



SOS California: Can the Oil Industry and Environmentalists Bridge the Gap?

Commercial diving industry legend **Lad Handelman** has a plan to achieve the impossible. The founder of two New York Stock Exchange companies, **Cal Dive International** and **Oceaneering International**, has made his mark on the subsea industry in countless ways, and now he hopes to have an impact on healing the chasm between California's liberals and conservatives on the subject of [gasp] **Big Oil!** This interview was conducted by Jim Buckley of the Montecito Journal, and is reprinted with permission.

Certain portions of the interview have been updated to reflect subsequent research and developments through July 2007.

Lad Handelman lost the use of his body from his chest down as the result of a 1985 skiing accident. His spectacularly modern home near the top of TV hill overlooks the South Coast of Santa Barbara County from Point Magu to the boat harbor below. He also looks out upon the Channel Islands and the Santa Barbara Channel, under which, Lad knows, lies an enormous pool of energy that both local and state officials have decided is not worth tapping into. Lad – a former oil-industry underwater contractor, and later abalone farmer – thinks this policy is extremely unwise.

“World Events are unfolding dangerously at a speed and scale unlike at any other time period in history,” Lad says. “Intrinsic to and perhaps the root cause of this danger,” he continues, is ‘energy’ – or, in America’s case, the lack thereof.” Mr. Handelman proffers that because California’s environmental policies have driven the nation’s environmental policy, America is being “strangled by its own irrational choices,” e.g. blocking all future offshore development “regardless of the crying need for money and energy.”

Lad Handelman wants to bring the energy business back to the Santa Barbara Channel and has formed a nonprofit organization, **SOS California**, to “bridge the gap” between the environmentalists and energy industry.

“Right now,” he says, “there appears to be a huge unnecessary conflict fed by misinformation and political paralysis, e.g. many politicians know the facts and the benefits of development but for fear of losing votes, cannot reverse their anti-oil positions. Californians cannot afford this. In these times, we must be willing to take a new look – to challenge the unchallengeable. I believe that once they learn the facts, most Californians will agree that the basic premises supporting the anti-oil movement are outdated, and they will want to join our bridge-building effort.”

Lad agrees that replacing oil and gas with new cleaner energy will remove a source of pollution in the air and water, and there will be a better place for us humans overall, but he says, “until that day actually comes, we need to preserve every bit of oil and gas energy we can.” Lad has other concerns as well.

“Other than the obvious need to replace petroleum energy with clean energy there’s another huge pollution problem that is staring us right in the face e.g., the enormous amount of natural pollution coming up from the sea floor, right here, in our own front yard.”

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He continues, "As I will explain later there is far more damage to our ocean waters and air quality now coming from these natural seeps than is coming from all the offshore production and onshore motor vehicles combined. The cause of this seep pollution can and needs to be removed. We can remove it by extracting it. Like pulling a sore tooth. Like purging a leaking septic tank."

You suggest that, by extracting the oil and gas that is now in the channel, we would be cleaning up the environment. How? Please explain. The ocean environment right now, especially from Point Conception down, is a place where the biggest oil seeps in the Western Hemisphere come from.

The Marine Science Institute at the University of California at Santa Barbara (UCSB) had earlier published its findings that about 4,200 gallons of oil oozes to the surface daily in a single 6-mile by 3-mile stretch seep area off Coal Oil Point. "But the amount now is easily more than double that." (Ira Leifer, UCSB Marine Science Institute, Research Scientist, February 1, 2005). That is just one seep area. According to the California State Lands Commission reports, there are one thousand two hundred recorded seeps south of Point Conception. Based on this new information when I visited with Leifer's research partner, Dr. Lyendyke, I asked "Is it fair to say that all-in there is now at least 10,000 gallons a day of seepage being released from below Point Conception down?" His reply, "Yes, you can say that."

