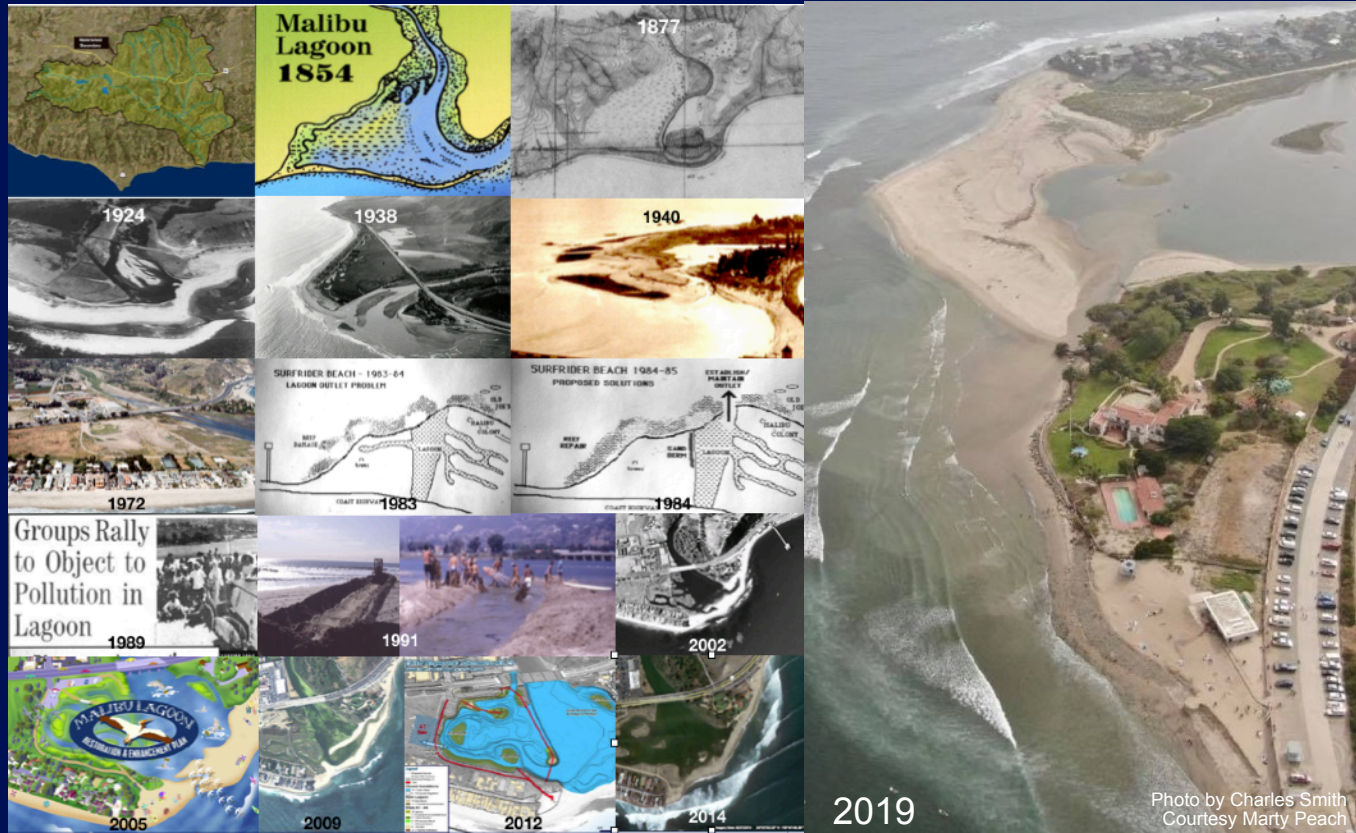


Nature, Man, and Malibu: A Brief Version of a Very Long Story - Part One

by Glenn Hening



Introduction

Thanks for taking the time to review a brief collection of facts that may help you form a better understanding of the natural and man-made dynamics that affect Surfrider Beach.

Of course everyone is entitled to their own opinions, and as you go through the information, naturally you still may have more questions than answers.

But my goal is only to provide a brief version of how Nature has created, albeit as affected by Man, an amazing natural wonder: the perfect waves we ride at Malibu.

Now, when we started Surfrider to protect the shape of the wave at 1st Point back in 1984, I was working at the Jet Propulsion Laboratory writing computer code for spacecraft. Today I'm teaching high school math classes. So I like to think I'm capable of separating facts from fantasy - which is important when it comes understanding the problems - and controversies - at Malibu.

This isn't easy when you consider:

- Natural processes that have been going on for thousands of years - and continue to this day;
- How, starting 100 years ago, the Malibu Creek wetlands was transformed forever thanks human intervention (such as the construction of PCH); and
- the nostalgia of older surfers vs the sciences of weather, watersheds, wetlands, and waves.

So my presentation is only intended to help simplify some of the complex issues involved - as opposed to my trying to explain in detail what is a very long and complicated story.

Then again, as Lance Carson said in his speech to protect the shape of the wave at the hearing back in 1984, "Malibu is like Old Faithful - a natural phenomenon found nowhere else."

I couldn't agree more. And if we are to honor that idea, and if we are to consider the issues at Malibu properly, we owe it to ourselves to do some clear thinking. This presentation represents my effort to do just that.

Glenn Hening, July 2019

So, to understand where we are today, let's start with the fact that Malibu - the shoreline and the waves - are dependent on a large watershed that drains down through Malibu Canyon to the ocean.

That watershed has remained essentially unchanged for about 8,000 years.

However, remember that a VERY LONG time ago the entire Santa Monica Mountain range was once underwater, and you can find seashell fossils throughout the mountains.

