Inland Fisheries Service

Native Fish Conservation

Annual Report

Inland Fisheries Service

Native Fish Conservation – Annual Report 2024-25

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Introduction

This report has been prepared to review the work performed by the Inland Fisheries Service (IFS) under the Tasmanian Freshwater Fish - Threatened Species Program for the 2024-25 period. Where available, results from annual monitoring over the past ten years are included, or if applicable, longer.

Tasmania has twelve 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*. These twelve species are also listed under the International Union for the Conservation of Nature (IUCN) red list (Table 1). The IUCN listings are the most up to date, being reviewed in 2019, whereas the Commonwealth and State listings have not been reviewed for a significant period, consequently the level of threat i.e. vulnerable through to critically endangered, varies between each entity.

Presently, there are seven species of freshwater fish that have active monitoring and management programs in place, these are: Arthurs paragalaxias, Great Lake paragalaxias, Saddled galaxias Clarence galaxias, Golden galaxias, Pedder galaxias and the Swan galaxias. Monitoring of the Great Lake paragalaxias and the Shannon paragalaxias was delayed until the 2025-26 period. A range of other freshwater fish are encountered during other work programs conducted by the IFS, these are generally documented in field notes and/or listed on the Natural Values Atlas. The IFS also records the trapping and transfer of short-finned eels and pouched lamprey from the Meadowbank Dam and the River Tamar power station tailrace, Trevallyn. 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 twelve 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 listings under the respective entities threatened species listing criteria (TTSP - Tasmanian Threatened Species Protection Act 1995; EPBC Act – Environmental Protection and Biological Conservation Act 1995; IUCN – International Union for the Conservation of Nature red list).*Extinct in natural location, only extant in two translocated locations.*

Location	Species	TTSP (Act)	EPBC (Act)	IUNC (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 (plus one small, translocated population)	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**	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	Endangered
NE and NW Tasmania, Flinders Island	Dwarf galaxias *(Galaxiella pusilla)*	Vulnerable	Vulnerable	Endangered
Coastal streams of Tasmania	Australian grayling *(Prototroctes maraena)*	Vulnerable	Vulnerable	Vulnerable

Survey results 2024-25 and summary information

Arthurs paragalaxias and Saddled galaxias

Overview

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

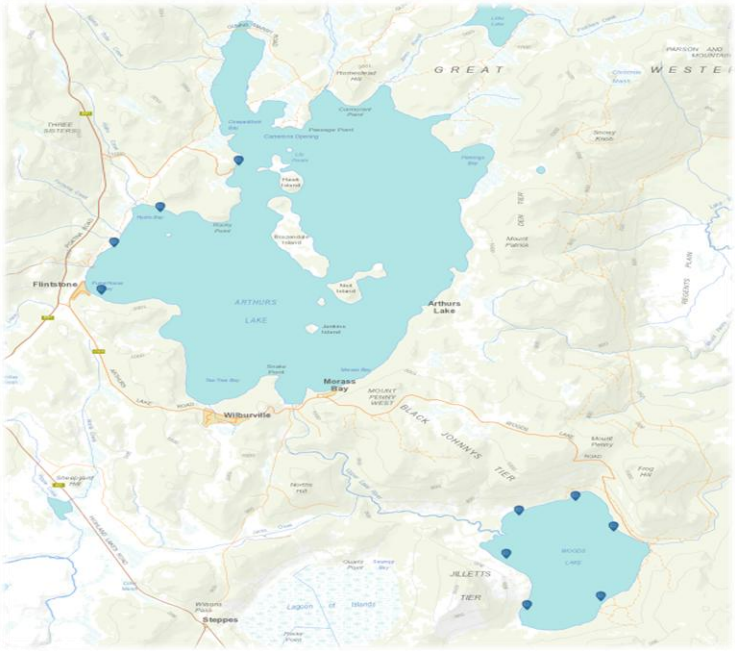

Figure 1: Arthurs Lake and Woods Lake showing annual monitoring sites.

Arthurs paragalaxias - Arthurs Lake

Monitoring of the Arthurs paragalaxias within Arthurs Lake was undertaken over 25-26 September 2024. Twenty-four fine mesh fyke nets, consisting of six nets set at four sites:

Flintstone Drive, Pumphouse Bay (north), Hydro Bay and Jonah Bay (Figure 1). At the time of the survey, Arthurs Lake was 2.2 m below full supply level. A total of 47 individuals were captured, resulting in a CPUE of 2.0 fish per net. This result is below the ten-year average (2015-24) of 3.4 fish per net (Figure 2). In terms of relative abundance, this result is within the bounds of recent years catches. Monitoring is planned for October 2025.

