

Bill Lovejoy/Sentinel photos

Fisherman Nick Tannaci finds himself stuck in the mud after trying to leave his north harbor berth during low tide last month.

THAT SEDIMENTAL FEELING

Santa Cruz harbor deals with growing sludge problem

By **BRIAN SEALS**
SENTINEL STAFF WRITER

Harbor 2000

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SANTA CRUZ — On a sunny Wednesday afternoon, Nick Tannaci was aboard his boat, the Reel Time, and hoping to go fishing.

But on this day, he was doing more mud navigating than fishing.

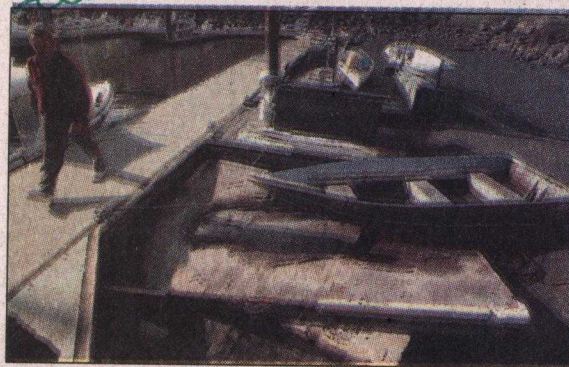
The layer of sediment on the bottom of the northern end of Santa Cruz harbor, just off 7th Avenue, was visible near the boat.

Tannaci took it in stride.

"Within an hour of high tide is the only time I can seem to get out," he said later.

This isn't what boaters mean by dry-docking, and it's not a new problem. From about the time the North Harbor opened in 1973, sediment rolling in from Arana Gulch has oozed into that section of the harbor.

In more recent times, that has resulted in a mud-capped upper harbor where docks



Silting and low tides leave boats high and dry in the north harbor on Wednesday.

hit the ground and some boaters feel frustration. That means big bills for the harbor district that already has to cope with sediment filling the channel at its entrance.

"It's getting worse," Port Director Brian Foss said while standing on the harbor's north end J docks. "It has accelerated with

urbanization."

A case in point, Foss holds up a wayward golf ball, an item that may have flowed in along with the sediment from as far away as the DeLaveaga Golf Course driving range.

In the years since the upper portion was opened, the volume of sediment has escalated, and fixes are years in the making. The result is damaged docks amid a field of mud at times.

In the mid-1980s, about 1,500 cubic yards of sediment found its way into that part of the harbor. This year, there is an estimated 10,000 cubic yards. And as that part of the harbor gets more shallow, it makes the docks more susceptible to breaking

waves that roll in.

The result is that the port district is spending \$800,000 to replace the J docks and is losing \$50,000 annually in lost slip revenue.

Dredging project adjustments could save money

By **BRIAN SEALS**
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This week crews at the the Santa Cruz harbor will begin dredging the upper harbor, an annual effort to clear the channel.

In October, the harbor conducted a project that could bode well for its expenses.

That project will allow crews to dispose of sediment in ocean waters so long as its content is 50

percent sand and 50 percent clay and silt.

Normally, regulators like the Environmental Protection Agency and the Army Corps of Engineers place the threshold at 80 percent sand and 20 percent clay or silt.

That is because pollutants tend to bind with the clays and silts. But testing in 2001 and 2005 showed no threat of pollutants, allowing for the project to go with the lower threshold.

That's important to harbor officials because if the stuff can be pumped back into the ocean, it saves money, compared with putting it in a truck and hauling it to the dump. That translates to about \$10 per cubic yard to dispose by sea, compared with around \$80 per cubic yard to dispose by land.

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Bill Lovejoy/Sentinel

Port Director Brian Foss faces an ongoing struggle with silting in the north harbor that strands boats during low tides like this one.

Harbor

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For now, about all that can be done is to pump the stuff out.

While the harbor is coping with sediment, the root of the problem lies far beyond the docks and boat yard up in the Arana Gulch watershed.

For the past several years, a group dubbed the Arana Gulch Watershed Alliance has worked on long-term fixes to erosion in that watershed, an issue not only important to boaters but to steelhead salmon that migrate upstream through the harbor.

"We're kind of fastened at the hip," said Roberta Haver of the Arana Gulch Watershed Alliance.

That group, with cooperation from a string of government agencies and nonprofits, is amid a decades-long effort that would include 20 projects to stabilize erosion and help fish swim upstream.

Three projects have garnered grant funding for design work and permits that would be needed, though the group is still looking for ways to pay for building them.

They include repairing a gully that has formed along what is known as the Blue Trail, replacing an old culvert that is impeding the steelhead from swimming upstream and a project by the city on its

Disc Golf Course to stabilize erosion there.

Another ongoing effort is at Harbor High School where a sediment basin catches a portion of the stuff that would flow into the harbor otherwise. It catches anywhere from 150 to 300 cubic yards per year, Haver said. That's a fraction of what fills the harbor, but it is a one-step-at-a-time endeavor.

In 2004, the fill was taken up to the DeLaveaga Golf Course to use for project work.

"We like to put it back to where it came from and keep it there," Haver said.

The challenge is competing for money to bring the projects to fruition. Any number of similar work is done up and down the coast, usually on larger rivers and streams.

Meanwhile, harbor crews were busy this week dredging the upper channel. They need to get the work done before March, the start of the season for steelhead to make their journey upstream.

"It's going to take a community effort to get on top of this" Foss said.

And boaters like Tannaci, who is on the waiting list for a permanent boat slip, navigate as best they can.

"If I have to keep an eye on the tide charts, so be it," he said.

On the Web at <http://www.aranagulch.org> and <http://www.santacruzharbor.org>.

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