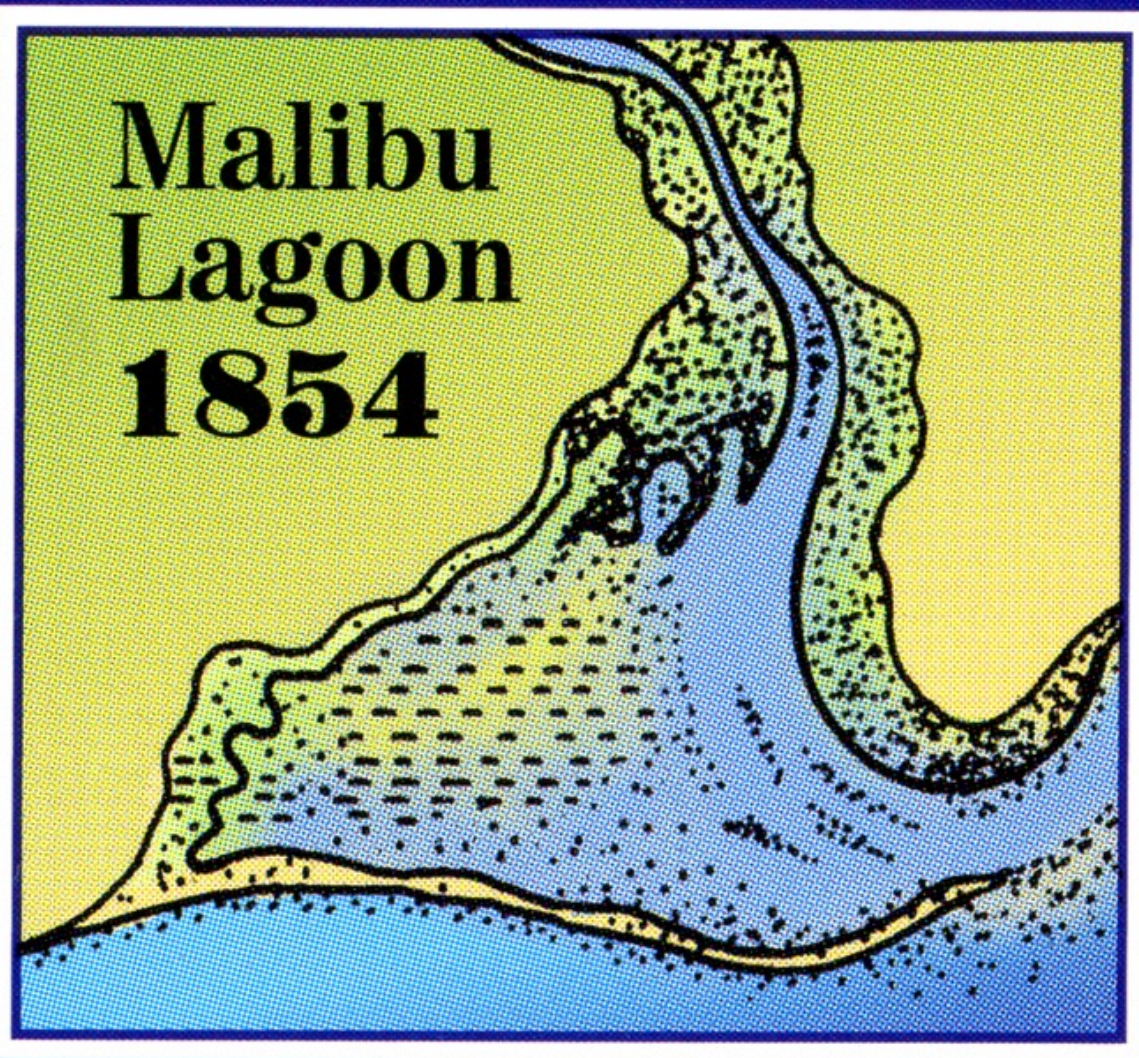


These graphics suggest that 2,000 years ago, and then about 500 years ago, Malibu Creek created a large wetlands from about where the Pier is today all the way up the coast to the Malibu Bluffs.