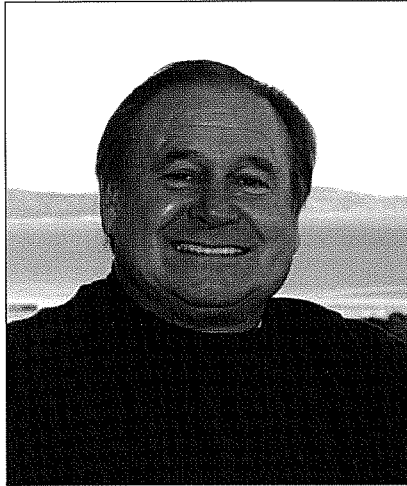
At this rate of 10,000 gallons a day what this translates to is that over every twelve-month period, if nothing changes, if we do nothing, it is guaranteed that our environment will suffer the same amount of oil pollution as from the catastrophic '69 spill. **Our ocean is being chronically poisoned.** Unknowingly, by choosing to block development, which would eliminate this seep problem, we instead are condemning our ocean, our beaches and our air quality to never-ending pollution. Does blocking development make any sense?

So, are you saying that offshore development will help our problem with the tar on the beaches?

Yes I am. As a commercial diver, I could see large natural "pancakes" of oil slowly rising up from the sea floor, four to eight feet across and several inches thick. You could punch that oil with your fist, and it wouldn't make a mark on your glove because it was hard. These pancakes rose to the top, blancketed the kelp beds and presented a danger to marine mammals – sea otters for one. And they also came ashore.

Since beach tars and petroleum odors

come from leaked oil and gas, the solution is to eliminate where this pollution is coming from. Those great quantities of submerged "oil-pancakes", thanks to past extraction, are pretty much gone now. And while oil tars still soil the beaches from Carpinteria up to Gaviota, overall there is much less now and in many spots only a fraction of what there was prior to extraction. It seems to me that too many of us are putting our concern in the



wrong place—we have it backwards. Consider this: The total leakage from the last thirty-nine years of offshore production in all of California (842 barrels) has made less pollution than what is coming from Santa Barbara's natural seeps every single week! I suggest that it's time we stop worrying about the so called "risks" of production and deal with the real problem—getting rid of the seeps. Our beaches would be tar-free if the rest of the untapped reservoirs were also drained.

How can extraction help with pollution and how long would it take?

These reservoirs are mostly shallow. Oil seeps have been coming up from sea floor cracks for thousands of years. These reservoirs were originally under very high pressure, emitting enormous volumes of oil and gas. After the pressure has been reduced the seepage stops. Think of a balloon being squeezed and its contents are being squeezed out. It's the pressure that does that. But when the squeezing stops, what is left of the balloon's contents will be at equilibrium and remain inside.

If we can de-pressurize these reservoirs to where there is no more pressure to drive the oil and gas, there would be no more oil or methane gas being forced up through the sea floor cracks.

Reservoir development projects take many years. Typically, the life of a field being developed is 20-25 years. The first development at the Coal Oil Point reservoirs began decades ago and a portion of this area is

still being produced. Scientific recordings demonstrate that seep levels here are less than half of the initial volume coming from seeps. These same scientists attribute this seep reduction to reservoir pressure relief, the result of extraction. We need to use this model as a way of dealing with ALL the remaining seeps. To me, to do any less would be like patching only half the holes that caused a flat tire.

Lad Handelman tells us that it is time that environmentalists, energy groups and politicians work together to benefit the environment and re-energize State and County coffers.

Lad Handelman proposes bringing the oil business back to California in an environmentally friendly way, and that funds from the oil industry should be used to help heal the ocean.

If you somehow convince the community to go ahead and pump out what oil and gas is there, what would the process of extraction look like?

It could be achieved in various environmentally friendly ways. Aside from slant drilling, another way would be to install one single production and collection platform in a new lease area which can then act as a hub for a multitude of pipelines emanating outward in various directions to distant sub-sea wellheads (a sub-sea wellhead is the uppermost component of a producing well which connects the oil flow coming up from the reservoir to a pipeline lying on the sea floor). Except for the central gathering platform, there will be nothing else to be seen.

Other types of discoveries might lend themselves to being developed **entirely** sub-sea, with pipelines from wellheads going directly to an onshore site requiring no platforms at all. These subsea/satellite methods are common practice today and after forty years, are well proven.

