Inland Fisheries Service

Native Fish Conservation

Annual Report 2025-26



Inland Fisheries Service

Native Fish Conservation – Annual Report 2025-26

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Introduction

This report has been prepared to summamrise the work undertaken by the Inland Fisheries Service (IFS) under the Tasmanian Freshwater Fish – Threatened Species Program for the 2025-26 period. Where available, results from annual monitoring of fish populations over the past 10 years (or longer periods) are included to provide context to the results for 2025-26.

Tasmania has 13 species of freshwater fish listed as threatened under the Commonwealth *Environmental Protection and Biodiversity Conservation Act 1999* and the Tasmanian *Threatened Species Protection Act 1995* (Table 1). These species are also listed on the International Union for the Conservation of Nature (IUCN) Red List (Table 1). The IUCN listings provide the most up-to-date assessments of conservation status, having been reviewed in 2019. In contrast, the Commonwealth and State listings have not been reviewed for a considerable period. Consequently, the conservation status and threat level (i.e. vulnerable through to critically endangered) vary between each listing authority. In addition, the different criteria that are used by each listing authority influence the conservation status that is assigned to each species.

At present, seven species of freshwater fish have active monitoring and management programs in place: Arthurs paragalaxias, Great Lake paragalaxias, saddled galaxias, Clarence galaxias, golden galaxias, Pedder galaxias and Swan galaxias. Populations of these species were monitored during 2025-26, except of the Clarence galaxias that was deferred until the 2026-27. A range of other freshwater fish species are captured and/or encountered during other work programs conducted by the IFS, these records are generally documented in field notes and some resulting data are entered into the Natural Values Atlas (https://www.naturalvaluesatlas.tas.gov.au, accessed 24 August 2026). The IFS also records the trapping and transfer of short-finned eels and pouched lamprey from Meadowbank Dam on the River Derwent and the Trevallyn Dam on the South Esk River (upstream of the Kanamaluka / River Tamar estuary). These records are published in the IFS Annual Report.

Conservation Status

Table 1 presents all Tasmanian freshwater fish that have been assessed under prescribed conservation criteria as specified by each listing entity. There are thirteen species and their level of assessment is determined by a range of criteria relating to their population size, population decline, geographical range, probability of extinction in the wild and the existence of threatening processes.

Table 1: Conservation status of Tasmanian freshwater fish. (TSP Act - Tasmanian Threatened Species Protection Act 1995; EPBC Act – Commonwealth Environmental Protection and Biological Conservation Act 1995; IUCN – International Union for the Conservation of Nature Red List).

Location	Species	TSP Act	EPBC Act	IUCN red list
Upper Swan, Macquarie, St Pauls and South Esk river catchments (includes translocated populations)	Swan galaxias *(Galaxias fontanus)*	Endangered	Endangered	Endangered
Lakes Crescent and Sorell, and upper River Clyde (plus one small, translocated population in farm dam in River Clyde catchment)	Golden galaxias *(Galaxias auratus)*	Rare	Endangered	Endangered
Upper River Derwent catchment, including the Nive, Clarence and Little river catchments	Clarence galaxias *(Galaxias johnstoni)*	Endangered	Endangered	Endangered
Lake Oberon and Strathgordon water supply dam (extant translocated populations)	Pedder galaxias (Galaxias pedderensis)	Endangered	Extinct in the wild	Endangered
Small number of streams flowing into Lake Pedder, Lake Gordon and upper Huon River catchment	Swamp galaxias (Galaxias parvus)	Vulnerable	Vulnerable	Vulnerable
Yingina / Great Lake, Shannon and Penstock lagoons	Shannon paragalaxias *(Paragalaxias dissimilis)*	Vulnerable	Vulnerable	Endangered
	Great Lake paragalaxias *(Paragalaxias eleotroides)*	Vulnerable	Vulnerable	Endangered
Arthurs and Woods lakes	Saddled galaxias *(Galaxias tanycephalus)*	Vulnerable	Vulnerable	Critically endangered
	Arthurs paragalaxias *(Paragalaxias mesotes)*	Endangered	Endangered	Endangered
Upper Ouse, James and Little Pine river catchments	Western paragalaxias *(Paragalaxias julianus)*	Rare	-	Endangered
North-east and North-west Tasmania, Flinders Island	Dwarf galaxias *(Galaxiella pusilla)*	Vulnerable	Vulnerable	Endangered
Coastal rivers of Tasmania	Australian grayling *(Prototroctes maraena)*	Vulnerable	Vulnerable	Vulnerable
Coastal rivers and wetlands in Tasmania	Australian mudfish (*Neochanna cleaveri*)	-	Endangered	Endangered

Monitoring results

Arthurs paragalaxias and Saddled galaxias

Overview

Arthurs Lake and Woods Lake support endemic populations of the saddled galaxias (*Galaxias tanycephalus*) and Arthurs paragalaxias (*Paragalaxias mesotes*). Recently, the saddled galaxias has been common in both lakes, while the Arthurs paragalaxias has been abundant in Arthurs Lake, but rare in Woods Lake. Until 2013, the Arthurs paragalaxias was thought to be absent from Woods Lake, as it had not been detected during annual monitoring between 1989 and 2013. A translocation program conducted between 2007 and 2012 resulted in 2,470 individuals being transferred from Arthurs Lake to Woods Lake. This action appeared to lead to the re-establishment of the species in Woods Lake, with 84 Arthurs paragalaxias captured during monitoring between 2014 and 2018, with evidence of natural recruitment and multiple age classes present. However, since 2019, only one Arthurs paragalaxias has been recorded in each of: 2019, 2020, 2021, 2024 and October 2025. None were recorded during 2022, 2023, or in an additional survey conducted in February 2025. By comparison, the Arthurs Lake population has remained relatively stable over the long term.



Figure 1: Arthurs Lake and Woods Lake showing annual monitoring sites, October 2025.

Arthurs paragalaxias - Arthurs Lake

Monitoring of the Arthurs paragalaxias within Arthurs Lake was undertaken on 27-28 October 2025. Twenty-four fine mesh fyke nets were deployed, with six nets set at four sites: Flintstone Drive, Pumphouse Bay (north), Hydro Bay and Jonah Bay (Figure 1). During the survey the lake level of Arthurs Lake was 2.17 m below full supply level. A total of 174 individuals were captured, resulting in a CPUE of 7.3 fish per net. This result is well above the 10-year average (2015-25) of 3.8 fish per net and a marked increase in abundance from the relatively low catch during 2024 (Figure 2).

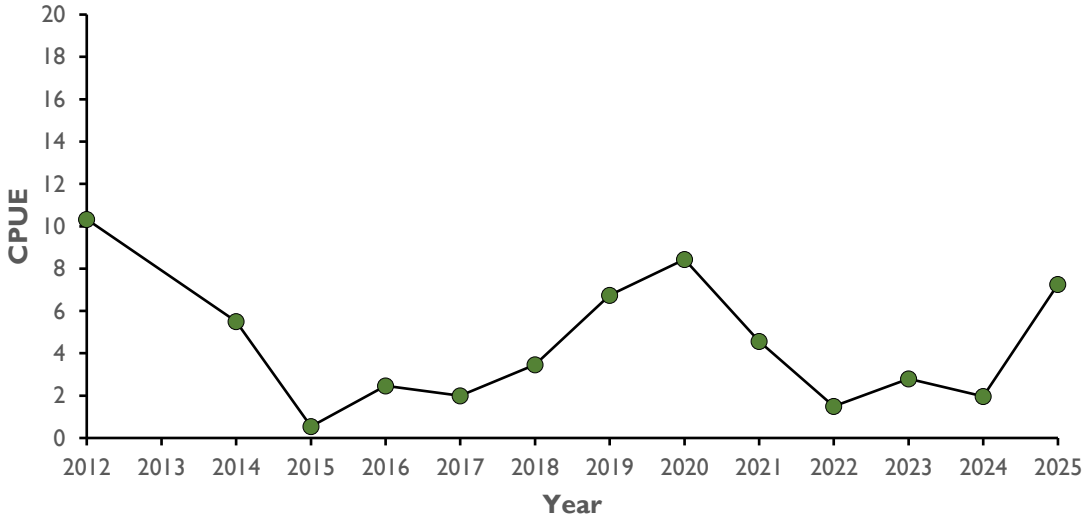


Figure 2: Catch per unit effort (CPUE, fish per net) for Arthurs paragalaxias captured during annual fyke netting surveys, Arthurs Lake, 2012-25.

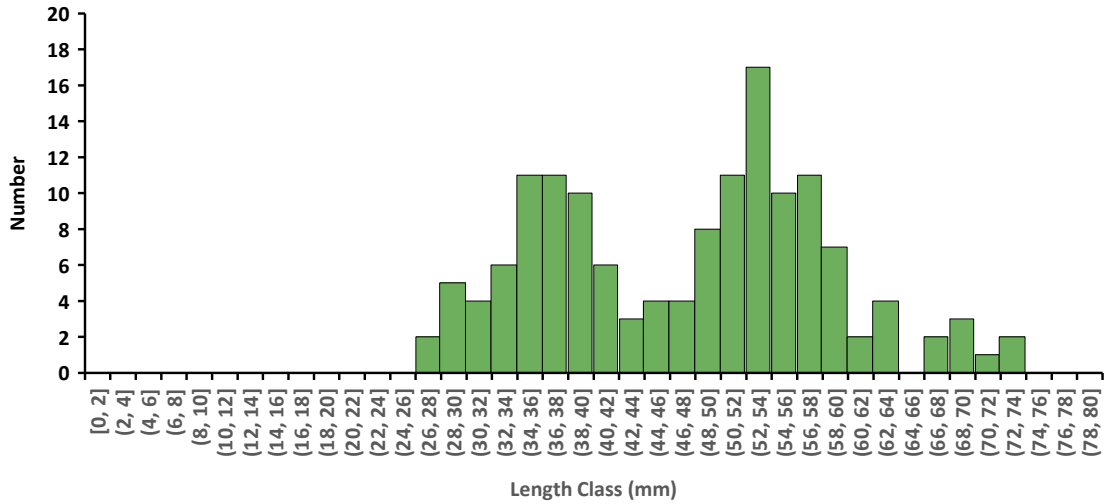


Figure 3: Length frequency for the Arthurs paragalaxias captures, Arthurs Lake, October 2025, (n=144).

Of the total catch of Arthurs paragalaxias, 144 were measured for length and plotted on a length-frequency histogram (Figure 3). Three distinct length cohorts are evident. Natural recruitment of juvenile Arthurs paragalaxias was significant, with substantial numbers in the 26–44 mm length range, which is likely to be comprised of 0+ and 1+ fish. Survival of larger adult fish in the 46–62 mm length range (1+ and 2+ fish) was high, and several individuals were recorded in the 66–74 mm length range, indicative of fish in a 3+ cohort.

Arthurs paragalaxias - Woods Lake

During 27–28 October 2025, twenty-four fine mesh fyke nets were deployed (11 double sets and 2 deep-set single fyke nets) in Woods Lake, mostly within the western section of the lake due to persistent high winds (Figure 1). Only one Arthurs paragalaxias was captured (Figure 4). This result is in line with recent annual monitoring.

Following the transfer of 2,470 individuals from Arthurs Lake to Woods Lake between 2007 and 2012, some encouraging monitoring results were recorded (Figure 4). However, total catches have declined to relatively low levels over the last eight years. Arthurs paragalaxias were not detected during monitoring in 2022, 2023 and February 2025 (an additional survey), with only one individual captured in October 2024 and 2025. The factors influencing this variation in relative abundance are unclear, but lake level conditions during spawning periods, variation in the abundance of brown trout and a low breeding stock (i.e. number of sexually mature individuals) are likely contributing factors. Interestingly, an intense algal bloom of *Dolichospermum* (cyanobacteria, non-toxic form) persisted from winter 2023 into late 2024. The bloom dispersed during December 2024 and was undetectable by April 2025. Results from monitoring saddled galaxias in Woods Lake during February and October 2025 indicate there were no detectable long-term impacts on this species, consequently, there is unlikely to have been any significant impacts on the Arthurs paragalaxias population.

