describing the nearly insurmountable challenge of re-opening the road, the foreman jumped into the passenger seat of a dump truck that had recently pulled up while the ground crew and operator piled into a tiny Daihatsu forward control, crew cab flatbed truck. They both did quick U turns and headed back up the road.

Every single remaining car and truck soon followed, even the Copec petroleum trucks, which each took a long time to execute ten point turns to reverse direction. I had no idea where they were headed, since the only options were to drive the aforementioned 160 kilometers (100 miles) back to the nearest sizable town or a ~300 kilometer (~186 mile) bypass on a tiny, very rugged 4x4 mountain road over a high, snow covered Andes pass into Argentina, up the fabled and reliably horrible Ruta 40 and then back on an equally tiny, very rugged 4x4 mountain road over another high, snow covered, Andes pass back into Chile. Throw in the two required border crossings and my money was on the square labeled: I'd beat them by staying there and waiting, even if it did take the crew three days to get the bridge open.

With the hoe shut down, the crew gone and the road emptying there was no action at the bridge but more rain, so I trudged back up the hill to where we parked the camper after a truck heading back up the road flagged us down and warned us about the bridge on our original approach.

I spent the night listening to the rain drill into the camper roof and comforting Steph, who was terrified at the prospect of the mountain sliding down on top of us, the road washing out from under us, or some variation thereof adding up to our rig rolling down the mountain and being engulfed by the raging, flooded river in the valley 300 meters (328 yards) below us.

She took no comfort whatsoever in my detailed explanation of how if any of those eventualities came to pass we'd be dead long before we hit the water. I even added a detailed description of how it would feel to drown if, by some remote chance, we actually did end up in the freezing, glacial river water.

Despite my best efforts she remained petrified and I got no credit at all for the graphic imagery and many adjectives I used in describing all the variations of how we could meet our maker. It was yet another example of why I will never understand women.

I awoke before dawn, relieved by the absence of heavy rain, our constant companion for the preceding week. I watched the sky lighten and the crew arrive, just after the first couple of vehicles of the day had skidded to a stop around the blind mountain corner between us and the bridge.

After some tea I walked down to assess the situation in the daylight. There were confirmations and one big surprise.

I walked back to the camper and opened the door. Even before climbing in, I gave Steph the news.

"There's some good news and some bad news," I began.

"Ok, let's have it," she replied.

"The good news is the crew is here and the hoe is making good progress on unplugging the bridge." I said, attempting to inject as much levity as I could. She wasn't buying it.

"And?" she prompted after my long delay, turning to tidy up the dinette.

"The bad news is the road on this side of the bridge is gone." I rolled the message out quickly, somewhat nonchalantly, hoping, perhaps, that she wouldn't notice.

She stopped, turned and looked at me.

"What do you mean, the road is gone?" she asked, eyes as big as saucers.

"Well, I mean the road is gone - just gone. During the night the flood waters diverted by the plugged bridge just washed it away. Wait until you see it, there's an entirely new river channel now and the road is just, well, gone." I replied, doing my best to keep things on an even keel,

“What does that mean? Will we have to stay here another night?” she was already moving quickly back into body shiver fear level at the possibility of another night perched over the flooded river.

“I don’t know the answer to that,” I replied, knowing from brutal experience I could not promise anything in a situation like this that I couldn’t, for certain, deliver. “Let me call Jorge on the sat phone and see if he’s got any information from his network for us. I put out an email to him via the Skymate this morning.”

Once I pushed “OK” on the Iridium satellite phone it took a few seconds before I heard the ring tone of Jorge’s cell phone. In that time my signal was transmitted from our camper’s roof antenna to one of a constellation of satellites covering the entire planet, bounced down to a ground station, switched to the terrestrial network, pushed down multitudes of fiber optic cables and switches, bounced via microwave to the cellular tower that had identified Jorge’s cellular phone in its coverage area, radiated out by that tower as an RF signal, and recognized as valid by Jorge’s cell phone, which locked onto the RF carrier, decoded the information, validated the transmission and initiated its ring tone. Jorge picked up on the second ring. Technology is so cool when it works.

“Douglas! I am just replying now to your email!” Jorge exclaimed in his usual burst of positive energy. “Chile will never let Ruta Seven close. It is a matter of national pride. They will have that road open. Do not take the bypass into Argentina, wait there.”

“OK, wonderful.” I replied. At moments like that you never know for certain where that national pride Jorge referred to stops and reality begins. I asked myself, “Is this just patriotic bluster, or is this grounded in fact?” But Jorge was unlike some Chileans and Argentines; he was very much a realist and essentially devoid of the blind nationalism that sometimes precluded good judgment in others.

Jorge continued, “I have talked to my friend who runs the airport in Chaiten. He assures me that Ruta Seven is open between your washout and Chaiten. There are no further landslides or washouts. He is ready to assist you in any way you need. He will bring trucks down to you if needed.”