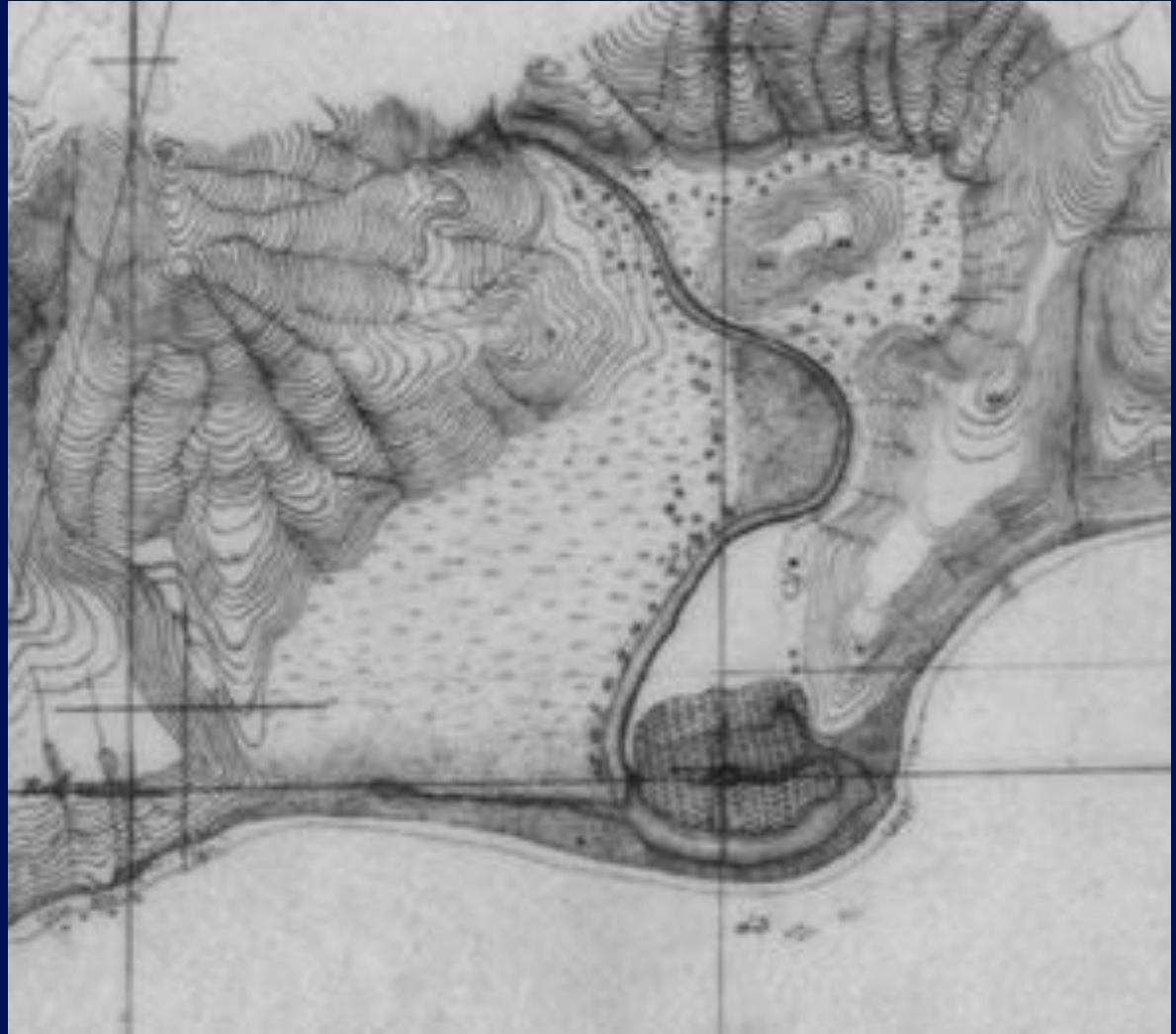
Imagine the lagoon being 20 times its current size - with no shopping centers, no PCH, no bridge, no Colony, no Adamson House, and even, in fact, no surf spot!

Yes, its possible to think that we would not have waves at Malibu as we know them if we look only at the hydrography and geography of the area as depicted in this image taken from a Spanish land map in 1854.



This image, from 1877, shows the creek flowing through where the Cross Creek shopping current exists, with a very large wetlands to the left and the creek curling around a lagoon to the right.

In this image, we can imagine that there might be good waves to ride down the eastern side of the lagoon, although this also shows the Adamason House area well within the lagoon.



Malibu - 1911. This may be the first photo ever of the area. Look closely and you can see the creek coming out right next to the Serra Retreat bluff - and flowing through where the Adamson House now exists. And of course the Lagoon and beach are quite different than what we are familiar with.



Circa 1924 - Here's where man started to mess with Malibu: the dam built by Mary Rindge immediately changed the downstream flow of Malibu Creek and allowed for development in the wetlands, including the construction of what we now know as the Adamson House.



This image is also from around 1924.

You can see the railroad track about where PCH is today, with a road crossing the creek upstream.

The railroad undoubtedly had a serious affect on the wetlands.

As for the lagoon and the beach: its hard to the interpret the “geo-morphology” of the area - though looks like good waves are breaking at “3rd Point”, although the “1st Point” looks a bit sketchy.



This modern image shows the constraining levee that was first constructed in the 1930s, forcing the Creek into its current path so that the bridge could be built for PCH.



Channeling the creek as soon as it emerged from the mountains also allowed for all the development in what once was a much larger wetlands.

Thus PCH, the shopping centers, the houses in the Colony, and the Civic Center were all constructed thanks to this levee.

The levee has been reinforced several times since it was constructed in the 1930s.

The constraining levee has never failed, even in the extreme rains of 1998 (shown at right).



Photo: Bill Parr

1938 - "It was once all a wetlands". Notice how the old PCH in the lower right (now the parking lot at Surfrider Beach) was replaced by PCH built on the railroad right-of-way which essentially cut the wetlands in half. Also notice the old road bridge upstream is gone.



1940 - Two years later, and its obvious that Malibu has changed again. Notice the size of the beach in relationship to the houses of the colony in the upper right. Also notice where the lagoon outfall has naturally meandered.



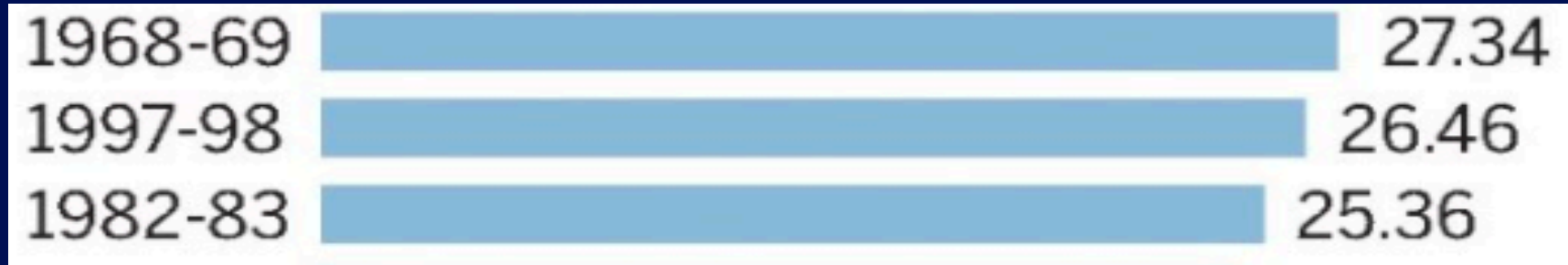
1941 - Consider the size of the lagoon in this image - there doesn't seem to be an outfall channel to the ocean, so all this water simply backed up.