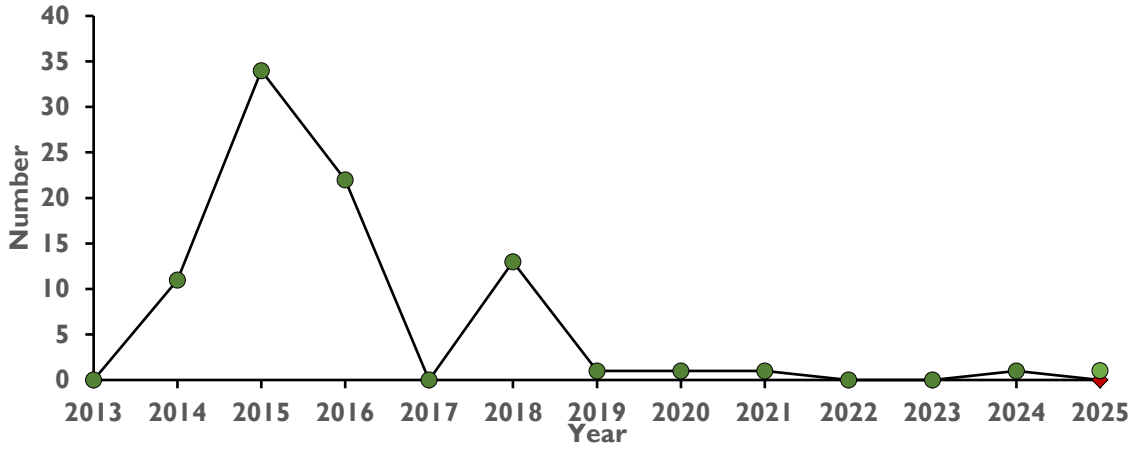


Figure 4: Total catches, Arthurs paragalaxias during annual fyke netting surveys, Woods Lake, 2013–25 (showing linear trendline), (the 10 individuals captured during 2014 were from Entura consultants fyke netting survey). The red marker was an additional survey conducted during February 2025.*

Saddled galaxias - Arthurs Lake

Monitoring of saddled galaxias in Arthurs Lake was conducted on 26–27 October 2025. Twenty-four fine-mesh fyke nets were deployed, with six nets set at each of four sites: Flintstone Drive, Pumphouse Bay (north), Hydro Bay and Jonah Bay (Figure 1). A total of 362 individuals were captured, resulting in a CPUE of 15.1 fish per net (Figure 5). This result represents a significant increase compared to the 10-year average (2015–2025) of 3.7 fish per net and is substantially higher than the 2024 result of 0.7 fish per net. These findings, together with comparable historical data, suggest the population exhibits inherent resilience, enabling it to recover to higher abundances when conditions are favourable.

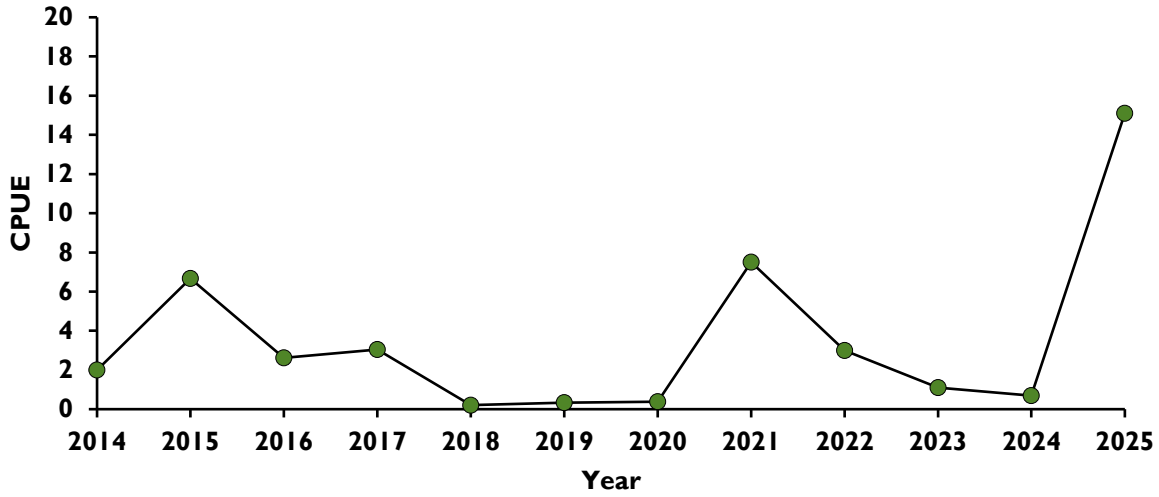


Figure 5: Catch per unit effort (CPUE) for Saddled galaxias, captured during annual fyke netting surveys, Arthurs Lake, 2014–25 (showing linear trendline).

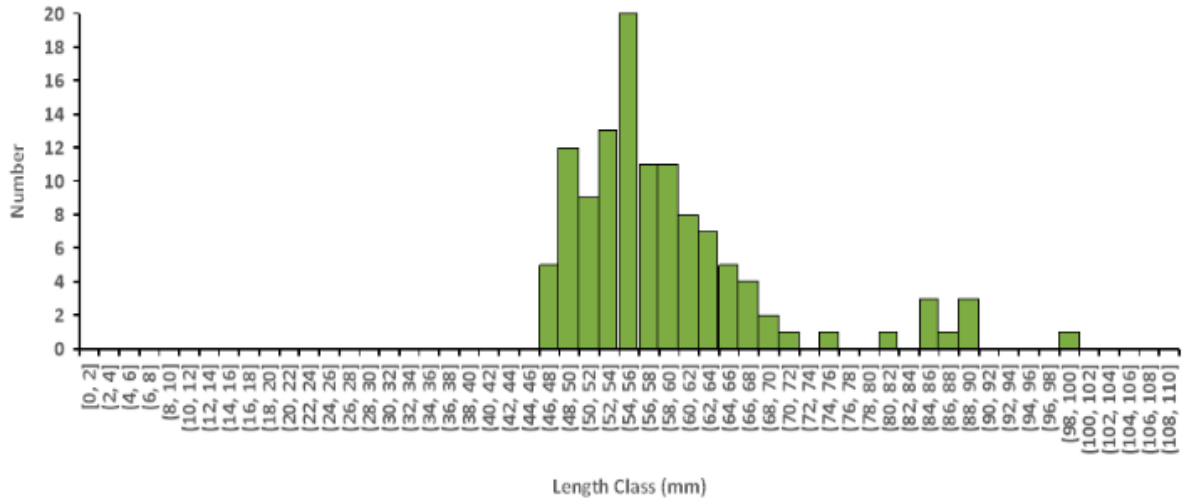


Figure 6: Length frequency for the saddled galaxias captures, Arthurs Lake, October 2025, (n=118).

The length-frequency plot (Figure 6) shows a prominent grouping between 46–76 mm. This is likely to represent a clustering of fish in 0+, 1+ and 2+ cohorts resulting in high abundances across this size range. Few individuals were recorded above 80 mm length. These patterns suggest strong historical recruitment but relatively low survival to larger size classes.

Saddled galaxias – Woods Lake

Monitoring of saddled galaxias in Woods Lake was conducted on 26–27 October 2025. Twenty-four fine-mesh fyke nets were deployed (11 double sets and 2 deep-set single fyke nets), mostly within the western section of the lake due to persistent high winds (Figure 1). At the time of the survey, the lake level in Woods Lake was 1.3 m below full supply.

The average CPUE for catches of saddled galaxias from Woods Lake over the 10-year period 2015-2024 was 2.7 fish per net, with the CPUE for 2025 at 9.3 fish per net (total of 224 fish captured)

(Figure 7). This result is well above the 10-year average and was almost driven entirely by the very large number of fish in the 50–84 mm length range, with very few larger fish present (Figure 8).

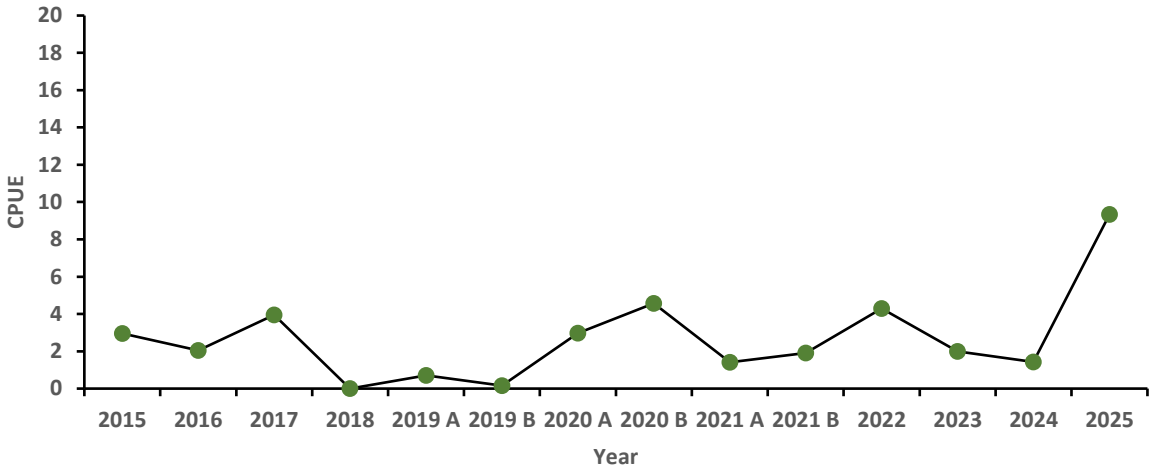


Figure 7: Catch per unit effort (CPUE) for saddled galaxias, captured during normal annual fyke netting surveys, Woods Lake, 2015 – 2025 (showing linear trendline).

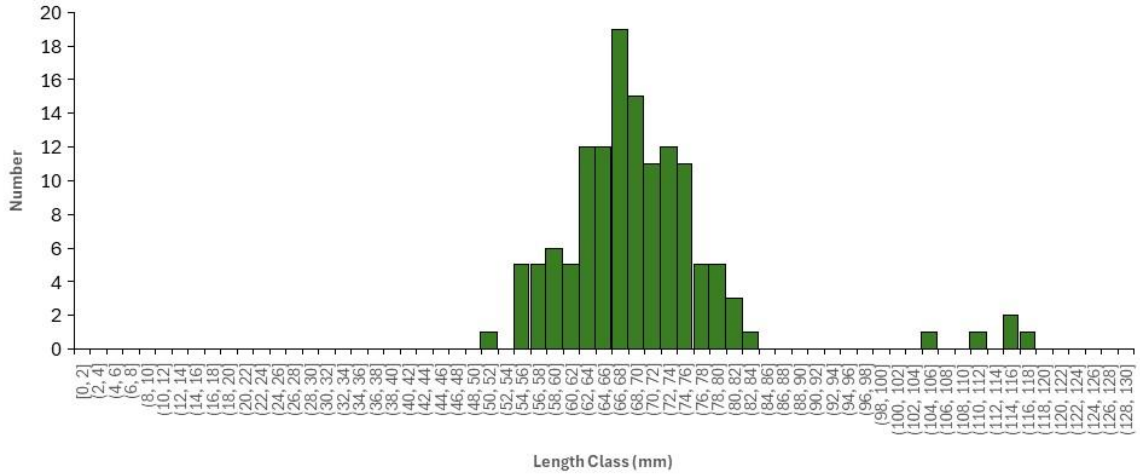


Figure 8: Length frequency for the saddled galaxias captures, Woods Lake, October 2025, (n=224).

The length frequency results for the October 2025 survey (Figure 8) indicates a high abundance of saddled galaxias across the 50-84 mm length range, which is likely to be comprised of fish in the 0+, 1+ and 2+ cohorts. There were very few larger individuals (over 86 mm) indicating low survival into age classes equal to or greater than 3+.

Shannon paragalaxias and Great Lake paragalaxias

Overview

The Shannon paragalaxias *(Paragalaxias dissimilis)* and Great Lake paragalaxias *(Paragalaxias eleotroides)* are endemic to *Yingina* / Great Lake, Shannon Lagoon and Penstock Lagoon (and connecting Shannon River). Both species are relatively abundant within *Yingina* / Great Lake;

however, the Great Lake paragalaxias is less common in Shannon and Penstock lagoons. The spotted galaxias *(Galaxias truttaceus)* is abundant in Shannon and Penstock lagoons, but less common within *Yingina* / Great Lake. While this species is widespread and abundant throughout Tasmania and is not listed as threatened, it has been included in this section for context in relation to the native fish fauna of Shannon and Penstock lagoons.

