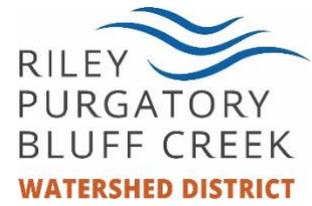


Lake Riley Zebra Mussel Assessment

October 22, 2018



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ASSESSMENT DETAILS

On October 22, 2018, RPBCWD staff conducted a zebra mussel scan on Lake Riley after a lake service provider discovered some zebra mussels when pulling docks and lifts. Previously no zebra mussels had been found in the lake during monitoring, which includes annual zebra mussel veliger sampling, semi-monthly boat launch scans and volunteer or public access adult zebra mussel monitoring plates. Staff conducted five scans varying in distance, from 175ft to 900 ft. Scans were conducted from shore out to waste deep water, most of the searching occurring between one to three feet of water. Staff utilized a handheld GPS device to track the scan route and mark points where zebra mussels were found. Structures and items checked for mussels included woody debris, rocks, aquatic vegetation, inlet pipes, bricks and garbage. Water visibility was very good, however, the wind was blowing 10-20 mph from the west northwest and made the boat launch scan difficult.



SUMMARY

Zebra mussels were found at all five scan locations although only a single individual was found near the boat launch and in the northeast bay. A total of 91 individual zebra mussels were found across all surveys. The zebra mussels appear to be widespread across the lake at low densities. Mussels were found of varying sizes suggesting that reproduction in Lake Riley has occurred. Most zebra mussels were found on rock, wood, and items placed in the water, including pvc pipes and bricks.



Staff began at the original discovery point and walked roughly 900 ft west. Immediately a large stick in approximately 2ft of water was found with six zebra mussels attached. Continuing down the shoreline staff discovered scattered zebra mussels on riprap near shore and on a pop can. Density appeared to be low moving west as individual zebra mussels were found generally on every other rock checked. Overall 53 mussels were detected along this transect. The substrate was predominantly coble and was considered good habitat for zebra mussels.



The next scan occurred on the main point of Lake Riley on the west side of the lake and covered approximately 620 ft. The primary substrate was comprised of sand and was considered less than ideal habitat for zebra mussels. Staff discovered a few individual mussels on the riprap along the shore and on smaller sticks, but most were located on items placed in the water such as pvc pipe (n=9) and bricks (n=9). Mussels were found at seven locations along the transect, totaling 24 individuals.

Staff then conducted a scan in the far north bay of Lake Riley, covering approximately 175ft. Zebra mussels were found at five locations in low densities across the transect, mostly attached to woody debris (nine of 12 mussels found). This area was also considered good habitat for mussels. The substrate was rocky and there was lots of woody debris present.



Only one zebra mussel was found in both the northeast bay and near the boat access (the combined distance scanned of these two transects was 970ft). The substrate at both locations was sand, which is not ideal for zebra mussels. The northeast bay mussel was found on riprap along shore and the boat launch zebra mussel was found on a large metal pin.