1947 - A frame grab from a short movie shot during a great swell - a good example of the power of the natural forces involved at Malibu - and how extensive the shoaling zone is thanks to the power of the Creek laying down deposits of cobble and sand for thousands of years far out into the ocean. We saw this again in August of 2014.



Speaking of how the watershed relates to classic surf, the chart below shows three rainy seasons that significantly affected the watershed and the waves at Malibu, especially the all time rainy winter of 1968-69.



It must be remembered that rainfall in the watershed brings sand to the beach and replenishes the shoreline “river of sand” (Dr. Inman, Scripps Institution of Oceanography). For comparison, consider that this past season about 16 inches of rain fell in the watershed. Although this is above normal, we’ve had below average rainy seasons in the watershed for the past six years (except for 2016-17, though that year much of the rain fell to the north of the watershed and/or soaked into the ground after the drought years). So contrast this past year with what we got after the epic winter of 1968-69, when Nature gave us an A-frame peak out at 3rd point - while completely burying 1st point with sand for the next few years.

1971 - Thanks to the all-time record rains of 1969, 1st Point was completely buried in sand. However we had a completely new "Malibu" to ride out at 3rd Pt, where a delta-shaped shoal had been deposited by the rains. Our new short boards fit the new wave perfectly. Here I am about to back-door the A-frame peak at 3rd point.



1972 - Back on land: there is no lagoon, and notice how dried up the creek appears. You can see the Little League baseball field that was built on top of the landfill, which was still being used to deposit construction debris.



1979 - An important image because now we can see the Cross Creek shopping center built up - thanks to the reinforcement of the constraining levee that channeled the creek and dried up the wetlands. However, the channeled creek now flows with enough downstream force to maintain an opening that allows for a somewhat natural back-and-forth flow with the ocean.



Then in 1982-83, State Parks acquired the landfill to establish Malibu Lagoon State Park to increase the public's access to the beaches in Malibu.

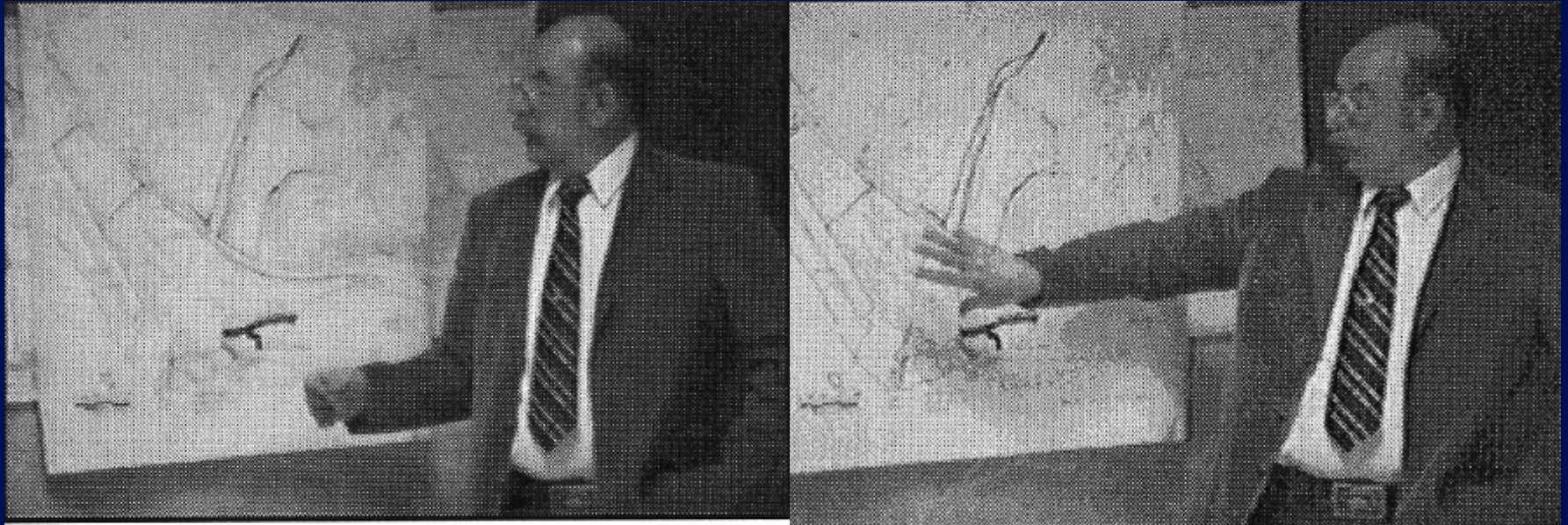
They decided to try and create a version of a wetlands by carving channels through the landfill and covering the area with various plants.

Unfortunately, wetlands science at the time was poorly understood. The channels became low-flow dead zones with no turbidity and putrid stagnation.



An engineer explaining the blue print that was used to design Malibu Lagoon State Park. It was decided to completely change entire area, including taking down the Surfrider Beach sign and make the entire beach all the way to the Pier part of the new Park.

A new parking lot was built for beachgoers who would use a trail to get to the ocean and shoreline. The Park would also include a “wetlands” created by cutting channels through the landfill to enhance the natural experience of Park users. Of course, all this had nothing to do with surfers or consideration for the place as a unique surfing resource.