On 13-14 April 2026, the native fish populations in Penstock Lagoon and Shannon Lagoon were monitored by setting 16 fine-mesh fyke nets overnight along the shoreline at each waterbody. At Penstock Lagoon, a total of 739 Shannon paragalaxias and 271 spotted galaxias were captured, with no Great Lake paragalaxias recorded. In Shannon Lagoon, captures comprised 182 Shannon paragalaxias, 887 spotted galaxias and three Great Lake paragalaxias.

Shannon paragalaxias - Shannon Lagoon

In Shannon Lagoon, Shannon paragalaxias have been relatively abundant between 2016 and 2026, with CPUE varying between 11.3 and 8.4 fish per net (Figure 9). Interestingly, CPUE for this species was much higher in 2013, although this value is likely anomalous and not representative of typical abundance.

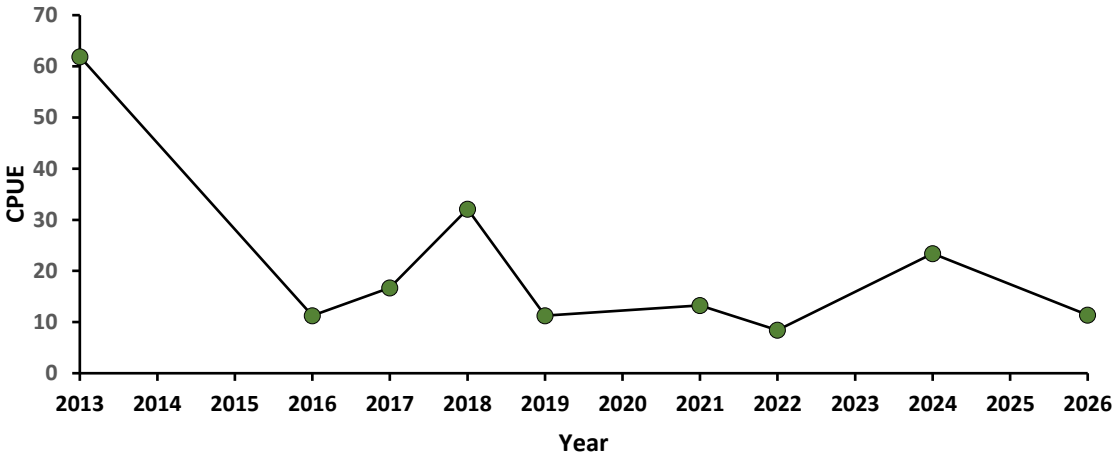


Figure 9: Catch per unit effort (CPUE) from annual fyke net monitoring for the Shannon paragalaxias at Shannon Lagoon, 2013-26 (showing long term monitoring trend).

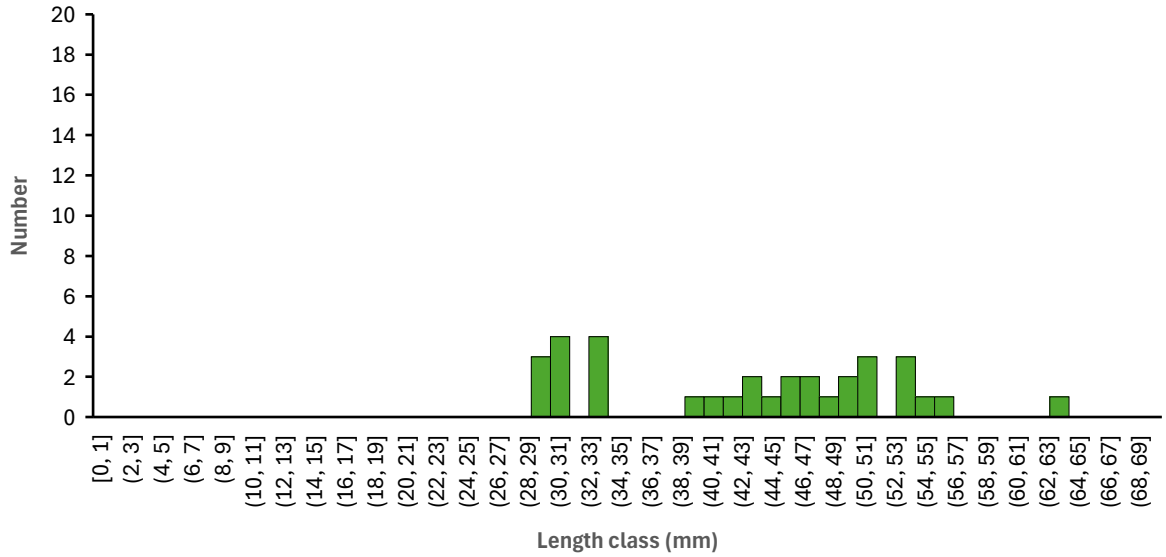


Figure 10: Length frequency for Shannon paragalaxias captures, Shannon Lagoon, April 2026, (n=49)

The length-frequency distribution of Shannon paragalaxias in Shannon Lagoon (Figure 10) was dominated by a distinct 0+ cohort at 30-35 mm, indicating successful recent recruitment. Several less distinct cohorts, likely representing age classes from 1+ to 4+, were also evident among fish exceeding 40 mm in length. Overall, the distribution suggests a recruiting population with multiple size classes present, although cohort separation was relatively weak in fish over 40mm.

Shannon paragalaxias - Penstock Lagoon

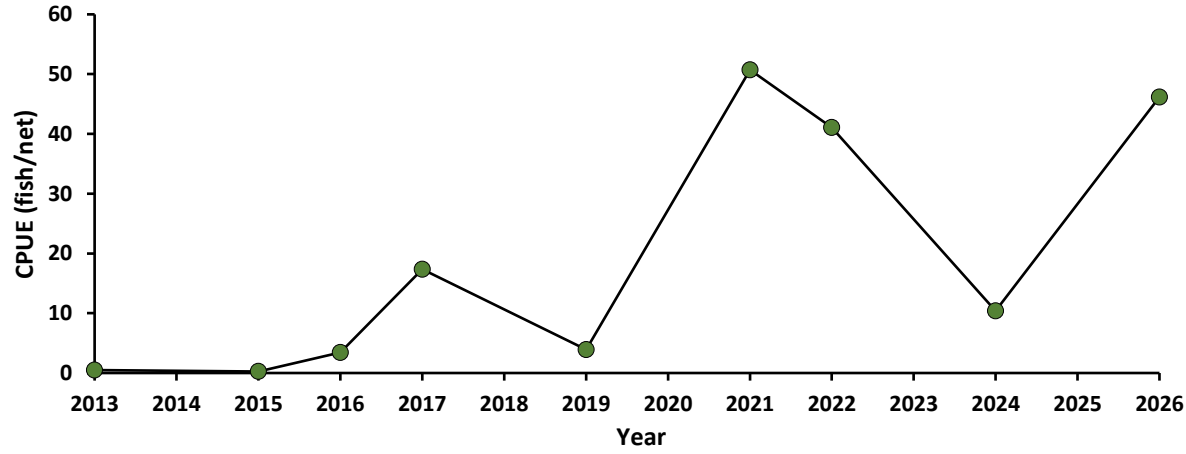


Figure 11: Catch per unit effort (CPUE) from annual fyke net monitoring for the Shannon paragalaxias in Penstock Lagoon, 2013-26 (showing long term monitoring trend).

Since 2013, catches of Shannon paragalaxias in Penstock Lagoon have increased overall, while also varying inter-annually (Figure 11). The relatively high CPUE in 2026 (46 fish per net) was driven largely by the presence of young-of-the-year fish, with numerous fish in the 32-42 mm length range

(Figure 12), indicating strong recruitment. Larger size classes (i.e. older fish) were weakly represented across the length distribution.

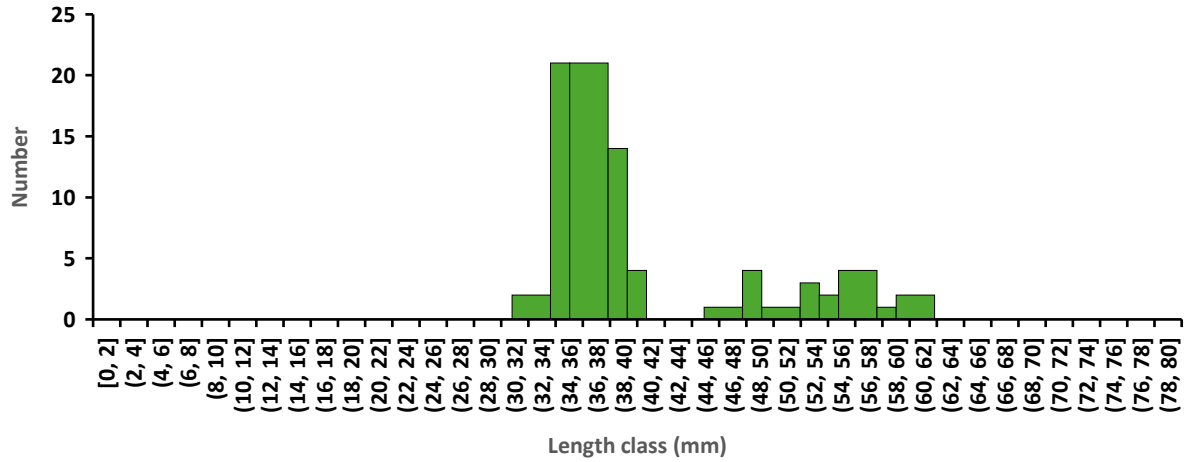


Figure 12: Length frequency for the Shannon paragalaxias, Penstock Lagoon, April 2026, (n=80).

Great Lake paragalaxias - Shannon Lagoon

The Great Lake paragalaxias typically occurs within Shannon Lagoon at very low abundances, with CPUE values of 0.5-2.0 fish per net (Figure 13). This may be due to the habitat in Shannon Lagoon being less favourable for this species compared to *Yingina* / Great Lake, with aquatic macrophytes and sediment substrata being dominant in Shannon Lagoon, whereas rocky substrate and deep-water Charophyte beds more common in *Yingina* / Great Lake. CPUE for the 2026 survey was 0.19 fish per net, which is similar to previous years.

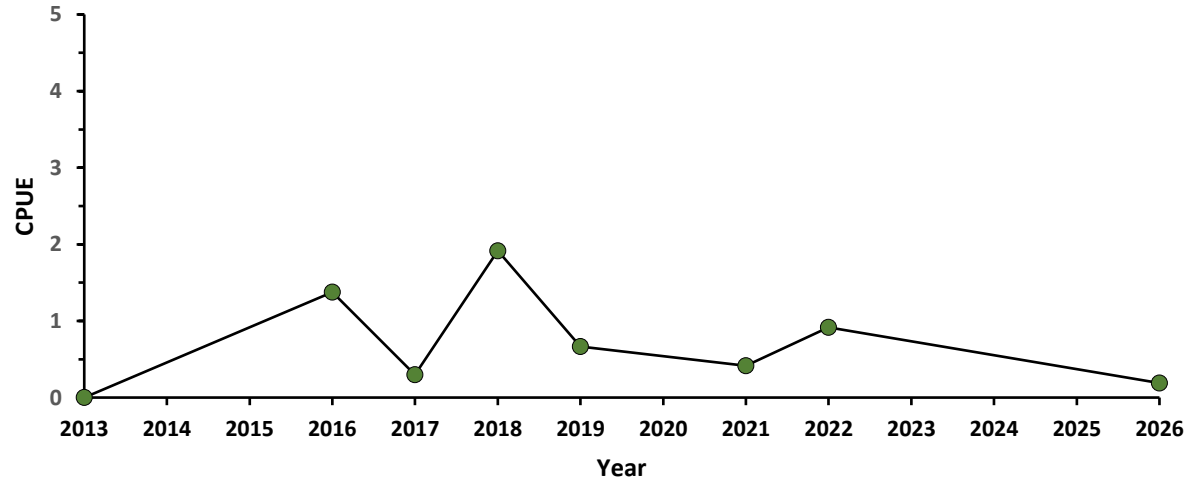


Figure 13: Catch per unit effort (CPUE) from annual fyke net monitoring for the Great Lake paragalaxias at Shannon Lagoon, 2013 – 2026 (showing long term monitoring trend).

