



Midpeninsula Regional
Open Space District

Memorandum

DATE: January 10, 2018

MEMO TO: MROSD Board of Directors

THROUGH: Ana Ruiz, Acting General Manager

A handwritten signature in black ink, appearing to read "Ana Ruiz".

FROM: Julie Andersen, Resource Management Specialist III
Kirk Lenington, Natural Resources Manager

SUBJECT: Western Pond Turtle Population Study

SUMMARY

On March 22, 2017, the Board authorized a contract with Biosearch Associates to assess the western pond turtle population (WPT), control invasive fauna, and provide monitoring to guide long-term management actions during the implementation of the Bear Creek Redwoods (BCR) Open Space Preserve Master Plan for an amount not to exceed \$104,000 over 36 consecutive months (three years) (see R-17-41). Study results from year one indicate that BCR does not support a viable WPT population and staff is now working to find a suitable alternate study site.

BACKGROUND

The contract with Biosearch Associates includes a western pond turtle population study and development of adaptive management scenarios to mitigate impacts resulting from opening Bear Creek Redwoods (BCR) Open Space Preserve to public use. Annual monitoring was to be conducted for 36 consecutive months to acquire baseline data, determine if additional studies were needed, and begin implementation of a cost-effective, long-term monitoring protocol as well as control invasive, non-native red-eared slider (RES) turtles that compete with the native western pond turtle.

After the first year of monitoring, it has become apparent that there is not a reproducing population of WPT at the BCR study site as only five individual WPT were captured, and all five individuals were male. Biosearch documented these findings and updated the WPT Management Plan for the site accordingly. Based on these results, Midpen will manage the site for individual turtles instead of a reproducing population. The revised recommendations will conserve the individual WPTs by maintaining existing aquatic habitat, and de-emphasize management measures for upland nesting habitat (since no nesting activity is occurring). The District will continue efforts to trap and remove invasive RES and monitor WPT using citizen science. If we confirm breeding attempts by WPT (nesting and/or young western pond turtles), mitigation for population-level impacts would be implemented during future projects.

The original contract with Biosearch Associates assumed female WPT presence to track their movements and determine nesting locations. Since no female turtles were found and no indication of a WPT population was present, staff will use the already purchased tracking devices at an alternate study site for the remaining two years of the contract.

Biosearch was asked to investigate Cherry Springs Reservoir at Sierra Azul Open Space Preserve. This site has multiple observations of 1-2 WPT during the last 20 years and is similar to the BCR site in that the District has long term plans to develop the site for public access. Biosearch sampled the site in September 2017, and no WPT or other turtle species were detected. A second round of trapping in spring 2018 will be conducted to more conclusively determine if the Cherry Springs site supports a reproducing WPT population or only individual turtles similar to BCR.

In spring 2018, Biosearch will also sample Alpine Pond located at Skyline Ridge Open Space Preserve. Docents and staff have observed both female WPT and young WPTs as well as a non-native Florida red-bellied cooter in 2017. Efforts to trap and remove the invasive turtle were unsuccessful in 2017, but will resume in spring 2018 during WPT population study efforts.

Based on the results from spring surveys, either Cherry Springs or the Alpine Pond site will advance for the remaining two years of WPT population monitoring. These sites are either open to or are slated for future public access. Developing a better understanding of the population health, where nesting occurs, and how to best manage the sites for WPT will be of value to the District into the future.