

Aquatic ecology monitoring: Macroinvertebrates and fish

Barwon Water undertakes aquatic ecology monitoring to gather baseline data to better understand the health of groundwater dependent ecosystems and ensure operation of the Anglesea borefield does not have a detrimental impact on these areas.

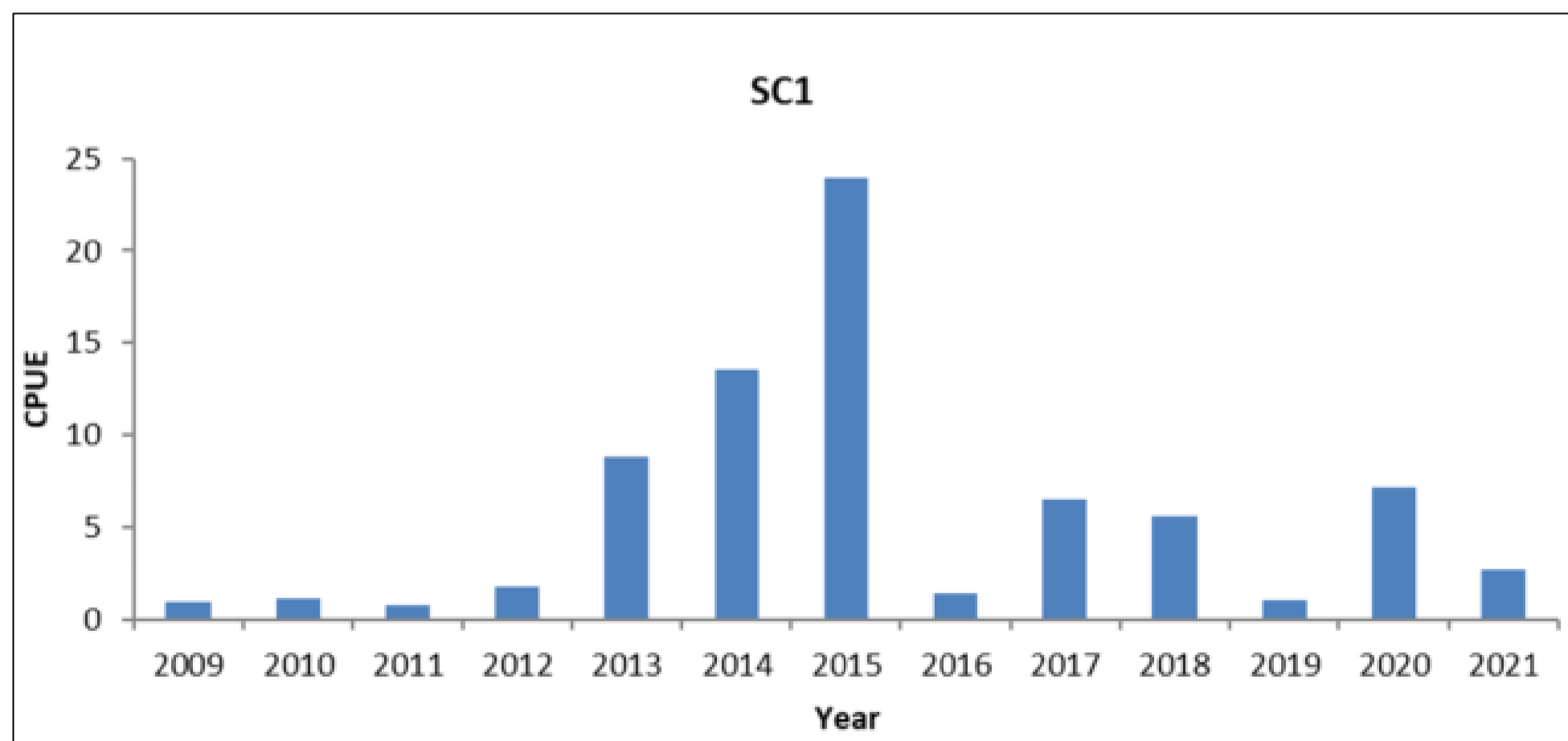
The aquatic ecology-monitoring component of the Monitoring and Assessment Program (MAP) comprises both macroinvertebrate and fish (Southern Pygmy Perch – *Nannoperca australis*) sampling.

What we are doing

We record the number and type of macroinvertebrates annually in spring, using stream sweep sampling across the catchment. We use bait trapping to record the number of Southern Pygmy Perch. This work is helping us develop a comprehensive baseline dataset.

What we have found

- Identified populations of the endangered species Otway Bush Yabby at 6 of 11 survey locations. This has now been incorporated into ongoing monitoring.
- Identified an overall low abundance and diversity of macroinvertebrates.
- A review of sampling in 2013 determined that the population of Southern Pygmy Perch was reasonably stable. Recent surveys have detected more individuals and consistent evidence of population recruitment. This is a positive sign as it shows successful spawning and survival.
- Variability observed within the data is considered to be within natural variation.



This graph shows variation in the number of Southern Pygmy Perch recorded. This can be attributed to factors such as natural variation in climatic conditions.