Great Lake paragalaxias - Penstock Lagoon

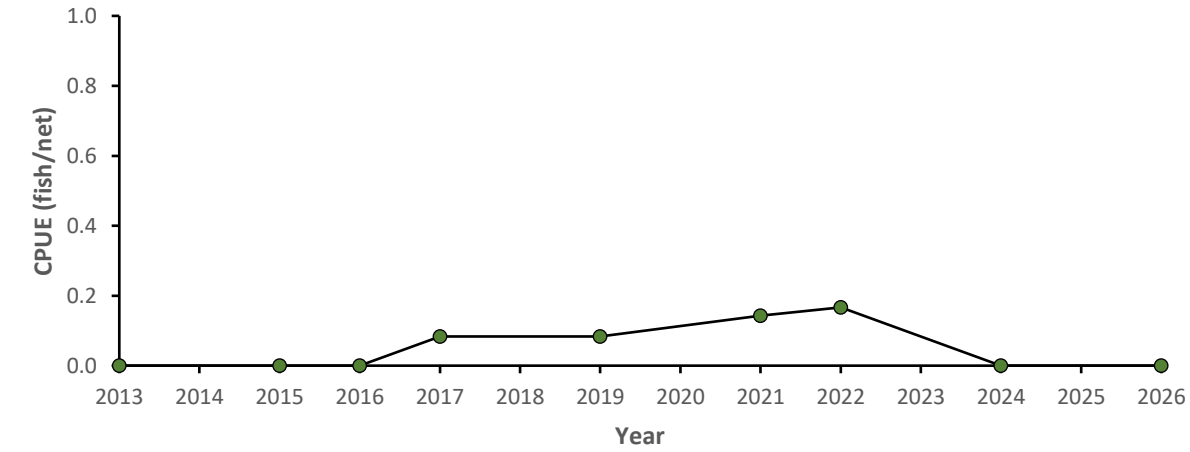


Figure 14: Catch per unit effort (CPUE) from annual fyke net monitoring for the Great Lake paragalaxias at Penstock Lagoon, 2013-26 (showing long term monitoring trend).

Historically, Great Lake paragalaxias are rare in Penstock Lagoon, with CPUE being extremely low at <0.4 fish per net (Figure 14). Similar to Shannon Lagoon, the habitats in Penstock Lagoon are thought to be less favourable for this benthic species. No Great Lake paragalaxias were captured during the 2026 survey.

Spotted galaxias – Shannon Lagoon

Historically, Spotted galaxias have been moderately abundant in Shannon Lagoon, with CPUE typically ranging from 10-20 fish per net (Figure 15). In 2026, CPUE increased markedly to 55 fish per net. This increase in abundance was driven by a strong recruitment event in 2025, as shown by high abundance of young-of-the-year fish in the length-frequency plot for the catch in 2026 (Figure 16).

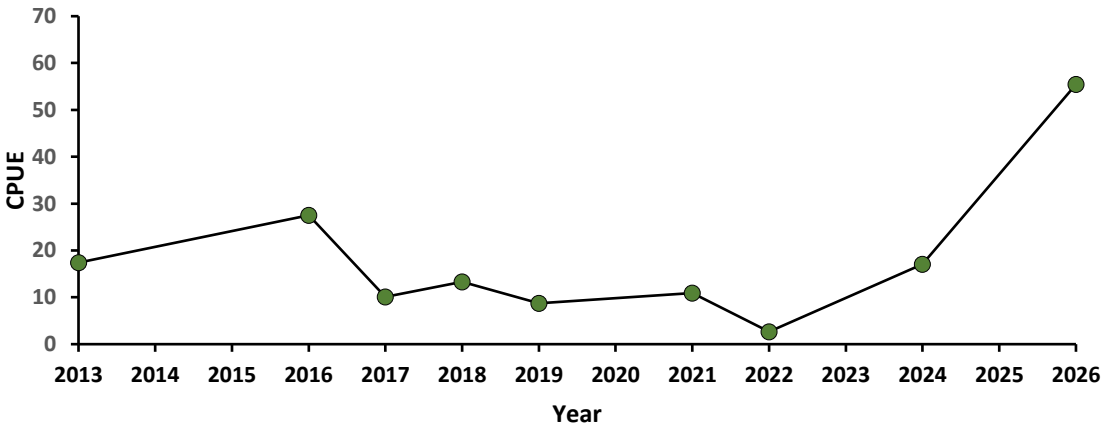


Figure 15: Catch per unit effort (CPUE) from annual fyke net monitoring for the spotted galaxias at Shannon Lagoon, 2013-26 (showing long term monitoring trend).

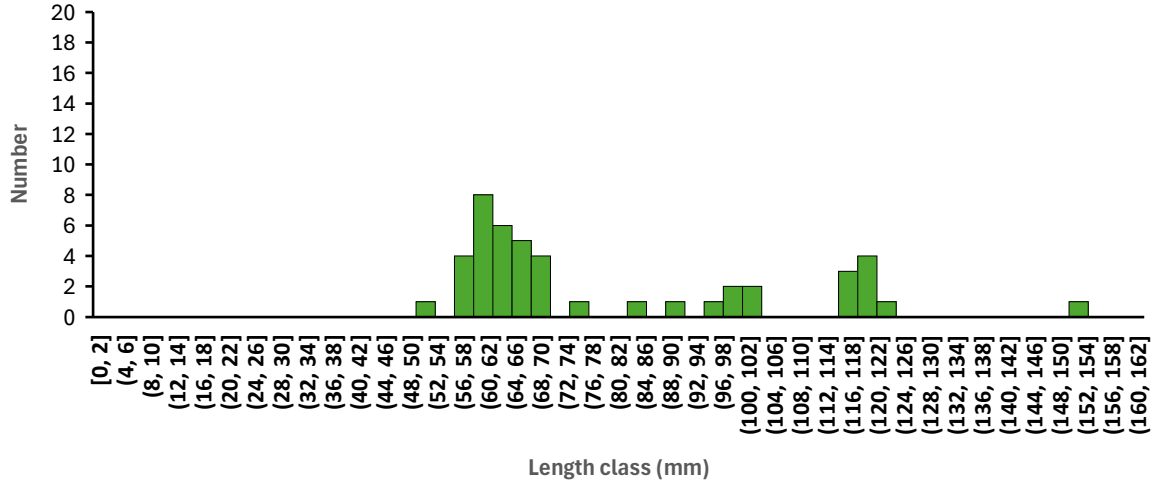


Figure 16: Length frequency for the spotted galaxias captures, Shannon Lagoon, April 2026, (n=73).

Spotted galaxias – Penstock Lagoon

Since 2013, the abundance of spotted galaxias in Penstock Lagoon has varied inter-annually, with a notable increase from 2021 onwards (Figure 17). The catch in 2026 (17 fish per net) is in line with recent years results.

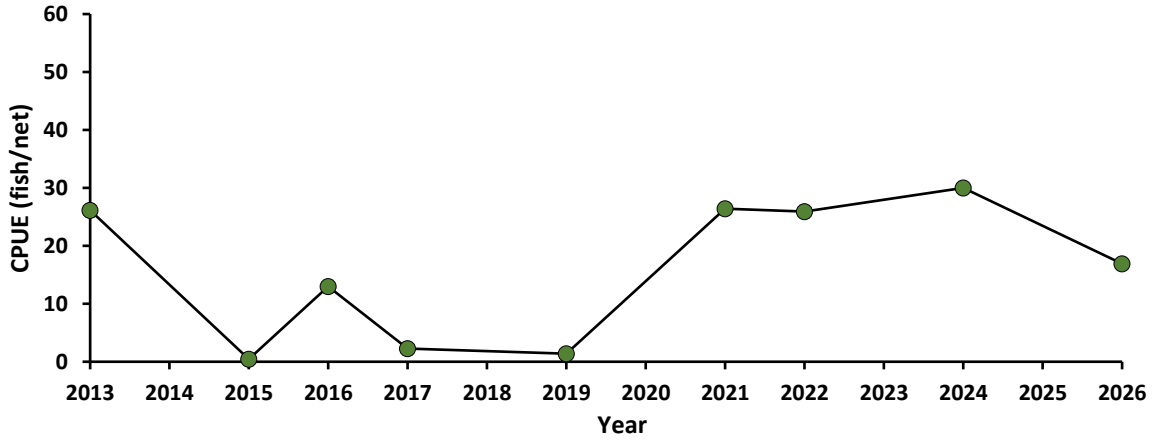


Figure 17: Catch per unit effort (CPUE) from annual fyke net monitoring for the spotted galaxias at Penstock Lagoon, 2013-26 (showing long term monitoring trend).

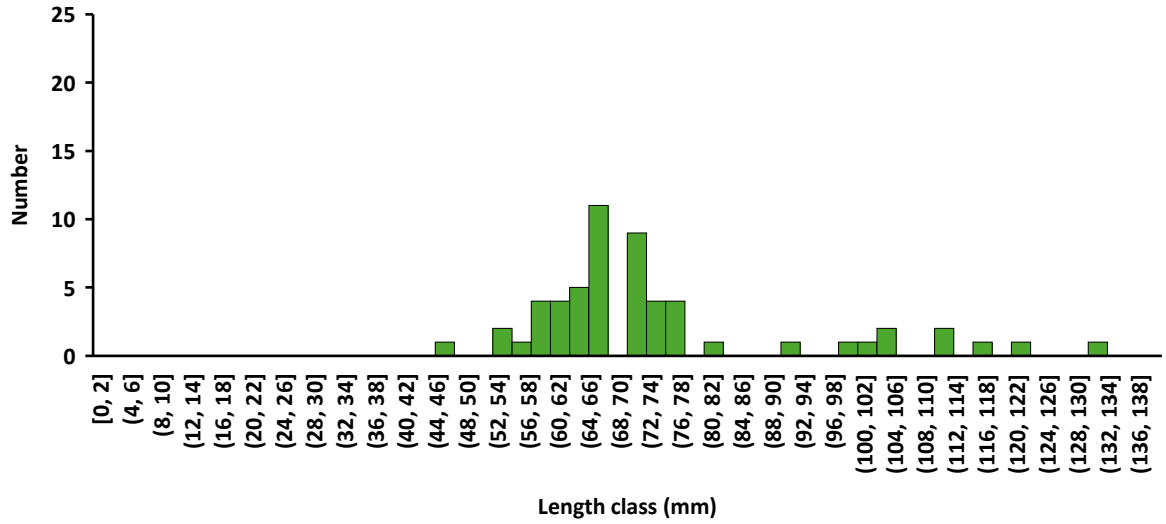


Figure 18: Length frequency for the spotted galaxias captures, Penstock Lagoon, April 2026, (n=80).

In 2026, the spotted galaxias population in Penstock Lagoon was dominated by fish that appeared to be age 0+ and 1+ (length range ~45-80 mm), indicating strong recruitment in 2025 and survival of fish into their second year (Figure 18). Larger size classes were sparsely represented in the catch, suggesting the 2026 population structure is dominated by recent recruits with relatively few older fish present.

Pedder galaxias

Overview (Strathgordon Water Supply Dam)

Since the translocation of 353 Pedder galaxias *(Galaxias pedderensis)* from Lake Oberon to the Strathgordon water supply dam between 2001 and 2007, abundance within the dam between 2009 and 2022remained high. However, since 2022 due to consecutive years of recruitment failure, CPUE declined (Figure 19) (Appendix 1). The annual survey in March 2026, together with additional surveys in April and June 2026, confirmed this trend.

No trout were recorded during these surveys; however, one juvenile climbing galaxias (45 mm in length) was captured during March 2026.

Extra survey effort was also used to check the inflows and outflow creeks of the dam for Pedder galaxias and other fish species. Electrofishing of the northern inflow and the dam outflow in April 2026 resulted in the capture of a single Pedder galaxias at the mouth of the inflow to the dam, with no other fish detected. Two *Astacopsis tricornis* were also captured and identified within the inflowing stream. The outflow creek was electrofished for approximately twenty minutes, with a number of brown trout adults and fry captured along with several climbing galaxias.

