

Harbor dredging operation termed a success

7-28-87

By RICHARD EMANUEL

Sentinel Correspondent

SANTA CRUZ — Sucking up a slurry of sand and water and spewing it out again down the coast, the mighty dredge Seabright has fulfilled expectations and kept Santa Cruz harbor open this winter, according to a draft report to be submitted to a port commission meeting tonight.

"The dredge does what it is supposed to do," said Port Commissioner Bill Lee.

"Looking at the trees instead of the forest, I'd say the short-term problem has been solved," Lee said.

The problem Lee refers to is the build-up of sand, called shoaling, at the harbor entrance. The sand is moved southward along the shore by the prevailing wave action in Monterey Bay.

Shoaling is a continuous process, but it is especially rapid during winter when storms can deposit as much as 15,000 cubic yards of sand in an hour, the report by Port District staff says.

Shoaling of the harbor entrance has been a persistent problem since the harbor was built, in 1964. The harbor entrance has been blocked by sand as much as four or five months in some years.

The first attempt to combat the migrating sand consisted of dredging the harbor entrance each spring, after it shoaled up each winter.

In 1970, a small, floating dredge was purchased to operate through the winter. It was quickly found to be inadequate and was dismantled after three months. Annual dredging by contractors was resumed.



Dan Coyro/Sentinel

The dredge "Seabright" was launched last October.

In 1976, an experimental "sand bypass system" was installed to suck sand from a fixed location and pump it down the coast, beyond the harbor entrance. This system too proved inadequate.

After the sand-bypass experiment, periodic dredging was resumed, this time several times a year instead of once each spring. A thorough review of possible permanent solutions to the problem was also undertaken by a

consultant hired by the U.S. Army Corps of Engineers.

Then in Sept. 1983, based on the consultant's findings, the Port District undertook to acquire a large, state-of-the-art, custom-built floating dredge to be owned by the Harbor District and operated daily over the winter dredging season.

The cost of a complete dredge system of adequate size was estimated to be \$3.6 million, of which

the Corps of Engineers agreed to pay 80 percent. In 1985, Congress appropriated money for the project.

Last October, the dredge, named the Seabright, finally arrived in Santa Cruz. It arrived on time and cost 20 percent less than expected.

"As far as how the dredge functions, I'd say it was a roaring success," says Port Commissioner Bill Lee.

"We thought we had a handful

of problems, but our consultant says it's been nothing compared to a really nasty dredge situation," Lee says.

The dredge was inoperable due to mechanical problems only 13 days during the dredge season, from mid-November through mid-May.

During that time, the Seabright moved an estimated 212,410 cubic yards of sand, at an operating cost of \$362,896, or \$1.71 per cubic yard.

Lee says the harbor was open "almost 100 percent" this winter, although he adds, "it was an easy year," noting the lack of severe winter storms that sometimes close the harbor entrance.

Lee also adds that the apparent success of the Seabright doesn't solve all the problems of Santa Cruz harbor. In particular, high surf at the harbor entrance still sometimes poses serious boating problems.

Lee says the solution to that problem remains to be worked out, but it probably lies in redesign of harbor jetties and construction of additional breakwater structures.

Meantime, boaters are "real happy" that the Seabright seems to be working effectively, according to Lee.

Boaters must watch for the dredge and its anchor lines and pipes, "you have to use due caution," Lee says. "But it's worth it in view of the benefits."

After two decades of fighting the shifting sands, harbor-watchers are wary about claiming victory.

But for now, the Seabright is performing according to expectations, and the harbor entrance has so far remained open.