Media Release

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SYDNEY WATER PARTNERS WITH CATTAI HILLS ENVIRONMENT NETWORK AND WESTERN SYDNEY UNI TO STUDY PLATYPUS POPULATIONS

Sydney Water are embarking on a study of Platypus populations in Western Sydney's Cattai Creek Catchment.

The study, in partnership with Cattai Hills Environment Network (CHEN) and Western Sydney University, will see water samples taken from the catchment and sent back to Sydney Water labs where they will be analysed for traces of Platypus environmental DNA (eDNA) to establish platypus numbers in the creek.

Sydney Water's lab teams have developed a testing method that provides vital information on platypus numbers by identifying the presence or absence of eDNA of platypus in water samples. This method was derived from water samples taken from Taronga Zoo's platypus enclosure.

Sydney Water's Head of Customer, Strategy & Engagement, Maryanne Graham, said: "The purpose of this project is to identify and map the presence of platypus within the Cattai Creek and Little Cattai Creek catchments.

"It's hoped that this work with CHEN and Western Sydney Uni will enable the future tracking and monitoring of platypus populations and is critical for effective conservation of the species and its habitat including building community knowledge and increasing environmental awareness on catchment health."

"Based on the results of this study, it is hoped this testing method, developed by our scientists, can be used again to allow researchers to gain a better understanding of the platypus population and the environment in which they are living.

"We are very grateful for the support from Taronga Zoo. Being able to gather water samples from their platypus enclosures has been vital to the success of this study."

The location of this study in Western Sydney is based on a response to community sightings of platypus in the Cattai Creek catchment. Samples have been taken from 3 separate water samples taken from across 36 sites identified by CHEN in the Cattai Hills catchment across 4 – 6 weeks. In addition, 56 sediment samples have also been taken from across these sites for testing.

"This study will provide further insight into how the environment surrounding the water treatment plants encourages Platypus health and highlights the contribution of Sydney Water's treated wastewater has to waterway health and wildlife habitat," Ms Graham added.





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Chair of Cattai Hills Environment Network, Sue Martin said: "We are grateful for the opportunity to have Sydney Water join us as we create awareness and celebrate platypus living across Cattai and Little Cattai catchments.

"Our citizen science program taking eDNA samples across our waterways has greatly benefited from the partnership with Sydney Water," Ms Martin said.

Two of Sydney Water's Water Resource Recovery Facilities (Castle Hill Sewage Treatment Plant and Rouse Hill Water Recycling Plant) release treated wastewater into waterways that join into Cattai Creek. It's believed this treated water has enabled the urban platypus population_by providing environmental flows during drought periods.

Western Sydney Universities, Dr Michelle Ryan, said it is very exciting to see Sydney Water expanding their capabilities and using environmental eDNA sampling to determine the distribution of the population of platypus in the Cattai and Little Cattai Creek Catchments.

"This is a non-invasive way to detect platypus in waterways. It can be used to determine if a platypus is nearby or has recently travelled that waterway without the need to capture or even sight the animal," Dr Ryan said.

"Western Sydney University plan to use this information to gain a better understanding of the distribution and habitat requirements of the Western Sydney Platypus populations. This will provide a real insight into these secretive creatures," Dr Ryan said.