I was momentarily speechless. This was so typical of the people we meet around the world, ready and willing to drop everything to help us in our moment of need. What do you say to an offer like that?

“Jorge, that is wonderful news,” I replied. “I don’t know when this bridge will reopen. Last night they were estimating 2 or 3 days, possibly more. But, that was coming from a guy who was wet, cold, tired, hungry and very much in need of some warmth and hot food. I just went down and looked at the job in the daylight. Even with the road being washed out, I think the hoe has, at most, eight to 10 hours of work. I can’t see this taking more than a day.”

“Yes, that is very good news! Stay there, do not take the bypass, Chile will not let that road be closed.” Jorge repeated.

As I signed off with Jorge I only hoped his confidence in his country would be matched by ability in the crew working the job. Based on construction job experience in my youth, I was confident in my estimate of what was possible for the hoe to do in a day, but that was all dependent on who was sitting in the driver’s seat, the operator.

I spent the next couple of hours changing a flat tire I noticed when leaving for my morning inspection, so by the time I returned to the job site, the crew, meaning essentially the hoe operator, since he was the only one really doing anything, had made significant progress.

In that amount of time he completed removing the trees and rocks that had plugged the small bridge. He was now working upstream in the small river, restoring, rebuilding and, where necessary, re-creating the natural channel of the river.

He'd already closed up the channels created during the flood when landslide debris plugged the bridge and turned the road into a small dam, which the river soon bypassed. The river, back to normal size, was again flowing down its original course and under the small bridge. It was now a tiny rivulet compared to the raging torrent I'd heard more than seen the night before.

The operator's next task was to fill in the chasm created when the flood waters bypassed the plugged bridge and, in so doing, create a temporary road across the gap. I found a good seat and settled in to watch him work during this stage of the project. Within minutes I knew I was in for a treat.

For that type and size of job using that piece of equipment, especially one that diminutive, it was all about efficiency. The goal was to use as few cycles of the hoe's arm and bucket as possible to move the maximum amount of the proper material to complete the job.

An average operator would need to move the hoe around a lot with the tracks, build and re-build piles of source material, deliver half-full bucket loads requiring twice as many cycles, and, in general, burn a lot of diesel for not many results.

A good operator would use the minimum number of machine cycles to deliver the maximum amount of material of exactly the right type to the exact right target within a given amount of time.

An average operator would mean we would be there another night. A good operator would mean we might get out of there that day.

What I saw in this operator was more than good. What I saw was more than the best. What I saw was the best of the best. This operator was world class.

The hoe was an extension of the operator's mind. When the operator thought it, the hoe responded, moving simultaneously in multiple planes and dimensions.

Like a surgeon, there was no wasted movement, no error in placement or motion. Every single extension of the arm or release of the bucket was an expression of control, precision and efficiency.

And beyond that, the hoe was working within a theoretical framework, a vision of the overall project, each stage anticipated and prepared for. From the beginning the previous night, working in the dark and torrential rain, the operator had carefully created banks and mounds of material culled from the plugged bridge and boulder filled river bed. Now, as he began to fill the canyon that prior to the night before was the road, he had every type of material he needed all within the swing radius of his compact hoe.

When he needed a large tree trunk to form a dike, it was there. When he needed a man size boulder to firm up that dike, it was there. When he needed bulk material to fill the dike, it was there. When he needed rock to build the top of the dike, it was there. When he needed small rocks to top off the dike and form a road surface, it was there, all within the reach of the hoe's arm.

This guy was a maestro, a master, a gifted artist with his chosen tool.

But, even more impressive, he required zero direct supervision. The supervisor and foreman spoke with him a few times throughout the day, but in the mode of consultation, discussing the situation, never as deliverer and receiver of orders. The operator was the type of worker you could put out on his own for a month and never have to worry about him delivering the goods. He was an A player.

When Steph walked down to shoot the action I pointed out some of the operator's attributes to her. She'd never previously had the opportunity to observe a truly talented machine operator at the peak of their game. Steph marveled at how he could track the hoe while rotating the chassis while filling the bucket, all perfectly executed, all with no wasted motion, all utilizing the exact material required he had previously, with perfect anticipation, stockpiled within a hoe's arm's reach of his work.

While we watched the operator perform in the early afternoon sunshine we talked about what a unique combination of talents and opportunities it takes to be the very best at something. If you find an ideal match between a particular role and your unique talents and then work very hard at becoming the best at that skill, you may have the opportunity to experience the unique joy of being in perfect harmony with your work and your abilities. At that moment you are the best of the best, you are world class.

There is nothing like being the best, the best of the best, world class, at something, but few people ever experience it. While almost everyone has the potential to be the best of the best, world class, at one or more roles, most people never find that ideal match between a particular role and their unique set of talents, skills and abilities. And even if they do, they don't invest the hard work over an extended period required to reach the level of best of the best, world class.

For most people, the closest they get to it is watching a performer or an athlete who is recognized as being the best of the best, world class, at what they do. And because our culture and society are so oriented to worshiping those celebrity performers we tend to only recognize best of the best, world class capabilities and assign corresponding stature and respect in those roles: celebrity, performer or athlete.