A review of these findings led to several management actions, including replacement of the fine-meshed screen on the dam outflow that had been removed late 2022; the translocation of Pedder galaxias from Lake Oberon to the Strathgordon water supply dam in late April 2026. A third survey of

the dam was subsequently undertaken in June 2026 to assess the status of the population following the translocation.

The June survey was specifically designed to capture both resident and newly translocated Pedder galaxias and to estimate the overall population size within the dam. This was possible because resident and translocated fish could be readily distinguished by their length distributions, enabling separate assessment of the two groups and evaluation of the contribution of the translocation to the receiving population.

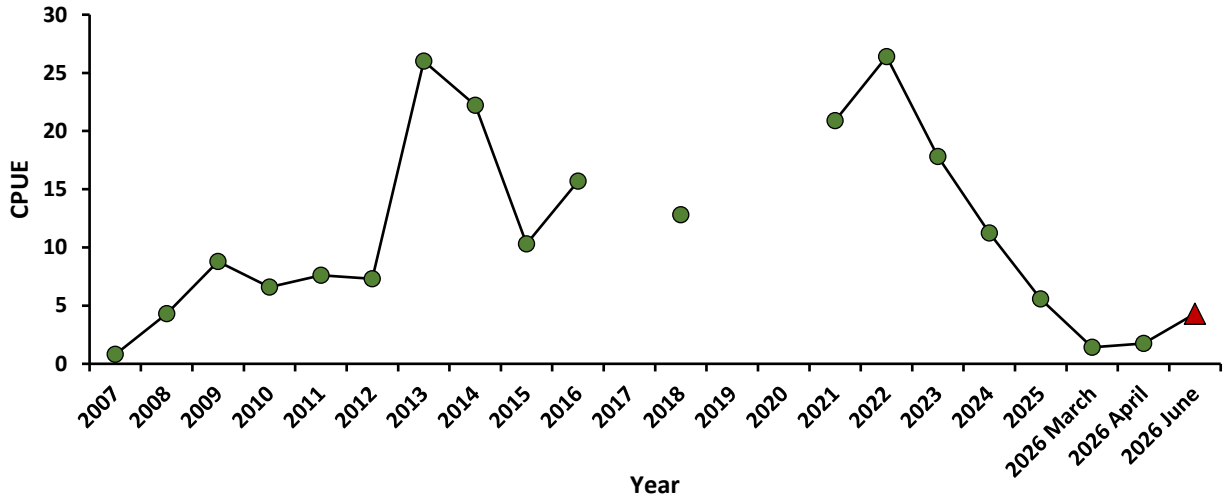


Figure 19: Catch per unit effort (CPUE) from annual fyke net monitoring for the Pedder galaxias at Strathgordon water supply dam 2007-26.

Results (March and April 2026)

On 23-24 March 2026 and 19-20 April 2026, the Pedder galaxias population in the Strathgordon water supply dam was monitored by setting 16 fine mesh fyke nets overnight along the shoreline. Total catches of Pedder galaxias were 17 fish during March and 28 fish during April, resulting in CPUE values of 1.1 and 1.8 fish per net, respectively (Figure 19). These results indicate that abundance of the population in the dam has continued to decline between 2023 to 2026. This decline has been driven by consecutive years of poor recruitment, with young-of-the-year fish not being evident in catches since 2023 (Appendix 1). Presently, the population consists of fish that are 98-123 mm in length (Figure 20), with no smaller/young fish being present.

A review of management actions identified that the 1 mm screen on the outflow of the dam had been removed during late 2022, leaving the coarser 5 mm screen in place. This action coincided with the first of several recent recruitment failures, as detected during annual monitoring of the population in autumn each year. No other factors or environmental conditions appeared to have changed in the dam or its small catchment. Consequently, the 1 mm screen was reinstated on the outflow structure of the dam in early April 2026. Additionally, 100 Pedder galaxias under 65 mm in length (Appendix 2), were translocated from Lake Oberon on 27 April 2026 (under permit TFA 26046). This translocation was done to increase the abundance of Pedder galaxias population in the Strathgordon water supply dam and maintain the genetic diversity in the population.

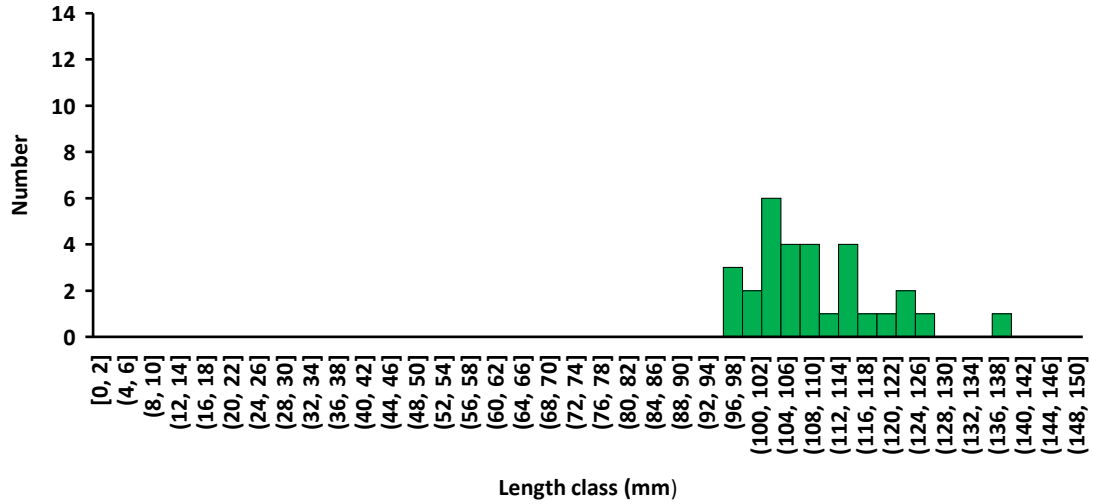


Figure 20: Length frequency for the Pedder galaxias captures, Strathgordon water supply dam, combined data for March 2026 (n=17) and April 2026 (n=28).

The length–frequency histogram (Figure 20) exhibits a unimodal distribution dominated by fish between approximately 95 and 125 mm in length, and very few individuals outside of this range. This pattern is indicative of older cohorts, likely comprising individuals in the final one to two years of their expected lifespan of 4-5 years. Notably, there is a complete absence of smaller size classes, suggesting a lack of recruitment over the past three years.

Results (June 2026)

Following the translocation of 100 Pedder galaxias from Lake Oberon to the Strathgordon water supply dam in late April 2026, a third survey of the dam was undertaken on 3-4 June 2026. Sixteen fine mesh fyke nets were set overnight along the shoreline (the same fishing effort as per previous annual surveys). A total of 49 Pedder galaxias were captured resulting in a CPUE 3.1 fish per net, representing a 72% increase in relative abundance.

Given the distinct difference in the lengths of fish in the resident population compared to the 100 newly translocated fish (Figure 21, Appendix 2), a Capture-Mark-Recapture population estimation was able to be calculated. Based on this analysis, the Pedder galaxias population within the Strathgordon water supply dam was estimated at approximately 272 individuals with a 95 percent confidence interval between 172-372, inclusive of the 100 translocated fish (Table 2).

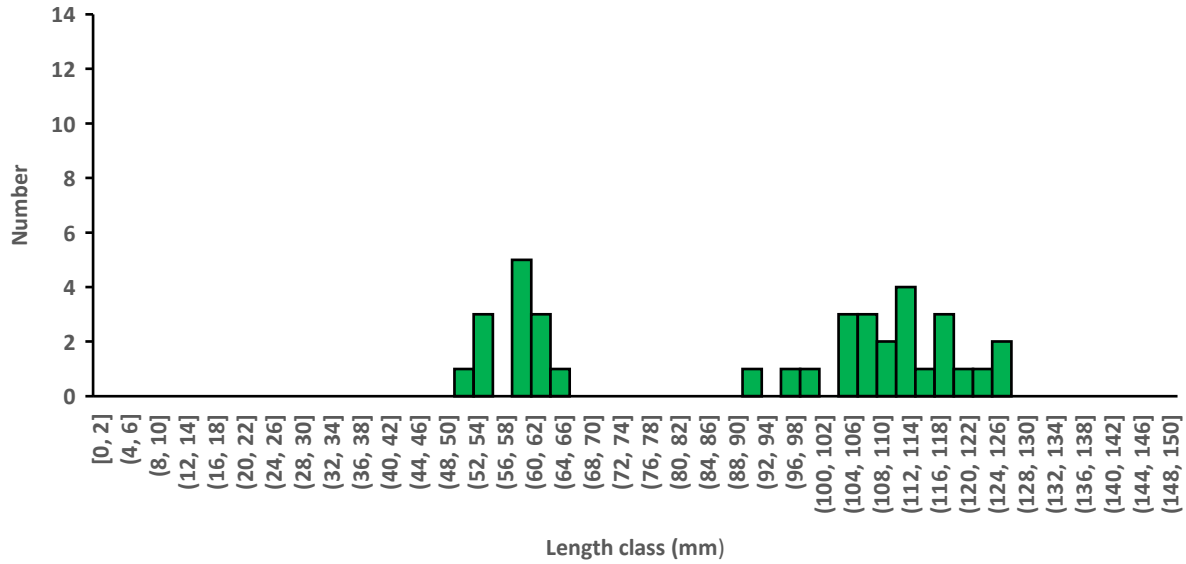


Figure 21: Length frequency for the Pedder galaxias captures, Strathgordon water supply dam, June 2026 (n=49).

Table 2: Summary of Capture-Mark-Recapture population estimate for the Pedder galaxias population in the Strathgordon water supply dam, 4 June 2026

Capture–Mark–Recapture Summary and Population Estimate		
Metric	**Value**	**Notes**
M (marked initially)	100	First capture sample
C (recaptured total)	49	Second sample size
R (marked recaptured)	18	Previously marked fish
U (unmarked)	31	New fish in sample
Proportion marked (R/C)	0.37	Recapture rate
Population estimate (Petersen)	272	MC / R
Standard error (SE)	51	Based on Petersen variance
95% confidence interval	172–372	Approximate range
Marked : unmarked ratio	18 : 31 (~1 : 1.7)	Recapture composition

Lake Oberon 2026

Overview

Since the translocation of 31 Pedder galaxias into Lake Oberon during 1992-1995 for conservation purposes, the abundance of fish within the lake has increased to relatively high levels. Early monitoring results from nighttime snorkelling observations and the use of fyke nets demonstrated that consistent recruitment was occurring, with multiple size classes present over several monitoring surveys between 1998 and 2026 (Appendix 3).

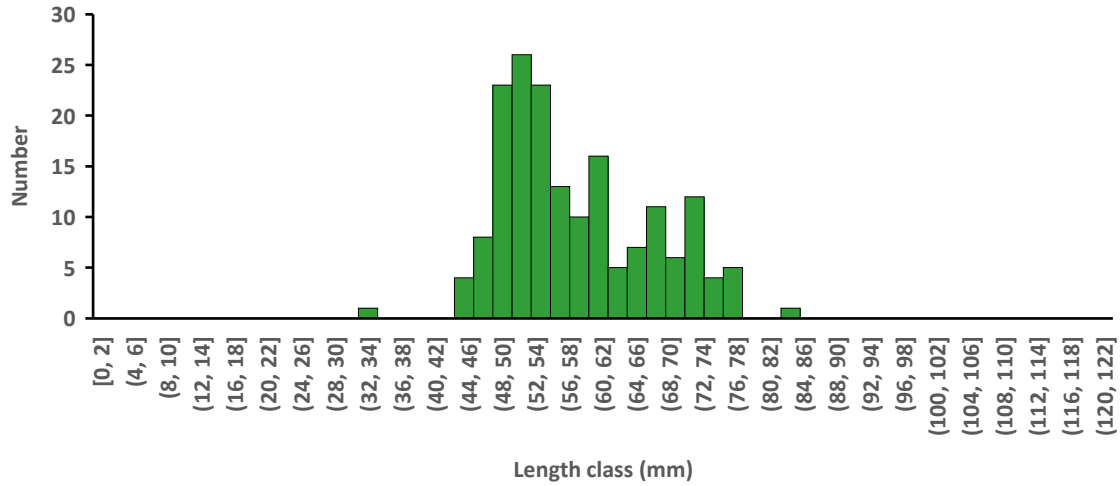


Figure 22: Length frequency for the Pedder galaxias captures (n=216), Lake Oberon, April 2026.