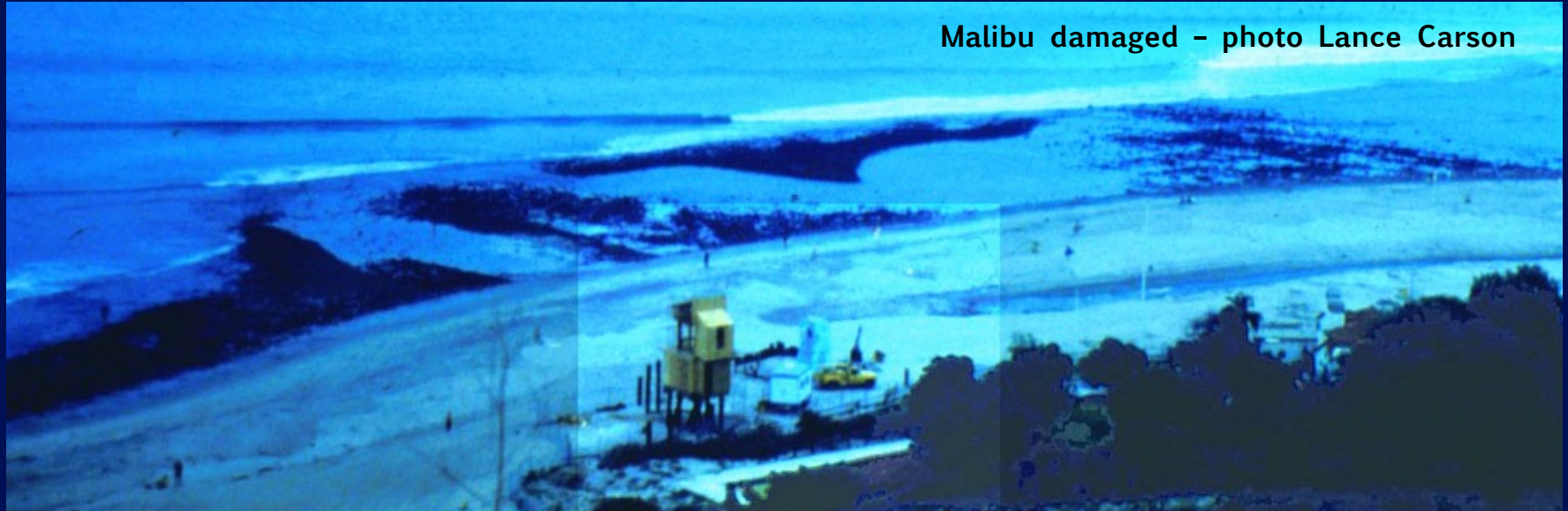


Photos from the community hearing, October 12, 1984

1983 - Since the channels were now supposedly threatening septic systems in the colony - and to maintain a nice beach for Park users - officials decided to drain the lagoon straight into the waves at 1st Point.

They completely ignored Lance Carson and other surfers who pleaded with them not to ruin 1st Point - one young surfer even laid down in front of the bulldozer - to no avail.

So when today's surfers talk about the potential for the wave at 1st Point being ruined, well this is what it looked like when that REALLY happened.



Malibu damaged - photo Lance Carson

PS: notice the new lifeguard tower being constructed as part of the Lagoon State Park project. The tower burned down soon after this photo was taken. The arsonists were never identified.

Another problem with the drainage ditch is that it would fill up with debris from the landfill now exposed by the channels - and polluted water thanks to the putrid stagnation of the water in the channels.



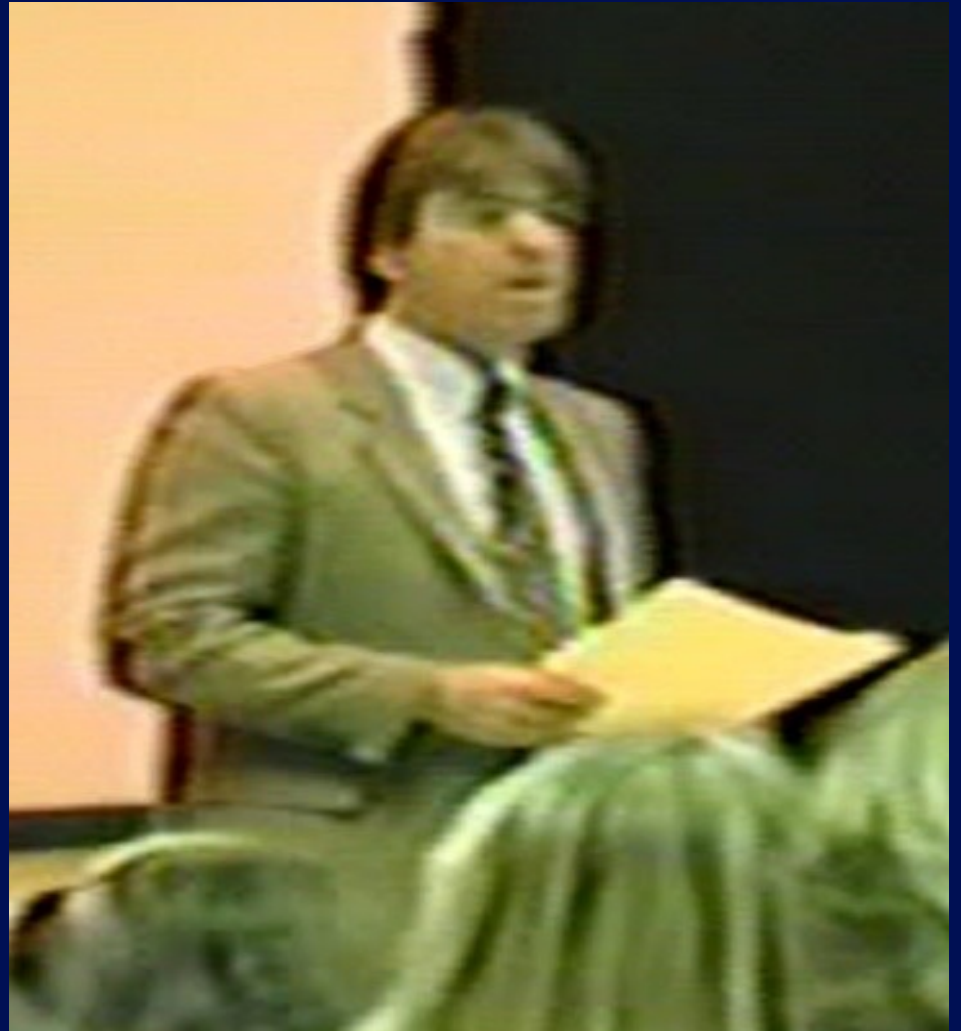
In 1984 I started the Surfrider Foundation - with Lance and Tom Pratte guiding our first action to defend the shape of the wave at Malibu.