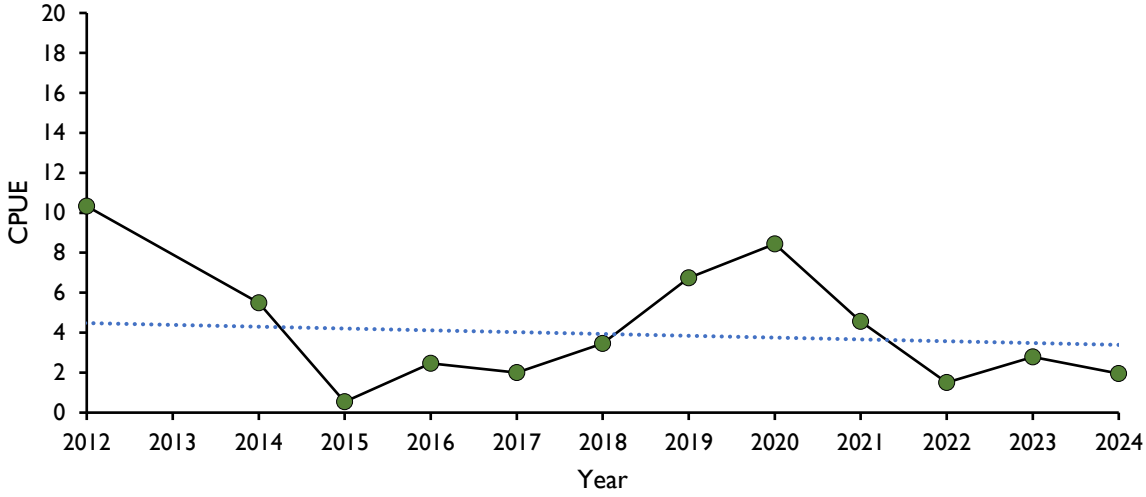

Figure 2: Catch per unit effort (CPUE - fish per net) for Arthurs paragalaxias captured during annual fyke netting surveys, Arthurs Lake, 2012-24 (showing linear trendline).

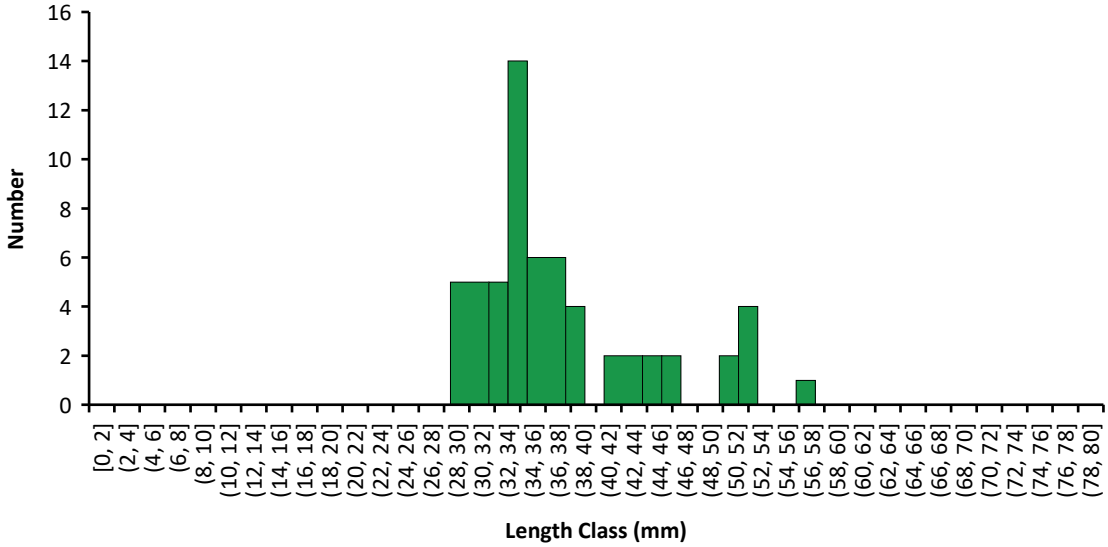

Figure 3: Length frequency for the Arthurs paragalaxias captures, Arthurs Lake, September 2024, (n=47).

Forty seven fish were measured for length and plotted on a length frequency histogram (Figure 3). There were three length cohorts evident. Natural recruitment of juvenile Arthurs paragalaxias during 2024 was significant, with good numbers in the 30–40 mm length range. The survival of larger adult fish was modest, with several individuals in the 42–48 mm and 50–58 mm length classes.

Arthurs paragalaxias - Woods Lake

Following the transfer of 2,470 individuals from Arthurs Lake to Woods Lake between 2007 to 2012 some encouraging monitoring results were recoded (Figure 4). However, total catches have declined to low levels over the last seven years. The Arthurs paragalaxias was not found during monitoring for 2022, 2023, and 2025 (additional survey) with one individual captured during October 2024. The factors influencing this trend are unclear but lake level management during the spawning period, the annual abundance of brown trout and the low population base are contributing factors. An intense algal bloom of Dolichospermum (cyanobacteria – nontoxic form), persisted from the winter of 2023 into late 2024. The bloom dispersed during December 2024 and it was undetectable by April 2025. Results from monitoring Saddled galaxias in Woods Lake 20-21 February 2025, indicate there were no detectable long term impacts on this species, the same is likely for the Arthurs paragalaxias.

