

Moggill Creek Catchment Group Annual Platypus Survey 2022

The observational survey was important this year due to the major flooding events earlier in the year.

Flooding can either be beneficial or detrimental for platypuses. A slow increase of water, fills the system and washes out nutrients and built-up sediment. More water means an increase in waterway connectivity for platypuses to move and a depth that is safe and effective for foraging. Especially, during breeding season (June – October).

A flush, can also help the habitat of their food source (aquatic insect larvae) as pollution and sediment impact the quality and quantity of insects. A clean system will be beneficial to insect abundance and therefore the platypuses and their bellies!

The major concern is within human impacted environments. Instead of water naturally soaking into the system, it enters hard and fast off impervious surfaces (roads, roofs, concrete paths etc.).

In an urban area, stormwater exacerbates water flow that can cause:

- bank erosion which impacts their burrow and nesting sites
- scouring of the substrate from the instream channel, which washes away their food and can temporarily displace platypuses
- foraging difficulty, as they are fighting against fast flowing water This decreases their chances of a good feed (especially for emerging juveniles as they may not be very strong or a custom to fast flows)
- and burrow sites can be inundated which is devastating if there are babies (they are in the nesting burrow until February)!

These impacts can also happen within an agricultural landscape if there is limited native vegetation cover to stabilise the waterway banks and disturbance from livestock.

The flood impact was noted by many observers in both their habitat rating sheets and photos (images below). The creek has areas of erosion along the banks, sediment deposits and the vegetation lost along the banks has opened up the canopy and side banks. Vegetation cover is important for platypuses as it creates some protection when they forage. The canopy cover can help conceal them while moving in the creek and the overhanging vegetation will help hide burrow entrances along the bank edges. The areas of well-established vegetation have had the least impacts, with only some noticeable exposure of big tree root systems.

Platypuses are robust and have coped in floods for hundreds of years. However, we still need to monitor them because we have exacerbated these threats and need to make sure they aren't being pushed to the point of no return. Hence, why monitoring their locations are important.

This year's results have identified the distribution to be consistent with previous years. It was also interesting that platypuses were not sighted in the lowest section around Kilkivan Avenue. They like to keep us on our toes!

We are lucky to have a community of active spotters that record seeing platypuses in other areas throughout the year, which is also important for monitoring distribution.

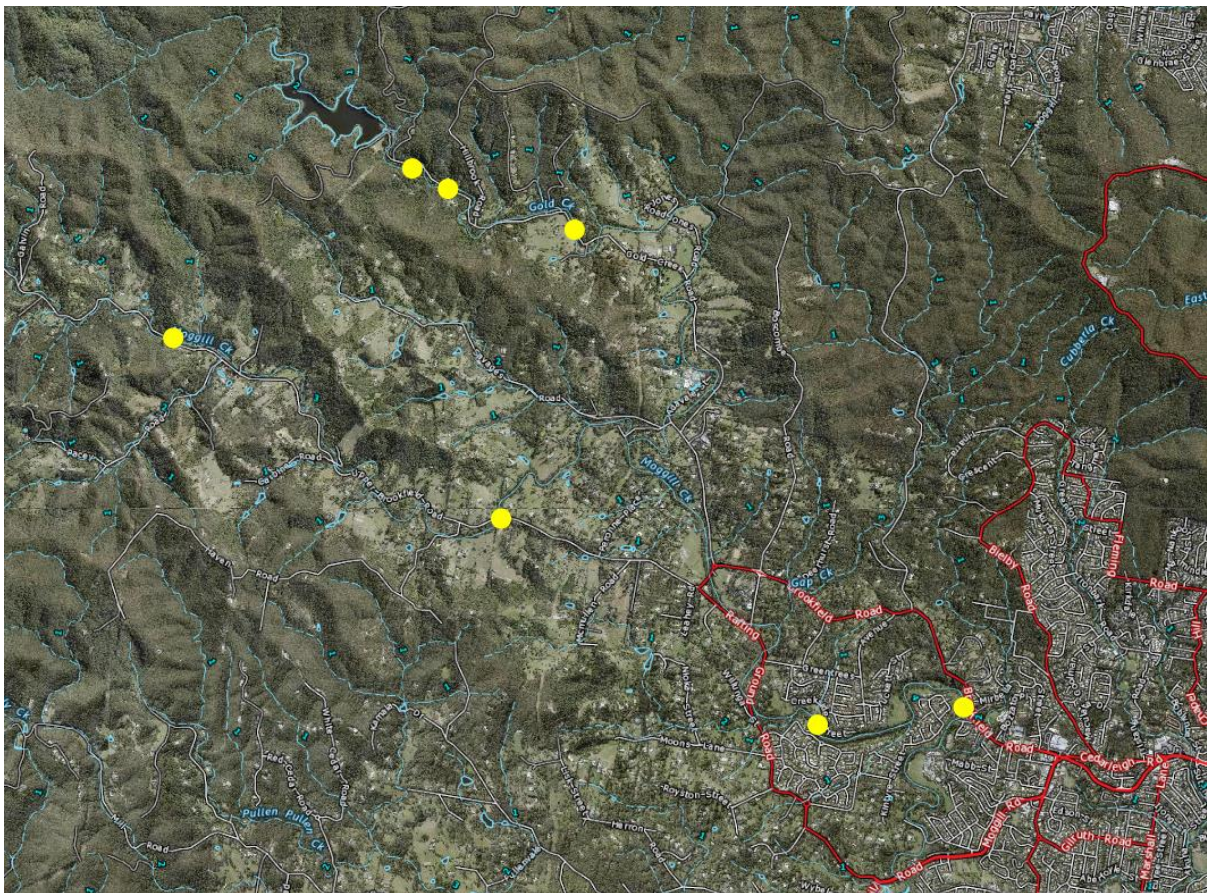
Overall, **7 sites** recorded observing platypuses, and distance and timings suggest individuals. With this year's low number, you can't speculate a decline in numbers. We didn't have as many observers this year at sites which has contributed to the low observations. In other wet years, we have seen platypus observations increase across the catchment which would relate to the increase in flow and connectivity within the system. However, the creek has been dramatically impacted which may have hindered platypuses in the area.

Also, two carp were sighted, one at Tuckett Street Park and the lowest site behind Manyung Street.

Aaron Wiggan was able to get some wonderful footage of a platypus puddling around in Upper Brookfield. You can watch it here! <https://youtu.be/q2mJE-UmdUg>

Thank you all for your ongoing support and participation. See you next year!

Tam.



Moggill and Gold Creek s recorded 7 sightings for this year's annual survey.

Images of flood damage in Moggill Creek September 2022



Fortrose St – The creek has changed in width and pools have moved. Gravel deposits.



Branton St – Scout Hut.



Huntington Estate Pool – erosion on south and north banks along with gravel deposits.