Again, the wave had been truly ruined in ways today's surfers can't even imagine.

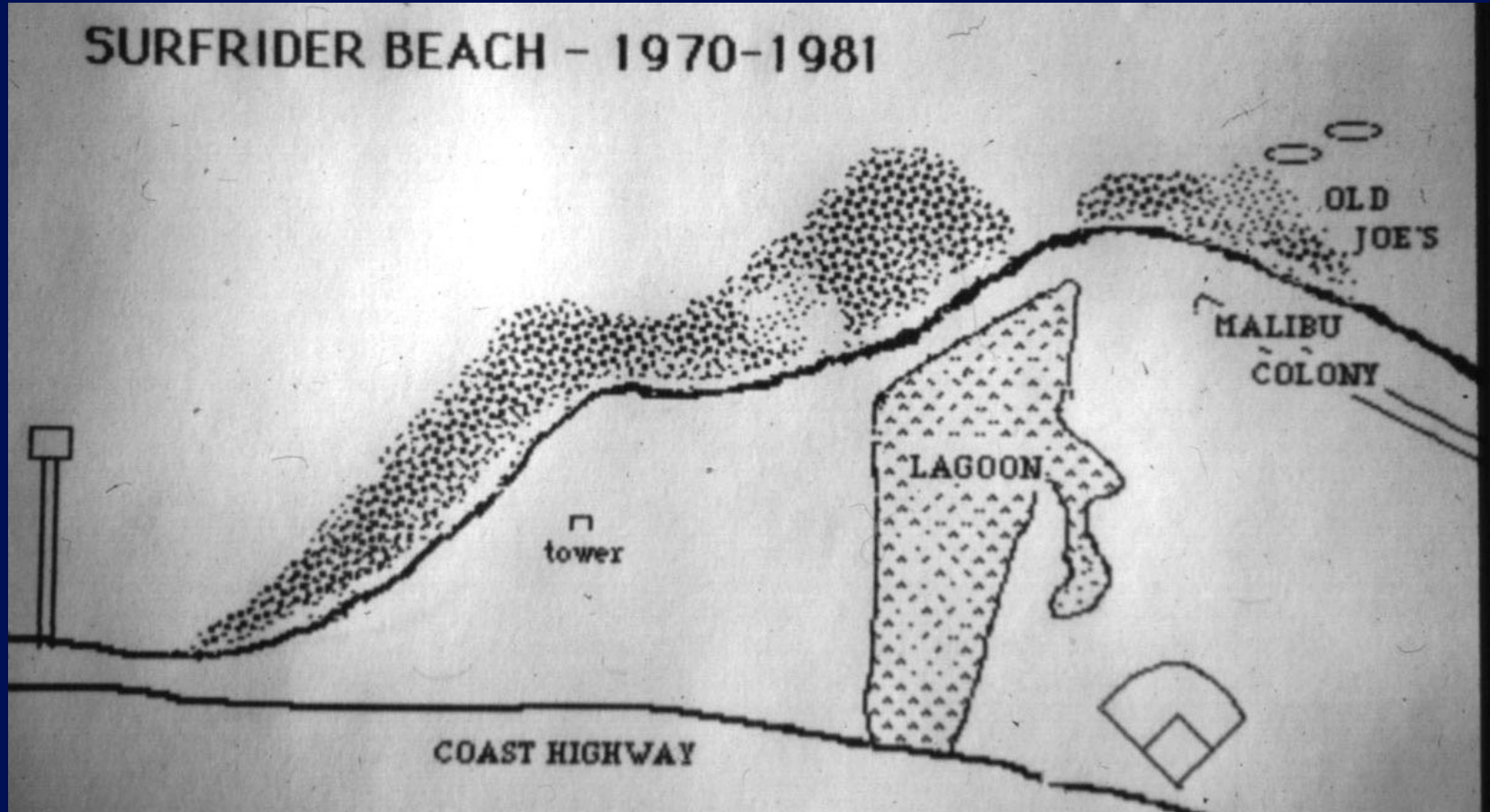
Tom Pratte arranged for a hearing with State Parks officials that was attended by a full house of surfers.

The hearing on October 12, 1984 was pretty intense: Lance made an impassioned speech, Tom quoted the Coastal Act, and dozens of surfers spoke up.