Consequently, what we miss as a culture and society is that there are best of the best, world class performers all around us, doing all types of jobs, filling all types of roles. We just never notice, acknowledge or respect them because they are doing regular jobs such as painting walls, ironing shirts, welding, writing computer code or, in our case, operating a track hoe.

The operator was creating a finish grade now, taking half buckets of pea size river gravel and shaking it out of the bucket as he swung across arcs of the road surface. When he finished each bucket dump the material on the grade varied in thickness by no more than an inch or two. I told Steph there was no way anybody watching would or could ever appreciate what they were seeing. In my opinion, what the guy was doing was essentially impossible with the piece of equipment he was operating. It was nothing short of amazing.

His final act was to tamp down the road surface with the bottom of the bucket, then roll it flat with a few passes of his tracks. He rolled off the temporary road backwards, admiring his work, the dike solid, the fill firm and the road grade absolutely flat. As his tracks cleared the surface he rotated the hoe 180 degrees and tracked it onto the road. It was like the closing notes of a master's symphony.

Snapping out of my revelry, I realized this meant the road was now open. The half dozen cars and pickups in line were up and running, edging towards the new grade. I sprinted up the hill to the rig to get it warmed up, down off the blocks, blocking stowed, camper rigged for travel and down the hill to the crossing.

In becoming hypnotized by the operator's mastery I managed to miss our initial window of opportunity. They let all the small vehicles over first and then the large trucks waiting behind them. Because we weren't immediately ready they closed the road again so two dump trucks could spread their loads of fill for the grader to use to make a top cap road surface.

This meant another hour or so of waiting, idling in line behind a new batch of cars and pickups. Worst of all, we were stuck around the curve and up the hill, so I did not even have the consolation of watching the action. Minute by minute the hour dragged by and finally we got the green flag.

As I approached the temporary bypass road the hoe was already busy filling in the void where the new road would be built to replace the washout. When I got even with the hoe I stopped the truck and gave a couple of short blasts on our air horns. The operator stopped in mid-swing and looked up at me. I gave him a broad grin and a thumbs up. He smiled, waved and went right back to it, one more best of the best, world class, perfect cycle in an endless run of hyper-efficient productivity.

I drove on across the bypass, northbound on Chile's Ruta 7, the Carretera Austral, pride of the nation, open once again.

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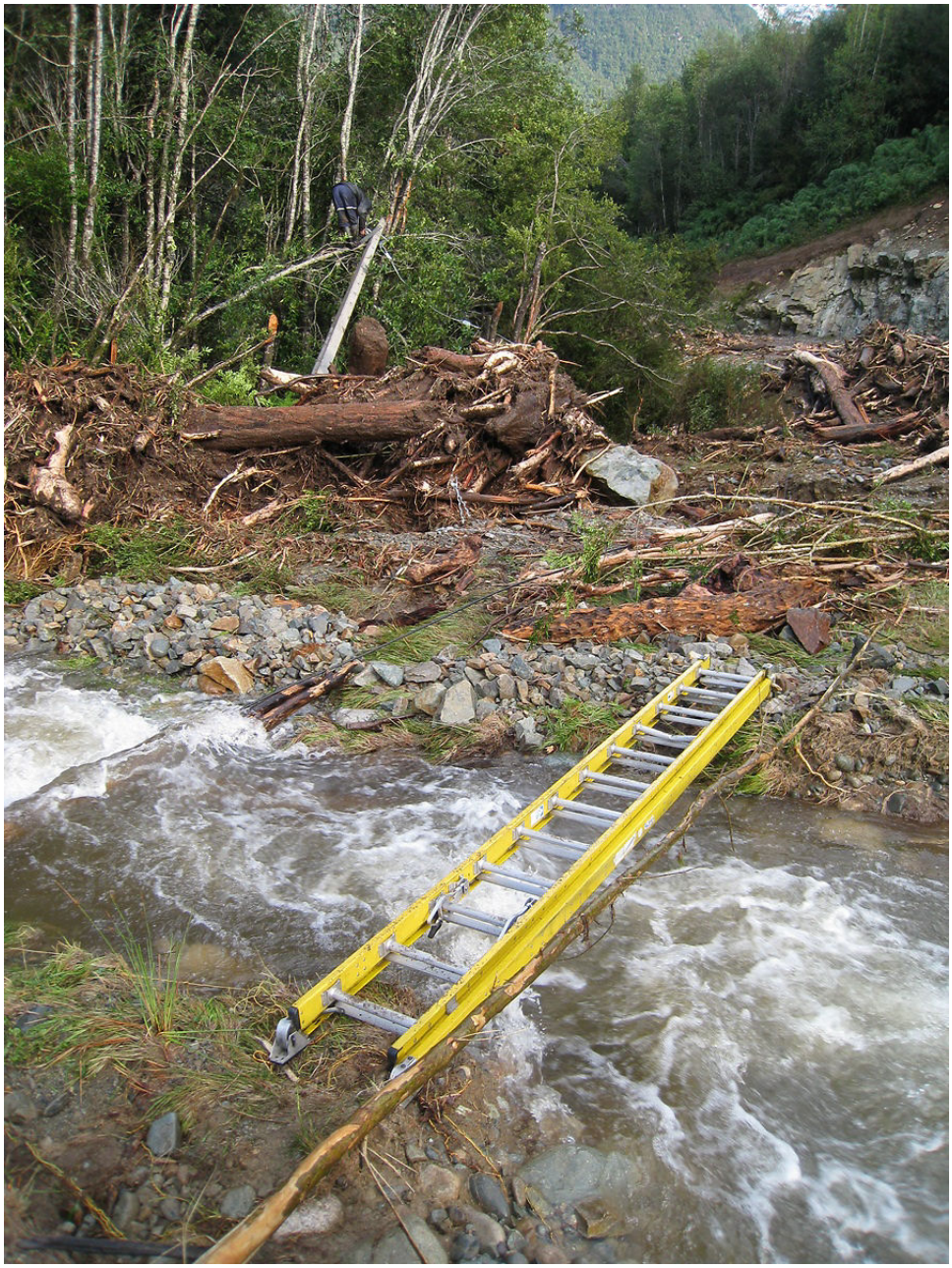
My first view of the bridge, 6:33 PM, 8 April, 2008. Note that at this time the road is still intact.