During 26-27 April 2026, the Pedder galaxias population in Lake Oberon was monitored using 10 fine-mesh fyke nets that were deployed overnight within the relatively shallow beach area adjacent to the campsite at the lake. A total of 344 Pedder galaxias were captured, corresponding to a CPUE of 34.4 fish per net. This result indicates that the population continues to be in high abundance, which is consistant with the results of other recent surveys of this population (Appendix 4).

The length-frequency distribution for this catch in Lake Oberon (Figure 22) exhibits a broad, multi-modal pattern, indicating the presence of several overlapping cohorts. Fish were most abundant between approximately 48 and 74 mm, with a dominate mode at 50-58 mm, with additional larger fish in the 60-70 mm length range. A smaller group of larger individuals (approximately 75–90 mm) represent older fish, confirming the presence of at least two to three cohorts in the catch.

A small number of young-of-the-year fish were recorded in the 34–40 mm size class. Their low relative abundance may reflect reduced capture efficiency in fyke nets for smaller individuals that may be transitioning from pelagic to epibenthic habitats, rather than a scarcity of new recruits within the population.

Overall, the presence of a broad range of size classes, from juveniles to larger adults, is indicative of ongoing recruitment and a population supported by multiple year classes, consistent with a stable, self-sustaining population.

Golden galaxias

Overview

Since the 1990s, the golden galaxias populations in Lake Crescent and Lake Sorell have been subject to several changes. The two populations have been separated by the placement of fine mesh screens to prevent the movement of European carp between the lakes. Carp have now been eradicated and the screens have been removed in September 2023, allowing for movement and dispersal between lakes. Additionally, climatic variability combined with water releases, have resulted in significant water level fluctuations and elevated turbidity, placing stresses on the lake ecosystems and galaxiid populations. The trout populations in both lakes are also likely to have influenced the golden galaxias populations, particularly as turbidity has decreased in recent years and the trout population is now increasing in abundance in Lake Sorell. The IFS reviewed its stocking policy during 2024 with natural recruitment now being the only input of brown trout into the system.

Golden galaxias - lakes Crescent and Sorell

The annual golden galaxias *(Galaxias auratus)* monitoring survey was conducted between 31 March and 1 April 2026.

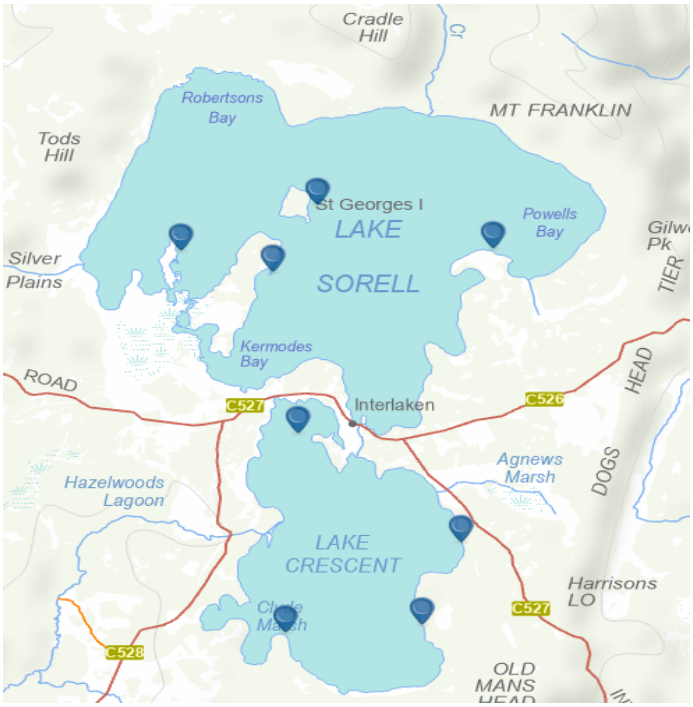


Figure 23: Lakes Crescent and Sorell, showing annual monitoring sites.

Within each lake, 16 fine-mesh fyke nets were set overnight, with four nets set at four locations (Figure 23), with the number of golden galaxias captured per site recorded. The fork lengths of around 150 golden galaxias from each lake were recorded. At the time of the survey, the lake level in Lake Sorell was 803.55 m ASL and the lake level in Lake Crescent was 802.40 m ASL.

The total catch of golden galaxias in Lake Crescent was 1,404 with an average CPUE of 88 fish per net. This result is down on the long-term average CPUE (2011-25) of 184 fish per net (Figure 24) and below the previous year.

In Lake Sorell, 4,257 golden galaxias were captured with a CPUE of 266 fish per net (Figure 24). Based on CPUE, this is the second highest catch in Lake Sorell since 2011, and first time the catch in Lake Sorell has been greater than Lake Crescent by a margin of >150 fish per net.

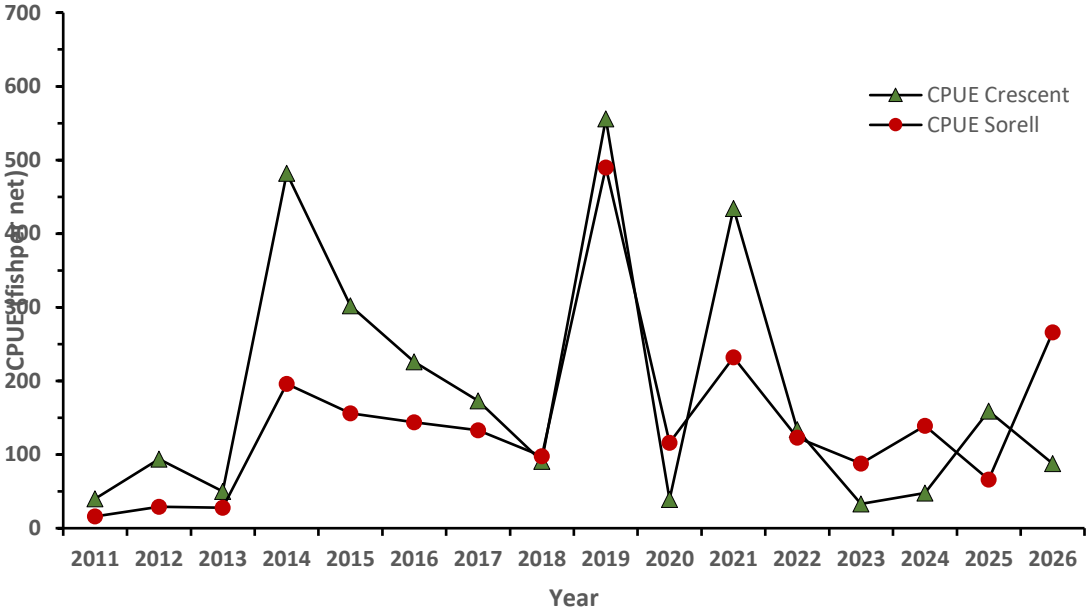


Figure 24: Catch per unit effort (CPUE) of golden galaxias in lakes Crescent and Sorell (2011-26).

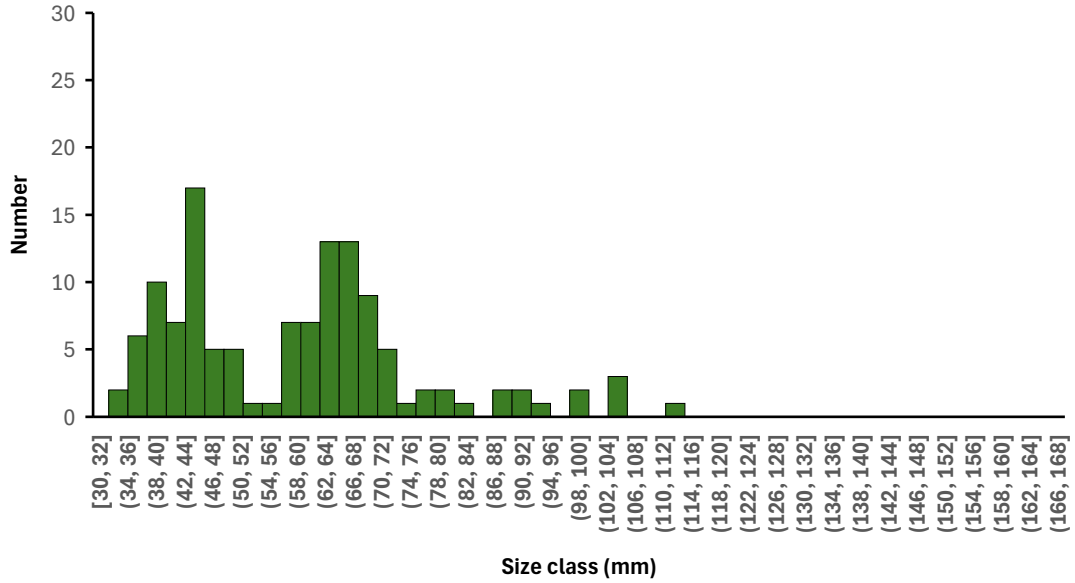


Figure 25. Length frequency for the Golden galaxias captures, Lake Crescent, April 2026 (n=154)

While the total number of golden galaxias captured in Lake Crescent was below the long-term average, there were signs of significant recruitment, with 45% of fish in the 30-55 mm length range and 41% between 55 and 75 mm (Figure 25). These fish represent 0+ and 1+ cohorts, respectively.

The number of fish over 75 mm was relatively low and there were no well-defined older cohorts, although fish in age classes 2+, 3+, 4+ and older were present.

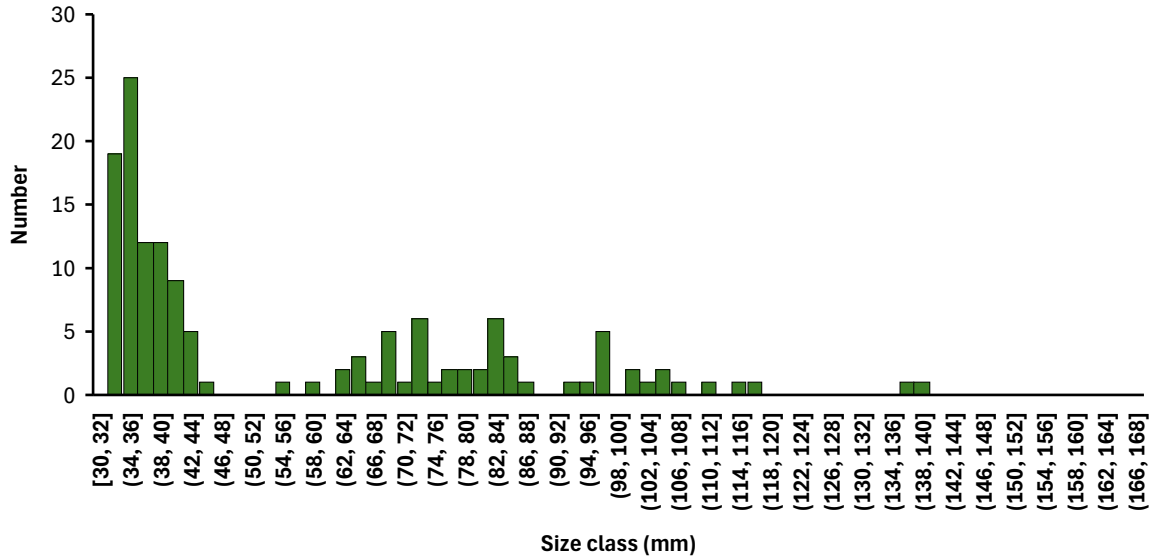


Figure 26. Length frequency for the golden galaxias captures, Lake Sorell, March 2026 (n=150).

Recruitment of golden galaxias in Lake Sorell from the 2025 breeding season appears to have been high, with 63% of fish in the catch being young-of-the-year (30-50 mm in length) (Figure 26). Compared to Lake Crescent, the proportion of fish in the 55-75 mm length range was significantly lower, with the proportion of fish over 70 mm also low, with no strong older cohorts present.