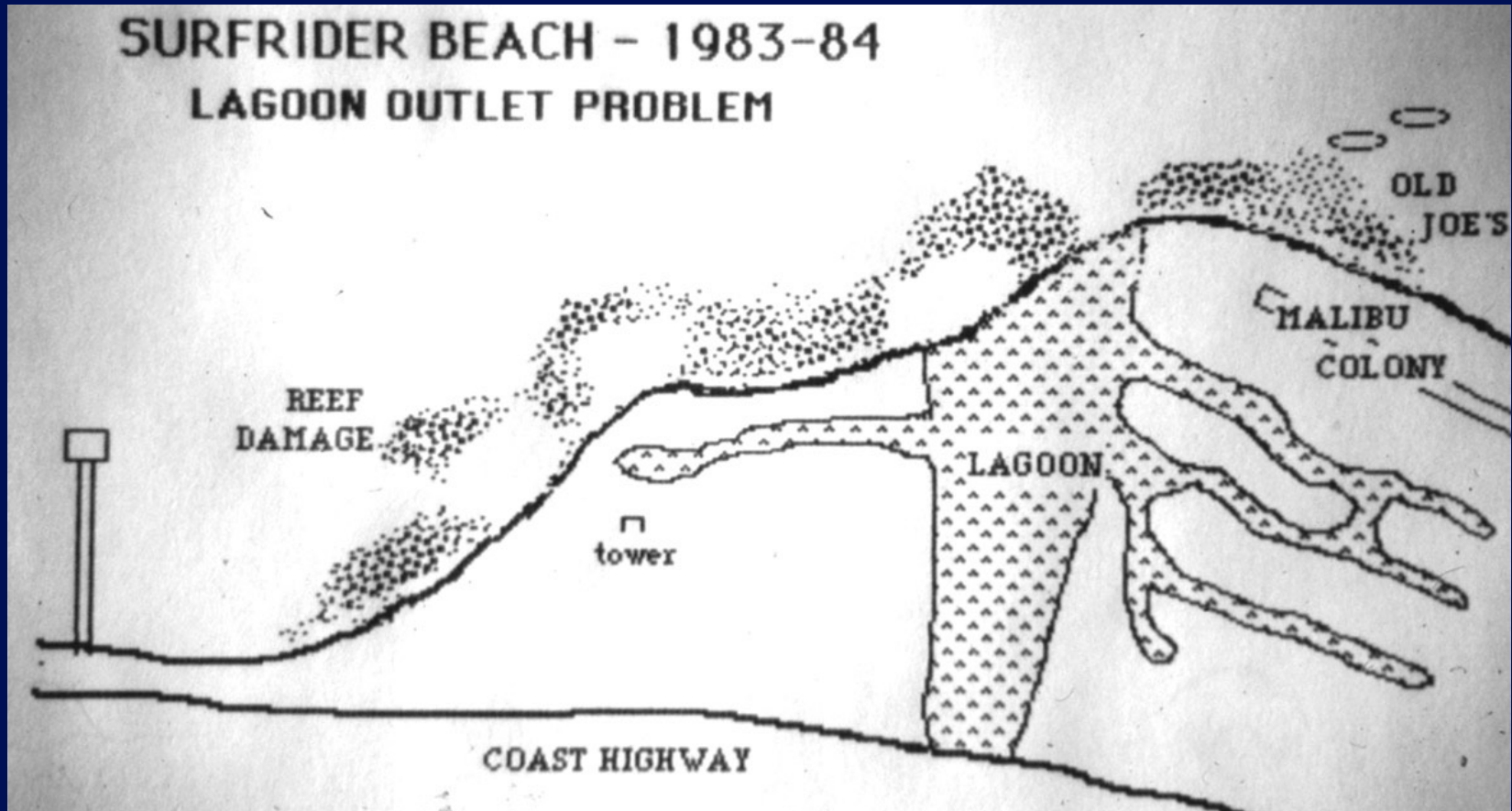
But we also had a solution, so I created some images on a brand-new Macintosh to illustrate the problem - and what we wanted.