In the early 'sixties, between Coal Oil Point and Gaviota, thirty such entirely sub-sea production systems were installed in state waters close to shore, and the public never even knew they were there.

Twenty-five years later, when the reservoirs had been emptied, the subsea hardware was removed and hauled away. The public never saw them in all that time. These subsea installations provided California with trillions of cubic feet of natural gas and they generated millions of dollars of new revenue for state and county coffers.

This well-proven technology can be applied again right here.

How easy or difficult will it be to prevent, or at least minimize, the danger of another oil spill catastrophe like the one in 1969? Nothing in the world is or will ever be 100% guaranteed failure-proof. Having said that, anyone who looks at the record can see that since the 1969 "catastrophe", 39 years and 10,000 new wells ago, even through hurricanes and destroyed platforms, offshore oil production is catastrophe-free. Since then, Santa Barbara's only "remarkable spill" was from a pipeline break off Point Pedernales, which was officially recorded as 163 barrels (Santa Barbara County Energy Department).

All told, in all these 39 years, only 842 barrels have spilled from offshore operations. And according to US Fish & Game records, with little, if any, damage to marine life.

By contrast, nearly 2,000 barrels a week, fifty-two weeks a year, are gushing up from natural seeps. Since the original spill in 1969, this means there have been only **842 barrels** spilled from offshore operations **versus 1,820,000 barrels** pouring out from these natural seeps. (Ref. MMS) And remember, this is the identical oil. There is no less damage from a fresh gallon of natural oil seep than a fresh gallon of pipeline spill. While anti-oil rhetoric claims state that because natural seeps are from nature and do not erupt all at once they cannot be compared to a production spill. That statement is nothing more than unscientific gibberish. Just ask a sea otter lying on the beach covered in oil from one of the seeps. See what he says just before he perishes. The same goes for all the dead birds found covered in oil.

That record is astounding. It sounds like you're saying we no longer have anything to fear from offshore development—so what has changed?

There are many reasons why offshore production has become as safe as it now is. In 1970, the year after the catastrophe, new and stricter regulations and other controls were established by the US Minerals Management Service (MMS), California's Environmental Protection agency and the newly created Santa Barbara Energy Department. Regulations were put in place requiring 24-hour/day monitoring and tough penalties for even minuscule violations (even a one pint leak must be reported).

They also required more and stronger safeguards. Should by chance a pipeline be snared and break, all flow is instantly stopped by automatic and redundant shut-in valves. Each and every offshore system is required by law to include several of these zero tolerance failsafe mechanical devices. And for even greater redundancy, onsite

technicians monitor flow pressures and via remote controls can trigger a shut-in as well. A perfect current example is what happened in the Gulf of Mexico with Hurricanes Rita and Katrina. More than 100 drilling rigs, production platforms and pipelines were destroyed or torn out by their roots and moved miles away. Amazingly, there was not even one spill that amounted to anything. The failsafe shut-in systems worked! So when the next big earthquake hits and the city's gas lines rupture and explode, I'd rather be on an offshore platform than in my own home.

Based on all this, my personal take is that I am more concerned about my steering wheel coming off or my water heater blowing up than I am about another uncontrolled offshore catastrophic blowout. Lets put this fear to bed, where it now belongs!

For example, in the early sixties, we installed 30 of these subsea wellheads, piped to shore, and the public never knew they were there. They were taken out 25 years later and the public never saw them in all that time. They provided a great economic benefit to the county through the state system, and a great deal of energy.

What about natural gas and methane seeps? How big of an issue are these?

This is a huge issue, as global warming, which comes from such emissions, has become the whole world's hot button. Once again, the public in general is unaware of the magnitude of these gas seeps and the extent of damage they reek on our air quality every day. According to Santa Barbara County Air Pollution Control's most recent report (2007 Clean Air Plan), the volume of greenhouse gases emitted by all our cars, trucks and vessels combined is polluting our atmosphere at the rate of 4,800 tons/year. This is a frightening amount which we're trying hard to reduce. And yet, according to these same records, even more pollution is spewing out from natural offshore seeps—a recorded 6,075 tons/year! I found this information unbelievable. When I asked the County officials what I thought was a reasonable next question, "Why in the world aren't we doing something about this?" The answer was, "Because these natural emissions are not regulated or controlled, addressing them

is not included in the County's Clean Air Plan." So you see, dealing with this issue is not even on their radar and certainly not in their budget. **UNBELIEVABLE!**

The researchers may be able to validate the existence of these dangerous emissions using scientific methods, but what can we the public connect with to help us understand this phenomenon?