The current size structure of both populations is recruitment driven, but Lake Crescent appears to have stronger survival into mid-size classes, while Lake Sorell is more heavily dominated by young fish with less progression into older size classes.

Swan galaxias

Overview

The Swan galaxias *(Galaxias fontanus)* is endemic to Tasmania, occurring naturally only in the headwaters of the Swan River above Hardings Falls, isolated headwater tributaries of the Tinamirakuna / Macquarie River and four small creeks at the foot of the Western Tiers within the western Tinamirakuna / Macquarie River catchment (Figure 27). In addition, under a previous recovery plan for the species, nine translocated insurance populations were established between 1989 and 1995 within headwater streams of the Macquarie, Swan, St Pauls and South Esk catchments. The ongoing viability of several natural and translocated populations is uncertain, with many populations having vastly reduced numbers (Appendix 5 and 6) and/or highly restricted distribution (found in relatively short stretches of streams). Some populations have become locally extinct while others are under severe stress due to climatic extremes (low flows and floods) and the presence of brown trout and in some cases redfin perch, in the streams were the populations occur.

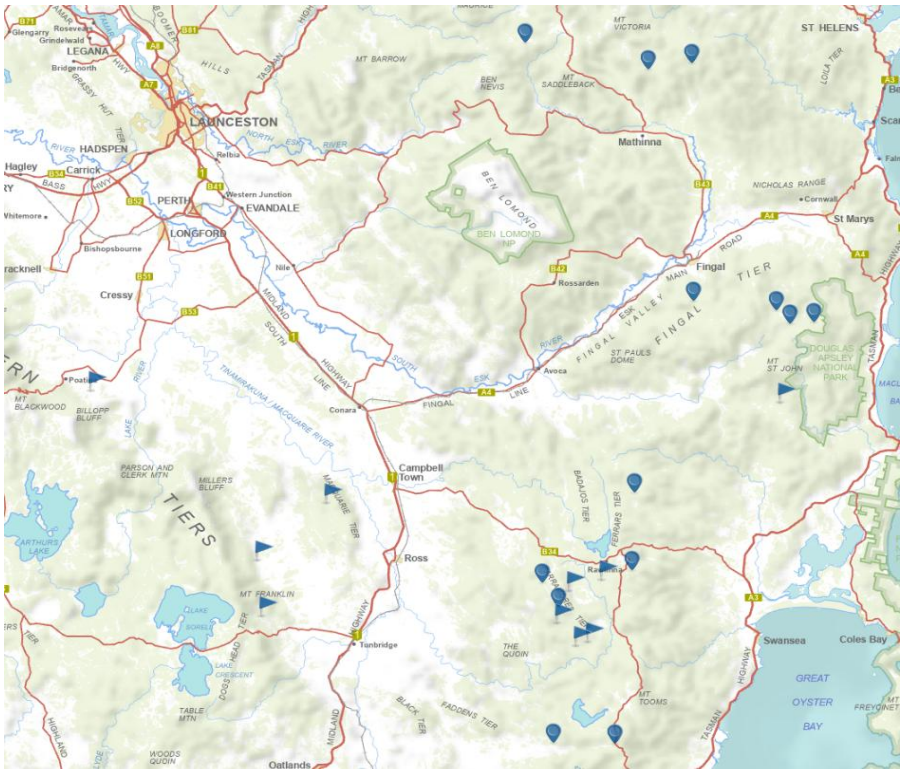


Figure 27: Locations of current Swan galaxias populations in eastern Tasmania, showing natural and translocated populations, as of June 2026.

Monitoring of Swan galaxias populations is conducted annually, with key populations being checked during most years and other populations being monitored as required (i.e. 2-5 year rotational monitoring).

During March 2023, two new translocated populations were established in Delvin Creek and Evercreech Rivulet. Early results from monitoring suggest these populations are establishing, with signs of recruitment in both populations. A third translocated population was established during

March-May 2025 at Newitts Creek, with Swan galaxias sourced from lower Blue Tier Creek and Rocka Rivulet. A low level of recruitment was also detected at Newitts Creek during 2026.

Source populations

The following locations served as sources for Swan galaxias for the establishment of the three translocated populations during 2023-25.

Rocka Rivulet

Rocka Rivulet (17 March 2026), eight Swan galaxias were captured from Rocka Rivulet by backpack electrofishing for an on-time of 920 seconds, resulting in a CPUE of 0.52 fish per minute. All fish were adults (80 - 111 mm length).

Dukes River

On 17 March 2026, the Dukes River monitoring site at the old bridge pool was inspected visually. No river flow was observed and pool levels were low. Due to these conditions, electrofishing was considered inappropriate. Twelve Swan galaxias were observed, estimated lengths 85-90 mm.

St Pauls River

On 21 May 2026, the section of the St Pauls River from the Valley Road floodway upstream for 650 m (GDA94 MGA55; 592444E, 5382849N) was electrofished for 1,025 seconds on-time. Five Swan galaxias were captured,. Two of these fish were retained for genetic analyses.

Cygnet River

On 19 March 2026, the Cygnet River downstream of McKays Road for a distance of 250 m, (including the pool immediately downstream of the road) was electrofished for 983 seconds on-time. A total of seven climbing galaxias were captured (90 - 160 mm length), with no Swan galaxias captured or observed.

Blue Tier Creek (lower)

The Blue Tier Creek source population was not monitored during 2025-26.

New translocated populations

Translocation populations of Swan galaxias were established at the following locations during 2023-25. Length data for all new translocated sites is contained within Appendix 7.

Evercreech Rivulet

On 18 March 2026, the new translocated population of Swan galaxias at Evercreech Rivulet (GDA94 MGA55 : 581046E, 5418522N) was checked. This population was established during March 2023 from sixty fish. The section of stream from 100 m downstream of the logging track crossing to 150 m upstream was electrofished for 982 seconds on-time. Eight Swan galaxias, between 32 - 125 mm were captured, for a CPUE of 0.5 fish per minute, compared to 0.2 for the prevous year. In addition, several other individuals of around 30 mm were also observed but were unable to be captured. Nine small *Astacopsis franklinii* (approx. 25 - 30 mm cpl) were captured or observed.

Delvin Creek

On 18 March 2026, the new translocated population of Swan galaxias at Delvin Creek GDA94 MGA55 : 575242E, 5417716N was checked. This population was established during March 2023 from sixty fish. The section of stream from 30 m downstream of the logging road bridge to 100 m upstream was electrofished for 915 seconds on-time. Seven Swan galaxias, between 31 - 110 mm were captured, for a CPUE of 0.5 fish per minute compared to 0.25 for the previous year. Three small *Astacopsis franklinii* (approx. 25 - 30 mm cpl) were captured and released.

Newitts Creek

On 17 March 2026, the translocated Swan galaxias population at Newitts Creek (GDA94 MGA55: 575242E, 5417716N) was surveyed. This population was established between March and May 2025, with 60 individuals released. A 350 m reach, extending from 50 m below the road culverts, upstream to the initial release site was electrofished for 1,203 seconds on-time. One adult (98 mm) and one juvenile (45 mm) Swan galaxias were captured, yielding a catch per unit effort (CPUE) of 0.1 fish per minute. An additional four juveniles were observed but not captured in the pool immediately downstream of the road culverts. Ten juvenile *Astacopsis franklinii* (approximately 25–30 mm carapace length) were observed.

Swan galaxias – routine monitoring sites

During March and May 2026, two other Swan galaxias populations were surveyed using backpack electrofishing. These sites were in addition to the translocated and source populations reported above. A summary of the fishing effort and catches at each location is provided below.

Tater Garden Creek

Tater Garden Creek was surveyed on 21 May 2026, focusing on the pools downstream of the eastern branch to approximately 100 m upstream of the confluence of the eastern and western branches. All lower pools were dry with only a very small number of wetted pools existing upstream. No Swan galaxias were detected.

Tullochgorum Creek

Tullochgorum Creek was surveyed on 21 May 2026 at the Mount Foster Road crossing (GDA94: 580929E, 5383947N). The creek was not flowing and only a few small pools remained. Two of these pools were electrofished for an on-time of just 54 seconds, during which ten Swan galaxias were captured (four adults ~70 mm and six juveniles ~ 30 mm), resulting in a CPUE of 10.9 fish per minute. However, this result is not considered representative of the abundance of the population due to the extremely limited habitat available at the time of survey.

Clarence galaxias

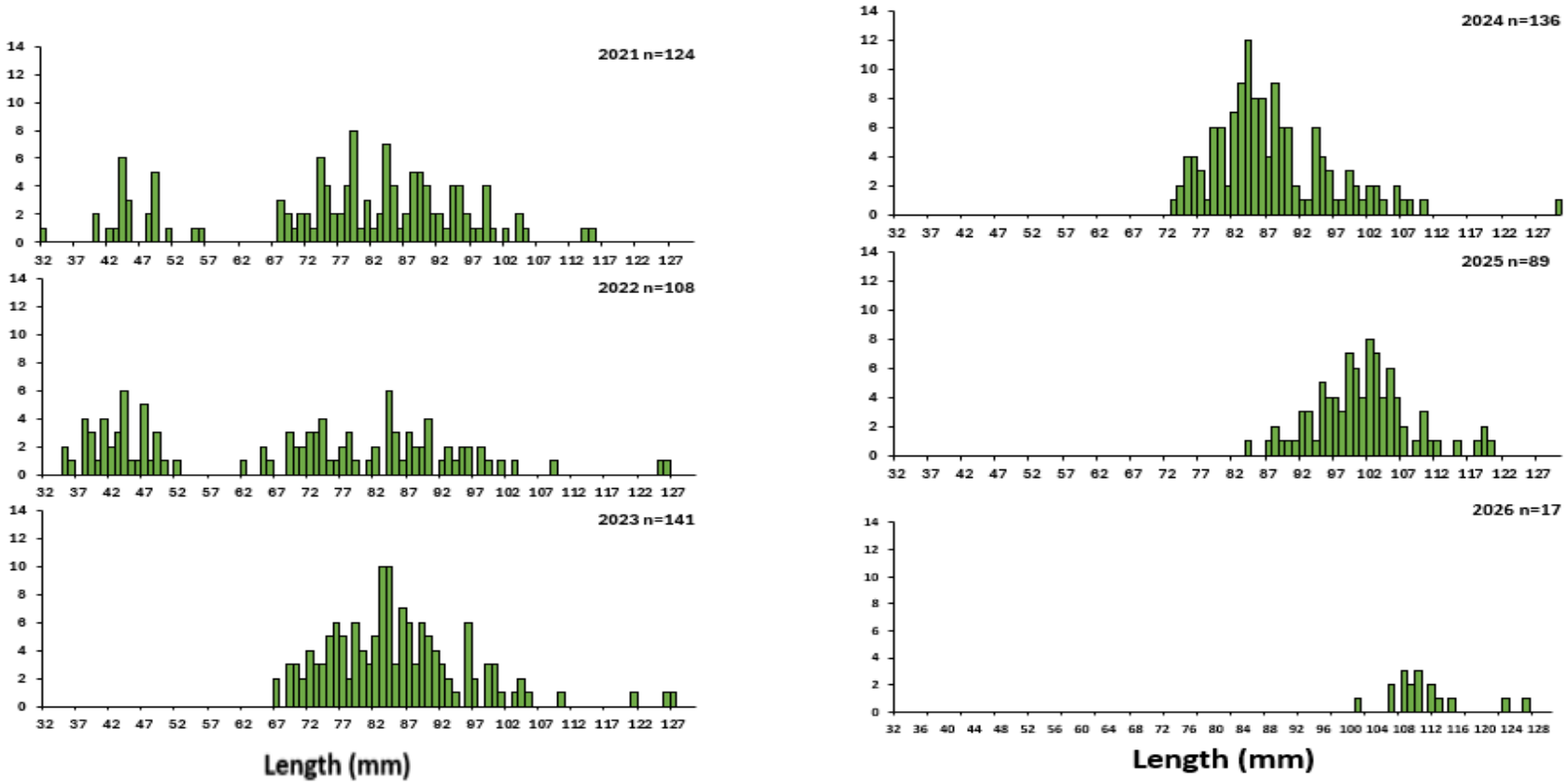
No monitoring or management actions were undertaken for the Clarence galaxias during 2025-26 period.