Sorry for the soft image, this was a 4/10ths of a second exposure, hand held, in very low light conditions.

The view the next morning, 9:52 AM, 9 April, 2008. The hoe was working to clear the landslide debris that clogged the bridge. The river channel formed by the flood is in foreground where the road used to be. Note the snow down below the tree line on the mountain in the background.

The view looking upstream of the river channel formed by the flood waters. The watershed for this little river is very, very small, just this small valley, which will give you an idea of the amount of rain that fell the previous week. This flood and washout was caused by a huge landslide in this valley. A large portion of a mountainside slid down, bringing with it hundreds of mature trees, soil, rocks, etc.



The ladder used by the optical fiber crew to cross the flood river channel. One of the fiber crew is stripping the salvageable hardware off the concrete pole.

The coil of new optical fiber cable used to patch the cable broken by the flood.

The hoe working on unplugging the bridge. The bypass river channel cut by the flood waters is in the foreground.

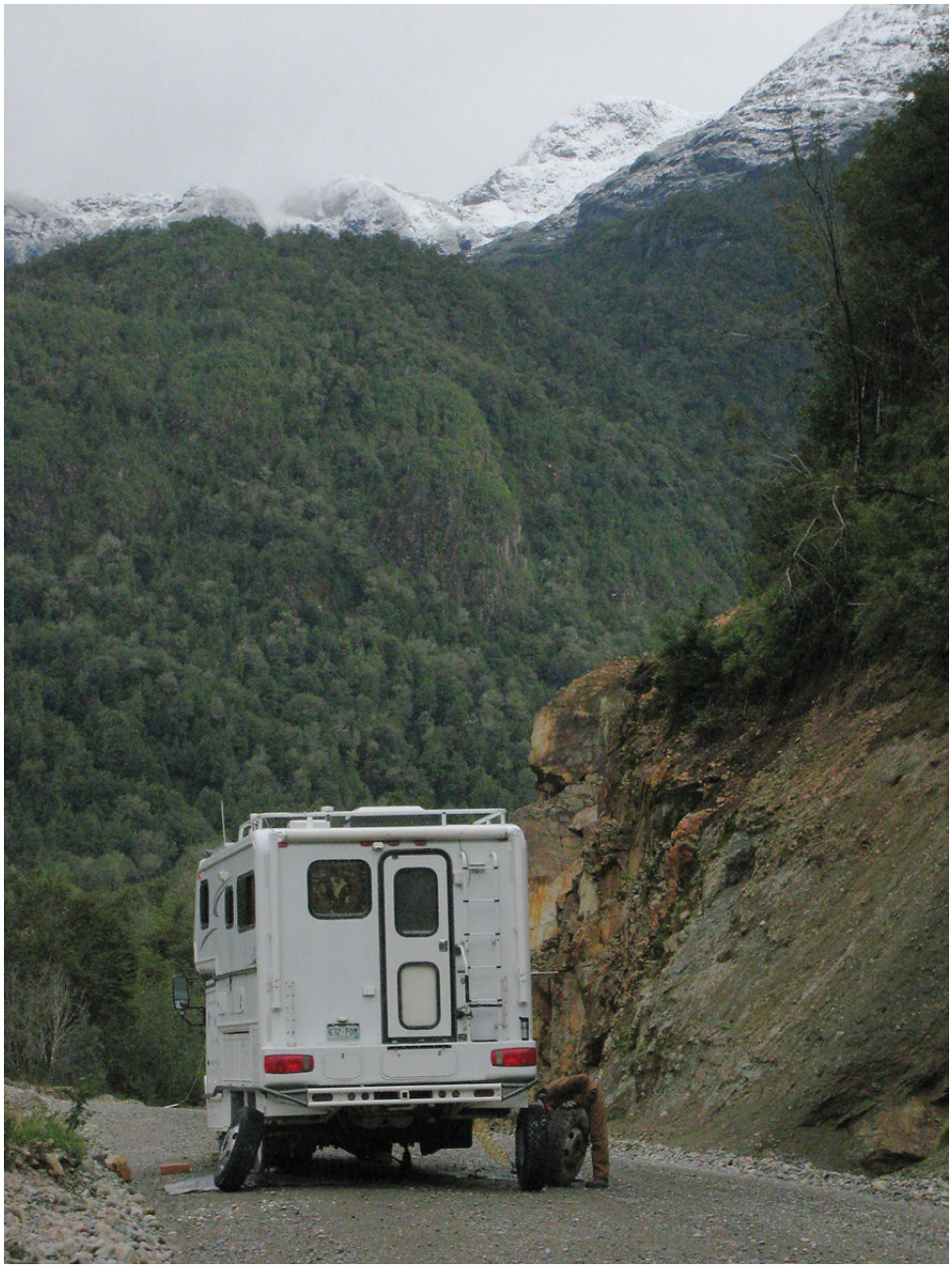


Photo by Stephanie Hackney

Changing the flat tire.

