

L.A. officials investigating groundwater seepage at Point Fermin cliffs

Donna Littlejohn, Los Angeles Newspaper Group, 3-15-15

There wasn't much warning when a cliff at San Pedro's White Point collapsed in November 2011, leaving a gaping hole in what was once a stretch of the town's scenic coastal drive and hundreds of millions of dollars in damage.

Landslides, though, are a fact of life along the ocean cliffs that line the Palos Verdes Peninsula.

Among the most famous was the 1929 collapse of an area now known as Sunken City, a 6-acre residential neighborhood, which now lies in slabs of tumbled concrete slumping toward the sea.

Now, in part thanks to some recent queries from a resident and the detected presence of groundwater, attention has turned to Point Fermin, the picturesque city park adjacent to and west of Sunken City, prompting officials to install monitoring equipment to take a closer look at the park's stability.

Thus far, city engineers say there are no indications of land movement or instability at Point Fermin.

The move was prompted by community concerns, including those voiced by San Pedro resident Brian White, a retired Department of Water and Power biologist, who discovered what appeared to be groundwater — a leading factor in landslides — seeping from the bottom of the cliff.

It was almost a year ago when White, a new resident and docent at the Point Fermin Lighthouse, made the discovery as he was exploring the oceanside geology of his new hometown.

"I was walking along and saw lots of water seeping out near the base of the cliff" just below the lighthouse, he said.

Noticing a large mat of bright green algae and a sulfurous smell, he began to explore further and discovered that some of the water seeping out of the bottom of the cliff was fresh. Friends of White, including an aquarist and a city sanitation worker, confirmed his suspicions.

Groundwater — listed as a contributing factor in the White Point slide — apparently was discharging through the cliff, he said. That condition eventually could lead to erosion and, in a worst-case scenario, a landslide, he said.

"Seeping groundwater is one of the prime indicators of slope instability," White said.

His concerns were taken seriously by the city of Los Angeles.

"Typically, excessive groundwater is one of the factors that contribute to instability," wrote Christopher Johnson of the city's Bureau of Engineering in response to emailed questions. The seep, he said, "indicates that there is groundwater beneath the cliff."

At a cost of \$48,000, city engineers last month installed two monitoring wells — one to measure groundwater levels and a slope inclinometer to detect ground movement and a potential for instability — just south of and inside the fence at the Point Fermin Lighthouse, a historic landmark on the top of the bluff.

Tracking the issue from the community side is the Coastal Risk and Beautification Committee, a standing committee created by the Coastal San Pedro Neighborhood Council.

“The whole thing is that we wish to save grief and expense for the taxpayers — and the neighborhood — by being proactive,” said Adele Healy, who moved to San Pedro three years ago and now heads up the committee.

The groundwater monitoring well, Johnson said, is about 110 feet deep.

“Staff from the Bureau of Engineering will periodically lower a water level indicator into the well to determine groundwater levels,” he said.

Depending on what the results show, White believes measures such as an underground water drainage system that sends excessive groundwater out beyond the cliff face — similar to the one now in place at White Point — might be warranted as a preventative course of action.

The same kinds of drains could be used at Point Fermin, Johnson said, although other systems also could be used if it is determined that a dewatering plan is needed.

Expensive? No doubt.

“At this time it is premature to speculate on a cost,” Johnson said.

But Healy said it would be far less expensive than repairing the kind of damage that would be done should the cliff begin to slip.

White said he’s encouraged by the city’s quick response so far.

“It’s just good housekeeping, you’ve got to be careful,” he said.