Education and awareness

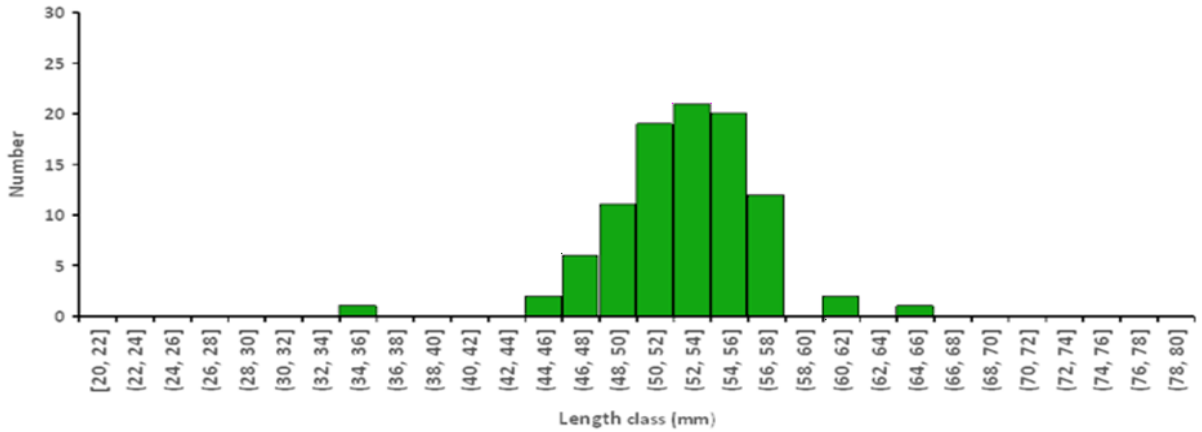
- During 2025-26,the IFS displayed material relevant to native fish conservation at Bushfest and Agfest.
- News articles were published on the IFS website and Instagram.
- NRM South commissioned educational and information videos on the management of the Swan galaxias and biosecurity messaging for anglers, and published newsletter articles on their website and social media accounts.
- During 2025-26, the IFS reviewed several forest practices plans and provided advice to the Forest Practices Authority regarding management of threatened freshwater fish.
- The following journal articles relating to management of threatened freshwater were published during 2025-26:
    - Jense C, Deagle BE, Freeman R, Burridge CP (2025) Historical impacts of invasive species may not always be what they seem: a genetic perspective from an endangered native species. *Diversity and Distributions* 31:e70072.
    - Horner K, Jense C, Ng EYX, Freeman R, Deagle BE, Burridge CP (2026) Evaluating genetic diversity, population structure, and introgression in insurance populations of one of Australia's most threatened species: the freshwater fish *Galaxias pedderensis*. *Conservation Genetics* 27:e9.
    - Deagle B, Freeman R, Devloo-Delva F, Jense C, Liu K, Shao C, Burridge CP (submitted) Conservation genomics of natural and translocated populations of the Swan galaxias (*Galaxias fontanus*) an endangered Tasmanian freshwater fish, *Aquatic Conservation: Marine and Freshwater Ecosystems*.
    - Widawski, V. & Styger, J. (2026) Exploring enablers of climate adaptation: Swan galaxias case study. Adapt Land & Sea Case study. National Environmental Science Program.
    - NRM South (2026) Saving a Native Tassie Fish: What Anglers Need to Know About the Swan galaxias.

Appendix

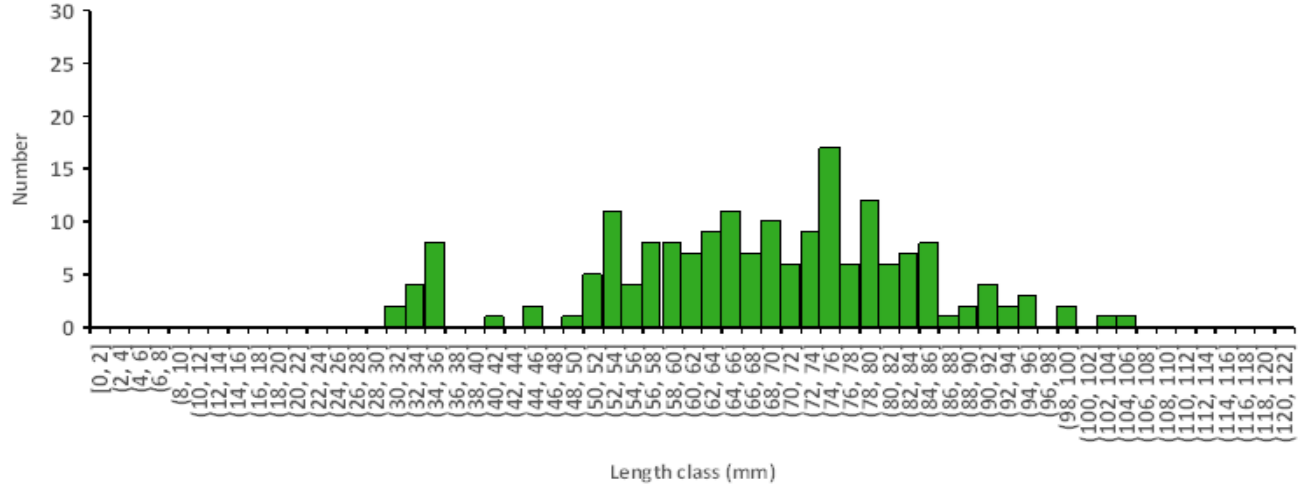
Appendix 1: Length frequency data from monitoring of the Pedder galaxias population in the Strathgordon water supply dam, 2021-26. The absence of recruitment from 2023 onwards is illustrated by the lack of fish <60 mm in length in these years.



Appendix 2: Length frequency plot showing the size structure of the 100 Pedder galaxias that were translocated from Lake Oberon into the Strathgordon water supply dam, 27 April 2026.



Appendix 3 Length frequency plot based on the catch of Pedder galaxias in Lake Oberon during monitoring in 2012.



Appendix 4: A summary of fishing effort and catches of Pedder galaxias in Lake Oberon, 1998-2026.

Year	Method type	Method details	Fishing effort (time/net sets))	Catch	CPUE (fish per min or fish per net)
1998	Night dive	Two divers 100 minutes	100	5	3.0
1998	Night dive	Two divers 230 minutes	230	10	2.6
1998	Night dive	Two divers (unknown likely 120 minutes)	120	9	4.5
1999	Night dive	Two divers 90minutes	90	18	12.0
1999	Night dive	Two divers 90minutes	90	8	5.3
2001	Night dive	Two divers 90minutes	90	lots	
2001	Night dive	Two divers 90minutes	90	few	
2001	Electrofishing	Backpack electrofishing time not recorded. Beach only	900	5	20.0
2001	Insect sweep nets	Beach area, trans to Strathgordon		52	
2002	Night dive	One diver, 450 m	450 metres	lots	
2002	Night dive	One diver	NE beach (small beach)	Not recorded but likely 23	
2005	Night dive	Two divers 120 minutes	120	481	240.5
2005	Electrofishing	Backpack electrofishing time not recorded. Inflow stream	1000	9	32.4
2005	Fyke net	One net overnight	1	117	117.0
2006	Electrofishing	Backpack electrofishing. Beach areas and inflow stream	1500	46	110.4
2006	Night dive	one diver 60 minutes	60	103	103.0
2007	Night dive	Two separate divers 60 minutes each 450 metres each	120	233	116.5
2007	Fyke net	six nets overnight	6	33	5.5
2007	Fyke net	six nets overnight	6	109	18.2
2007	Night dive	Two separate divers 60 minutes and 30 minutes the other each covering approx 450 metres	90	232	154.7
2007	Electrofishing	Backpack electrofishing time not recorded. Inflow stream	1000	19	68.4
2012	Fyke net	Ten nets overnight	10	158	15.8
2012	Electrofishing	Backpack electrofishing the inflow stream for 1,029 seconds for 27 Pedderensis	665	27	146.2
2022	Electrofishing	Backpacked ellectrofishing beach areas and inflow for 54 Pedderensis (est shocktime 1,900 seconds)	1,900	54	102.3
2026	Fyke net	Ten nets overnight	10	344	34.4

Appendix 5: Summary of status of Swan galaxias natural populations and their associated monitoring.

Location		Land Tenure	Year discovered	Year last monitored	Year last observed	Previous know extent of subpopulation (km of river) 2002	Present know extent of subpopulation (km of river)	Change in extent (km of river)	Previous abundance	Current abundance
1	Swan River tributary	State Forest	1978	2022	2022	2	1.5	-0.5	Low numbers	Low
2	Blue Tier Creek (lower)	State Forest		2025	2025	2.5	2.5	0	Low numbers	High , incl. juveniles
3	Parramores Creek	Private		2018	2006	1.5	0	-1.5	Low numbers	Extinct
4A	Tater Garden Creek (east)	Private		2026	2023 (e-DNA)	1	0	-1	Low numbers	Absent
4B	Tater Garden Creek (west)	Private		2019	2008	1.5	0	-1.5	Low numbers	Possibly extinct
5	Snaky Creek	State Forest		2018	2008	1	0	-1	Low numbers	Possibly extinct
6	Brodribb Creek	Private		2024	2012	1.5	0	-1.5	Low numbers	Absent
7	Macquarie Tier creek	Private	2004	2007	2007	1.5	1.5	0	Low numbers	unknown
8	Dairy Creek	Private	2003	2023	2023	0.5	1	+0.5	Low numbers	Moderate
9	Joes/Greens Creek	Private	2004	2026	2026	1	2	+1	Low numbers	Low
10	Floods Creek	State Forest	2004	2022	2011	0.5	0	-0.5	Low numbers	Possibly extinct

Appendix 6: Summary of the status of Swan galaxias translocated populations and their associated monitoring.

Location		Land Tenure	Year discovered or translocated	No. translocated	Year last monitored	Year last observed	Previous known extent of subpopulation (km of river) 2002	Present know extent of subpopulation (km of river)	Change in extent (km of river)	Previous abundance	Current abundance
1	Blue Tier Creek (Upper)	State Forest	1989	60 adults	2024	2015	2.5	0	-2.5	Low numbers	Extinct
2	Lost Falls Creek	State Forest	1991	50	2025	2015	1.5	0	-1.5	Low numbers	Possibly extinct
3	Dukes River	State Forest	1991	50	2026	2026	10.5	10.5	0	Low numbers	Moderate
4	Cygnet River	State Forest	1993	50	2026	2025	1.3	1.3	0	Low numbers	Low (brevipinnis present)
5	St Pauls River	State Forest	1993	50	2026	2026	6	6	0	Low numbers	Moderate/Low
6	Rocka Rivulet	State Forest	1993	50	2026	2026	5	5	0	Low numbers	Low
7	Green Tier Creek	Private	1995	87 (20 adults)	2019	2019	2	0.5	-1.5	Low numbers	Very low
8	Tullochgorum Creek	Private	1995	64 (14 adults)	2026	2026	2	0.5	-1.5	Low numbers	Low
9	Coghlans Creek	State Forest	1995	56 (30 adults)	2018	2007	1.2	0	-1.2	Low numbers	Extinct
10	Wye River	State Forest	1995	50 (42 adults)	Never established	Never established					Never established
11	Evercreech Rivulet	State Forest	2023	60 (36 adults & 24 juveniles)	2026	2026	TBD	TBD			New translocation low

Location		Land Tenure	Year discovered or translocated	No. translocated	Year last monitored	Year last observed	Previous known extent of subpopulation (km of river) 2002	Present know extent of subpopulation (km of river)	Change in extent (km of river)	Previous abundance	Current abundance
12	Delvin Creek	State Forest	2023	60 (30 adults & 30 juveniles)	2026	2026	TBD	TBD			New translocation low
13	Newitts Creek	State Forest	2025	60 (24 adults & 36 juveniles)	2026	2026	TBD	TBD			New translocation low

Appendix 7: Swan galaxias new translocated populations, length data March 2026.

Evercreech Rivulet (mm)	Newitts Creek (mm)	Devlin Creek (mm)
30	45	31
32	98	38
105		41
110		82
110		87
120		100
120		110
125		

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