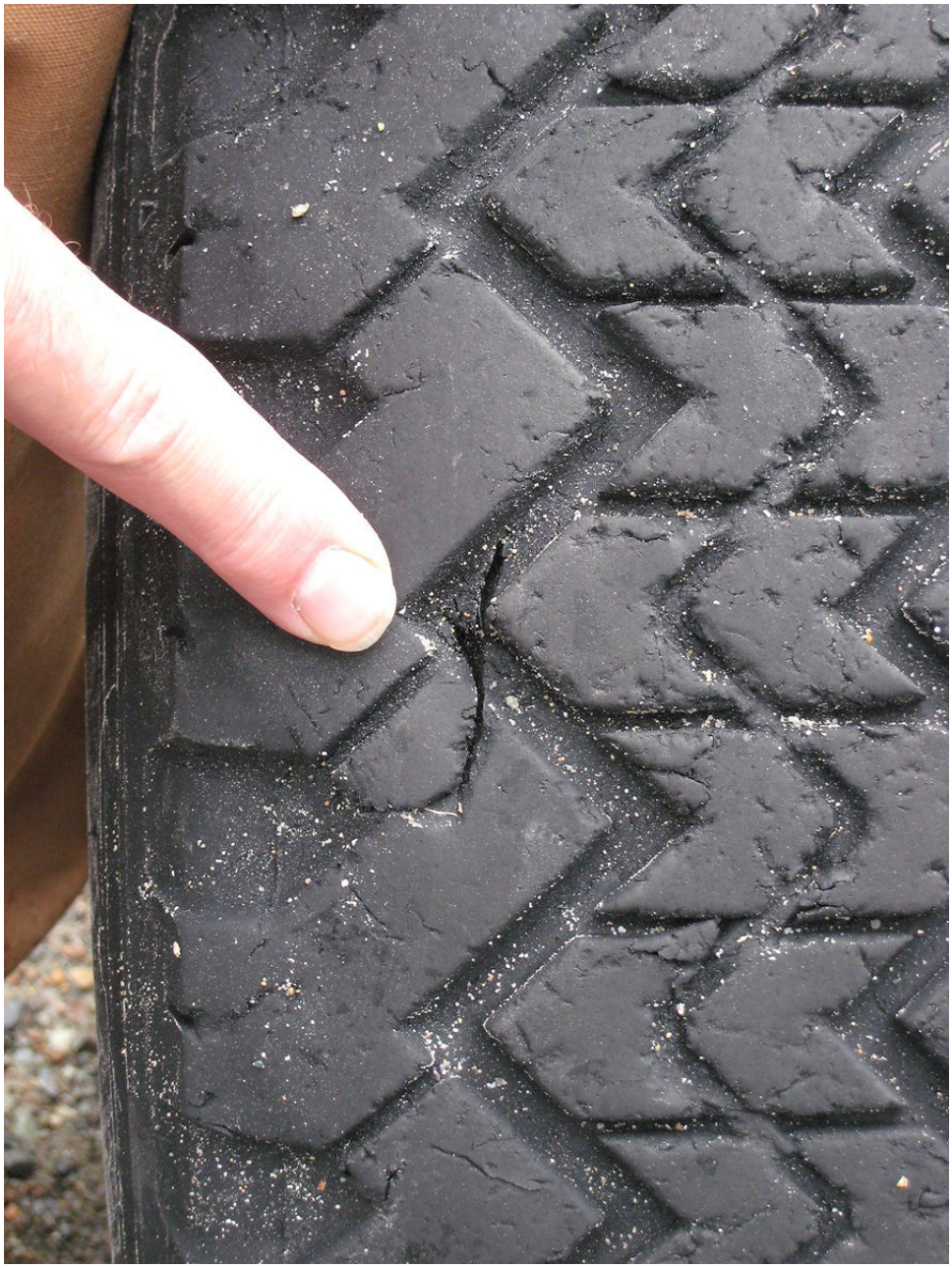
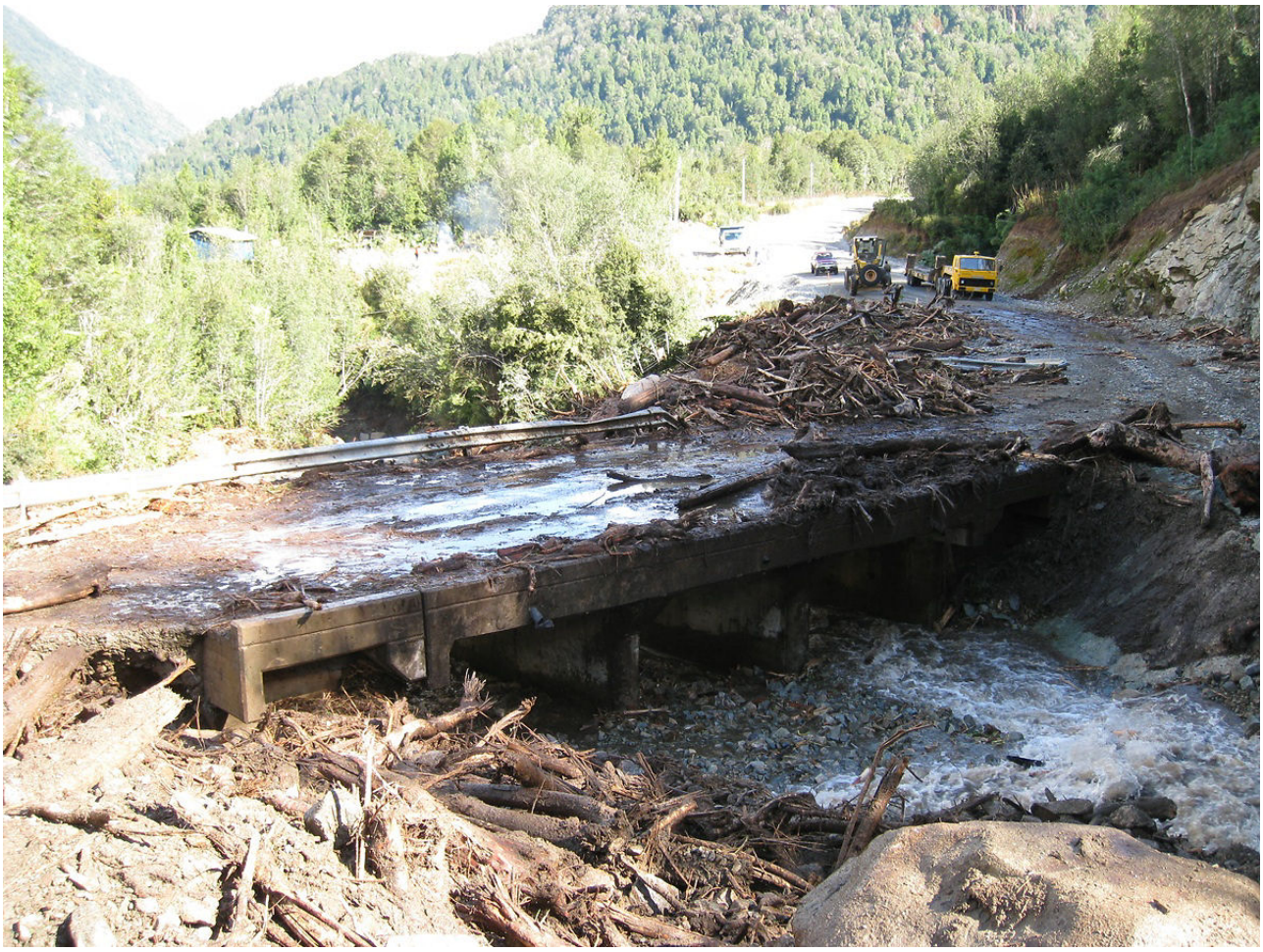


Photo by Stephanie Hackney

The road debris cut all the way through the steel belts.