From underwater, these gushers can be witnessed shooting out of holes on the seafloor, and occasionally observed as they boil into the atmosphere. For example, just a year ago a group of UCSB researchers were right on-site when a very visible and dramatic occurrence of one of these methane blowouts happened right next to their boat. Amazingly, they got the whole episode on film. The incident was written up by *Santa Barbara News-Press*, "Was Methane Blowout Earth's Warning Signal?" (August 27, 2006). This article describes "a big blowout of methane from an undersea seep... when three separate streams of bubbles burst out of the tar and shot up 60 feet to the surface where a cloud of methane drifted over the UCSB air monitoring station."

The article goes on to say that, "Scientists have suspected that underwater explosions of methane like this occur frequently and that a major explosion could trigger runaway global warming."

If we took the pressure out of these gas reservoirs, this danger, as remote as it may be, would go away. And we'll have dealt a blow in the fight against global warming.

Going back to the idea of extraction, if such extraction were allowed, how much oil and how much money are we talking about? Referring to the Santa Barbara-Ventura Basin, a 1997 Minerals Management Service report stated: "Recoverable oil reserves from the Outer Continental Shelf waters alone are estimated at 9.0 to 12.6 billion barrels." This translates into new revenues in excess of \$500 million per year, so the known financial prospect is huge. Yet one anti-oil spokesperson makes the unsupportable unchallenged claim that "even if produced, all of Santa Barbara's oil reserves would only supply the United States for 28 days." This anti-oil rhetoric is incorrect and of no relevance. Twenty-five years of new revenues and new energy is what we need, not rhetoric. We are talking about a lot of money that could do a lot of people a lot of good.

Everyone resents the large profits made by the huge oil companies. But look at it this way: First off, they'd have to pay out a sizeable chunk of their would-be profits in the form of royalties (e.g., the \$500 million). On top of that, they would have to pay out to us nearly half of the remaining profits in the

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form of corporate taxes, which means even more money to the state and counties. Can you imagine how much money we're talking about here?

Who would get all this money?

Once collected at the federal level a portion goes to the State and then a part of that amount finally is received at the county level. However, under the current political climate and the recent experience of other States, we know that if California is willing to reopen California offshore development, the energy companies will be willing to pay a higher royalty percentage. The end result will be a huge new revenue source to benefit all Californians and particularly help fund many needed projects throughout Santa Barbara County which have long been delayed for lack of funding.

So, you are hoping this money, or at least a good portion of it, could be dedicated to cleaning up the creeks, streams, and ultimately the ocean?

Absolutely. A stipulated portion of this new revenue can be earmarked to expand or replace Water Treatment Plants which were supposed to clean contaminated run-off water before it flows into the ocean. Our Sewage Treatment Facilities also need major modernizing and expansion to deal with the increased bacterial effects from our exploded population (public health and coastal wildlife are threatened, marine organisms are dying off).

Another stipulation would be to fund long-term UC research and development programs designed to accelerate alternative energy projects. By using all the brain power of UC's number of world-class scientists (UCSB alone has five Nobel Prize winners), we may be able to advance the advent of practical clean energy by many years. The money for these grants will be there to be had. Why not take advantage of this invaluable natural resource for these purposes- rather than seeing it squandered through cracks in the ocean floor? If my mother saw me allowing such wastefulness go on she would disown me.

Have any local politicians or community leaders come forward in support of your project?

