

Fourth Pearce Creek-area testing finds consistent results

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An updated study of Pearce Creek-area surface water and sediment quality, such as that seen here on the Elk River, has four consistent healthy results.

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CECILTON — A fourth biannual study of Pearce Creek-area surface water and sediment quality found consistent results compared to previous studies, officials reported Friday.

Ever since a U.S. Geological Survey study found contamination of local water tables in a cluster of Pearce Creek-area neighborhoods, state and federal stakeholders have been working toward providing potable water for residents and sealing the Pearce Creek Dredge Material Containment Facility (DMCF) so that it could be reopened for dredge spoil disposal.

Meanwhile, Maryland Port Authority officials are committed to showing local residents that they know what effect future dredge spoil disposal will have on local waters. They hired the environmental and engineering consulting firm Anchor QEA to study the health of the nearby Elk River and Pearce Creek Lake before and after the first spoils were disposed of at Pearce Creek, which started last fall.

On Friday, Karin Olsen, with Anchor QEA, explained the results of the fourth seasonal period of studies, conducted in May, during a routine meeting of the Pearce Creek Implementation Committee, which contains federal, state, county and local stakeholders. This latest test cycle finished a two-year baseline to use as a reference to post-dredge spoil disposal findings.

The consultant's test examined 12 sampling locations: seven in Pearce Creek Lake near the DMCF's discharge point and one farther away as a reference, and one in the Elk River near the outflow from Pearce Creek Lake with another one farther away as a reference. They also added two testing locations off of Elk River beach at the insistence of locals in the spring of 2016.

"The data has been really consistent to what we've seen in the past," Olsen said. "There hasn't been a lot of change, which is good because it's a good indicator of what's happening out there."

Of the 18 chemicals tested for in the surface water in the fall of 2015, only one — zinc — exceeded water quality standards at one site in Pearce Creek Lake, a common result for the Chesapeake Bay, while none of the testing sites found chemicals in excess of water quality standards last spring.

In sediment testing, levels of nickel higher than what scientists like to see were detected in Pearce Creek Lake, while five other metals were found in less concerning degrees. At the Elk River monitoring site, no metals exceeded concerning levels, while two metals — nickel and zinc — exceeded concerning levels with six more found at less concerning levels at the reference site farther away from the disposal area.

Such findings, while not perfect, are not of great concern in the Chesapeake Bay, where higher nickel concentrations are common, Olsen explained. Those findings are also generally consistent with what researchers have found over the first three rounds of testing.

“We look at these studies as snapshots in time, so if all the monitoring and reference locations have concentrations that are consistent that just means the system is functioning as a whole,” she explained. “As we move forward with the program, we’ll be to use this reference data to determine if something is affecting the whole lake or if there is potentially something from the DMCF affecting quality.”

Meanwhile, lab-controlled benthic bioassays, or 10-day growth studies of organisms that live in or on sediment, found that both Pearce Creek Lake and the Elk River were not toxic and had high survival rates for organisms last spring — results that mirrored what researchers found in the last three rounds of testing.

At the Elk River beach testing site, researchers found that the water and sediment there was of very good quality, finding no concerning results in each of the various studies.

The conclusion of the baseline exterior monitoring studies is important because the U.S. Army Corps of Engineers resumed disposal of dredge spoils at the Pearce Creek site on Dec. 1. Officials reported Friday that dredging of an estimated 500,000 cubic yards of spoils from approach channels to the C&D Canal went well. Great Lakes Dredging and Dock Company used bucket dredges to clear down to 35 feet in the Elk River, using a floating pipeline to dispose of spoils at Pearce Creek DMCF in the \$9.2 million project.

Meanwhile, on-lot connection of Pearce Creek-area homes to public water service extended from Cecilton is progressing quickly. As of Friday, exterior work had been completed at 197 of the 235 lots, with internal hookup finished at 152 of them. The accompanying abandonment of wells — meant to prevent future leaching of naturally-occurring contaminants — is running a bit behind schedule, with only 58 wells capped and filled so far.

Time for residents who haven’t signed access agreements with the town of Cecilton’s contractor for interconnection is running out. Onsite construction must be completed by Sept. 8, 2018, in order to have state funds pay for it, otherwise the estimated \$10,000 cost will be borne by the homeowner.