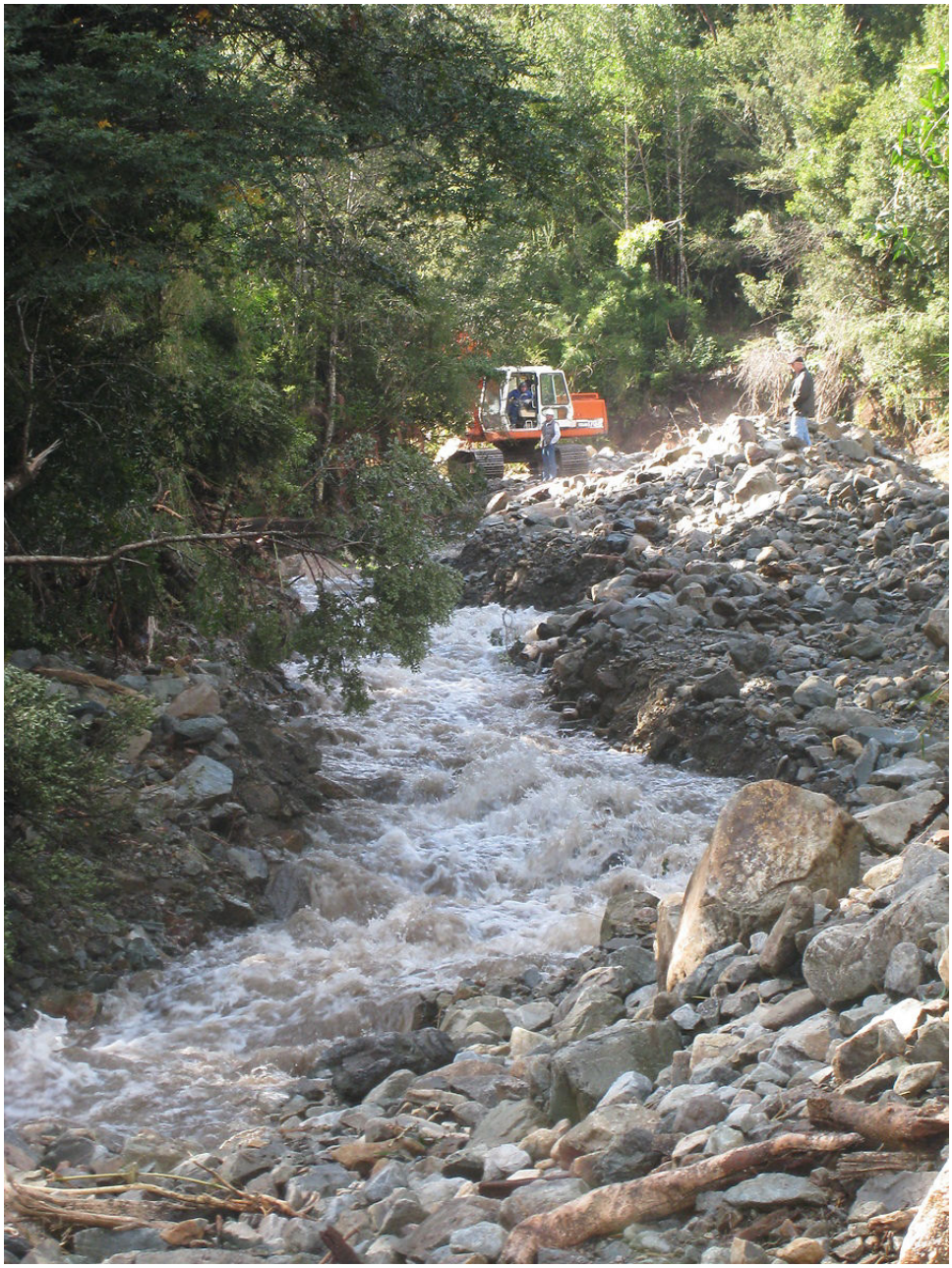
At this point the debris that plugged the bridge was cleared and the river was restored to its original, normal channel. This is a view of the bypass river channel created by the flood waters. Note the size of the trees and boulders.

The view looking downstream of the bypass river channel created by the flood waters.