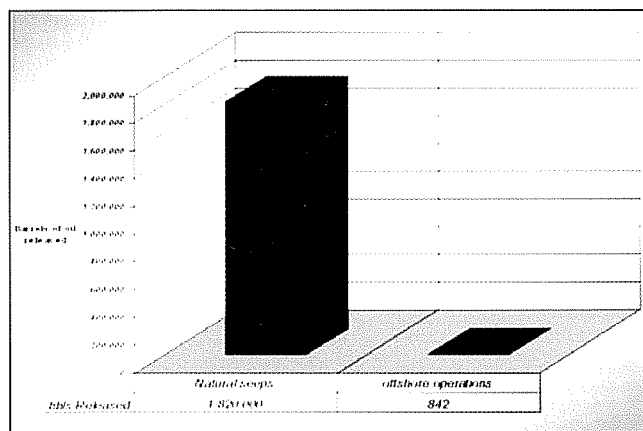
No. We have only presented this to two of them - I won't say who they are - but they both are afraid to touch it because they see being in any way connected to this issue as "political suicide." At the same time, these same representatives say that if we can show them enough public voice for the project, they'd look at it again.

What's missing from this picture is that the public has not been informed or made aware of the facts, let alone had the opportunity to voice its opinion. I believe if the public did have the opportunity, it would voice very strongly that we cannot keep following our current path "to nowhere." I believe our populace will agree that it's time we re-examine things, that we need change!

What is SOS California's first step, to convince the public or environmental groups? I don't think we can convince anyone of anything they don't want to be convinced of—that is not our job. Education is Step One and that is what **SOS California** is all about. Thanks to the advent of web sites and blogs, we can now spread information throughout the community and state within months, not years, and those that can look at it with open minds can see for themselves that it is time to put aside our fears from 1969 and join the rest of the world in making good use of energy.

So, what's your plan to roll out this information and begin the process of educating the public? The first thing, which we are now working on, is to complete our website, **SOScalifornia.org**. This will allow people to check out the science, check out the records and satisfy themselves that our information is factual.

Next will be to expand this informational website into also becoming a central platform for all to share information and openly express their views and ideas. This becomes



A look at natural vs. manmade oil pollution offshore Santa Barbara since 1970. There is virtually no comparison between natural oil seepage and spills caused by man.

a vehicle for Californians to communicate their views to our politicians. I believe that once our politicians see this effort as a true grassroots movement, they'll have to listen. And perhaps, may even feel compelled themselves, to re-examine the current offshore energy blockade policy.

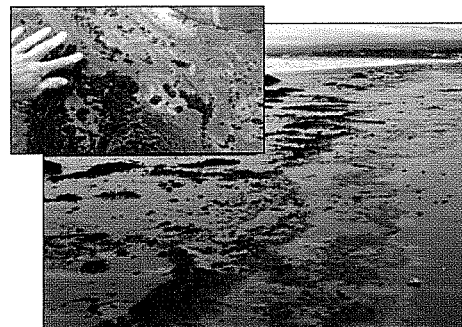
So **SOS'** job is to create the mechanism where all Californians can get current

information, to see the whole picture- and then be empowered to do something about it.

Aside from the steps you've just mentioned, what do you see as the longer term strategy?

Based on my experience, it would be futile at this time to detail any long-term plan.

As events unfold, the optimal strategy will reveal itself. For now, we are concentrating our efforts on getting the word out.



The public, due to misinformation campaigns from the anti-oil environmentalist lobby, is unaware of the staggering magnitude of natural oil seepage.

For the record, what is in it for you?

What's in it for me is peace of mind from knowing that I did everything I possibly could do to promote change that is good for the environment and for California. My history demonstrates that I am an environmentalist. I've spent cash money, a couple hundred thousand dollars, re-planting abalone in these islands. I have spent fifteen years of my life supporting marine mammal and other resource protection. I see myself as being a reality-based steward of the ocean. At this point in my life I do not need to prove anything to anyone. But neither can I sit back and let a few fear-mongers inflame the public with old information to promote their own self-serving agendas—living off the results of that fear—and in the process do more harm than good to our environment and to the best interest of the community.

I'm just an average guy who wants to do the right thing. I don't and won't get any money from this. I just want to go to sleep at night knowing that I spoke up for what I know is right. **UW**

For readers out there who want to help, we invite you to join our **SOS California** effort. You can go to our website or call the office and get started NOW! Contact:

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