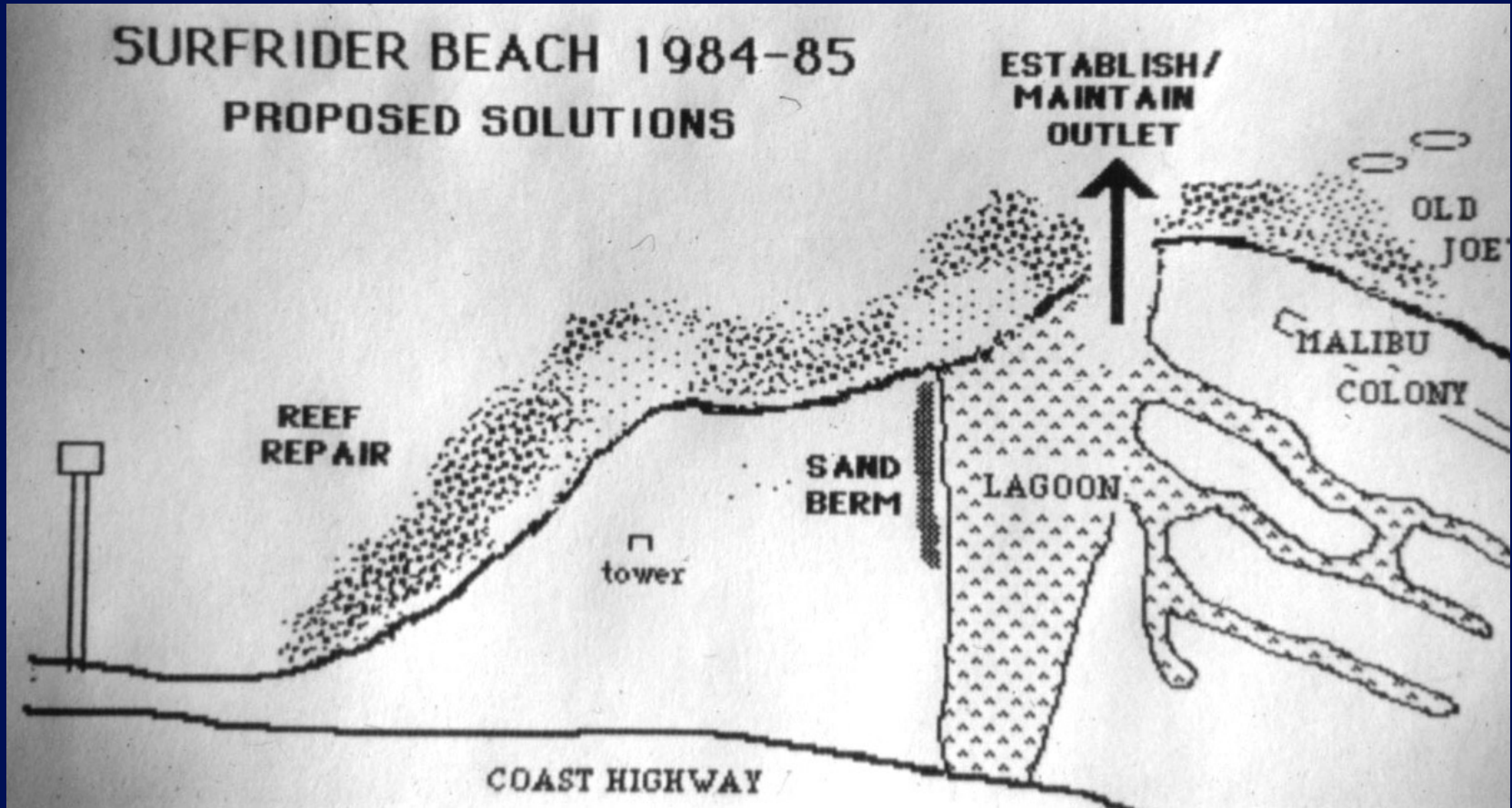
I showed this slide to orient officials. The peak at 3rd Point was still breaking many years after the 1969 storm first formed the delta-shaped shoal, while 1st Point finally turned back into its usual form due to natural erosion and wave-action processes.



Draining the lagoon at various outlet locations essentially scoured ditches across the long even cobblestone bottom. The wave was essentially unridable except at very low tides.



So here's what we proposed - and State Parks agreed (though Tom Pratte said we won because officials thought we would riot if we didn't get what we wanted!)



So we won - and we were stoked! We'd saved the wave!

But by 1988 we realized we still had a serious problem: draining the lagoon was creating a real threat to our health due to the putrid stagnation and dead zones in the poorly designed low-flow channels. And State Parks would drain the lagoon depending on the availability of the bulldozer - including on days when the surf was good.

Here is an image from July 1989 showing the drainage ditch dug by the bulldozer.



So we had to go back to activist mode right when Malibu was applying to become a city to avoid LA County forcing homeowners to shift from septic tanks to a sewer system.

This was also when the Tapia Wastewater Treatment Plant (upstream in the creek watershed) was applying for an expansion.

It should be noted that Tapia had won an award for the cleanest, triple filtered recycled water in the U.S.

And the water, which was not sewage by any means, was sold to Caltrans for irrigation rather than put it in the creek.

But we didn't know that at the time. We formed the Malibu Chapter of Surfrider, and we hammered Tapia endlessly for discharging "sewage" that polluted the creek, the lagoon, and the waves.

Groups Rally to Object to Pollution in Lagoon



Dirty water data to stir need for lagoon cleanup

Legal Options for Regulation of Tapia

Council Holds Early Morning Debate on Wastewater Group

Caltrans Loses Suit Over Bay Pollution

■ Courts: Judge rules that the agency violates clean water laws by allowing roadway runoff to drain into the ocean off Santa Monica. It is the first such decision in the nation.

By MARLA CONE
Times Environmental Writer

erized needs such as freeway maintenance. *Refused request*

Consultant Says Wastewater Issues Are Critical to Malibu Future Plans

Water Board OKs Creek Sewage Ban

By LOUISE LARSON
Times Staff Writer

City Council chambers 666

Surfrider Foundation
Malibu Chapter
Presents

Pollution and Disease at Surfrider Beach: The Complete Story (So Far)

Wed., Aug. 5th ■ 7:00pm ■ Michael Landon Community Center

Your chance to get the facts you need with no hype, no hysteria, and no cheap shots.

Complete Data Summaries available including maps, graphs, aerial photos and recent scientific studies.

And we even took matters into our own hands when the bulldozer would show up to drain the lagoon - even when the surf was good and a lot of people were in the water.

Here's what the bulldozer would do to drain the lagoon - and here's what a bunch of surfers would do in response led by longtime Malibu surfer Paul Minkoff, (lower right in the white visor).

Sometimes it worked, and sometimes it didn't. And when the surf was flat and nobody was surfing, State Parks simply drained the lagoon with no regard to the pollution issues they were creating in the ocean.



One time we were able to get some advance info on the bulldozer schedule, and were there to stop the lagoon from being drained into the ocean.

This was actually a somewhat tense situation (witness armed State Parks ranger coming to talk to us) but I knew Ranger John and he was a good guy. The 'dozer driver understood the whole thing, and so we were able to delay things until a call was made to the State Parks superintendent.



Photo by Ken Seino

The superintendent called back and stopped the 'dozer in its tracks. And for the next few years, they would drain the lagoon only when absolutely necessary - and NOT when the waves were good with a lot of surfers riding them - or when State Park beachgoers were in the ocean. But that was not the end of the story by any means.



Photo by Ken Seino

Nature, Man, and Malibu: A Brief Version of a Very Long Story End of Part One