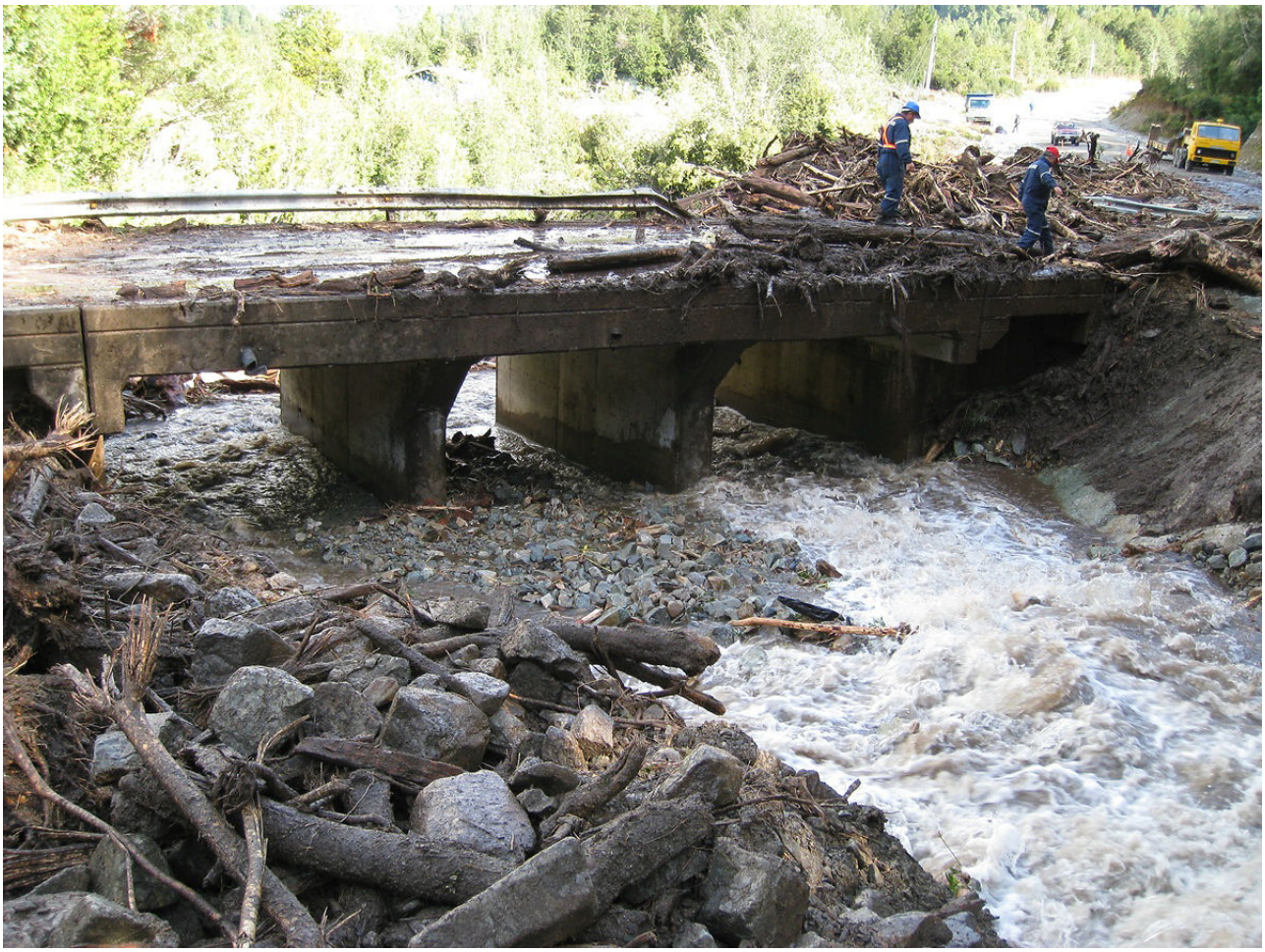


A view of the bridge after the debris that plugged it had been cleared. Note the debris piled on the far side of the bridge.

The view looking back up the road we were parked on. The bypass channel cut by the flood waters is in the foreground. Note the road bed fabric liner. The road that was destroyed was a very new road.



This is the view looking up the normal, original course of the river. The hoe is working to build up the banks to seal off the bypass flood channel created in the storm. The hoe created a path for itself all the way up the river and re-created this original, normal river channel.



This is a detail view of the bridge showing the normal flow rate of this little river.

The hoe building the temporary bypass road. Note the size of the debris and boulders.

Photo by Stephanie Hackney

Crossing the temporary bypass road created by the hoe. The road surface created using the dump truck's fill by the grader was actually rougher than what the hoe operator built using debris and river rock.

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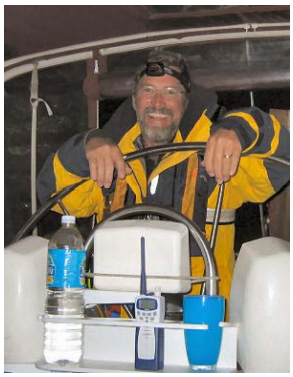
“Foulies” is a marine colloquial term referring to waterproof clothing worn in rain and winds.

This is a shot of me wearing my foulies at the helm sailing the North Atlantic Ocean.



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Chile’s Carretera Austral runs 1,100 kilometers (683 miles) through the remote and largely unpopulated southern reaches of the country. Most of the rugged gravel road was built between 1976 and 1988, with the southernmost stretch to O’Higgens and spur roads, such as that to Caleta Tortel, added in the last few years. It remains an expressed national goal to extend the Carretera Austral to link the land mass of the entire country via roadway.

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“Track hoe” refers to an articulated arm and bucket excavator mounted on a track (bulldozer or tank type) transport. It is a machine that is referred to by many different names depending on the region and type of construction it is used for.

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We crossed the bridge at 3:30 PM, 9 April, 2008.

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Unless otherwise noted, all photos by Douglas Hackney.

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Photo by Jorge Valdes

Douglas and Stephanie Hackney are on a two to three year global overland expedition. You can learn more about their travels at: http://www.hackneys.com/travel/index.htm