During 2-3 October 2024, twenty-four fine mesh fyke nets were deployed, consisting of four nets set across six sites (Figure 1), with one Arthurs paragalaxias captured. Results are expressed as total numbers rather than CUPE (Figure 4). An additional duplicate monitoring survey was conducted during 20–21 February 2025 but no Arthurs paragalaxias were detected.

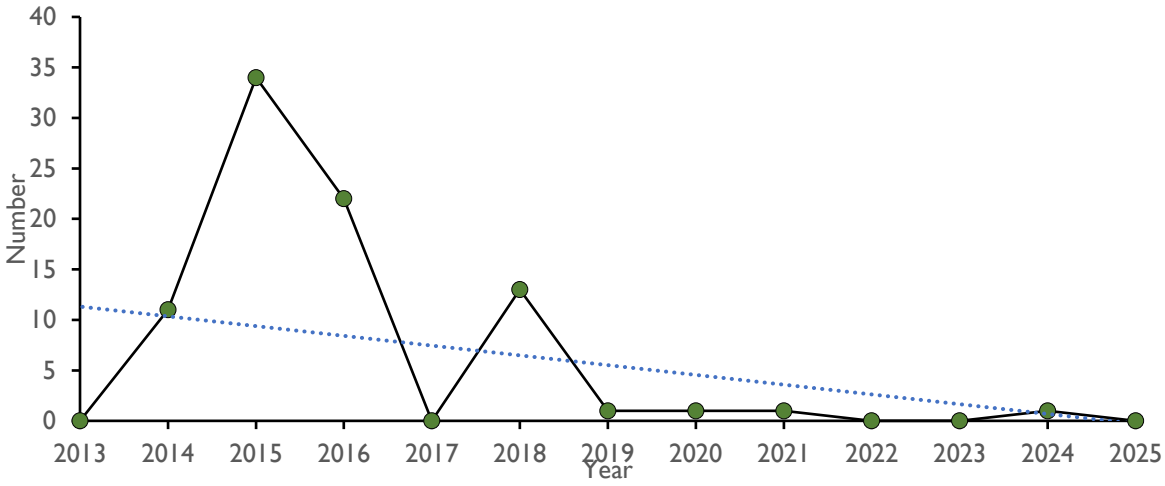

Figure 4: Total catches, Arthurs paragalaxias during annual fyke netting surveys, Woods Lake, 2012–25 (showing linear trendline), (the 10 individuals captured during 2014 were from Entura consultants fyke netting survey). The 2025 survey was additional to the normal monitoring schedule.*

Saddled galaxias - Arthurs Lake

Monitoring of the Saddled galaxias within Arthurs Lake was undertaken 10-11 October 2024. Twenty-four fine mesh fyke nets, consisting of six nets set at four sites: Flintstone Drive, Pumphouse Bay (north), Hydro Bay and Jonah Bay (Figure 1). A total of 17 individuals were captured, resulting in a CPUE of 0.7 fish per net (Figure 5). This is a notable decline in comparison to the ten-year average (2014-24) of 2.6 fish per net. Comparable results were

recorded during 2018 – 2020 with an increase CPUE during 2021, indicating the population has some resilience, but ongoing monitoring will be required.

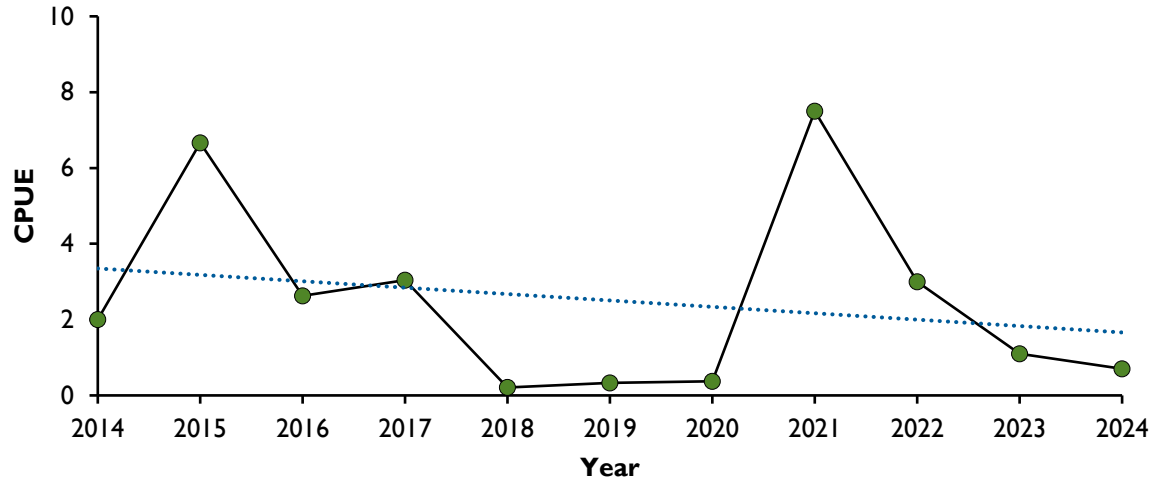

Figure 5: Catch per unit effort (CPUE) for Saddled galaxias, captured during annual fyke netting surveys, Arthurs Lake, 2014–24 (showing linear trendline).

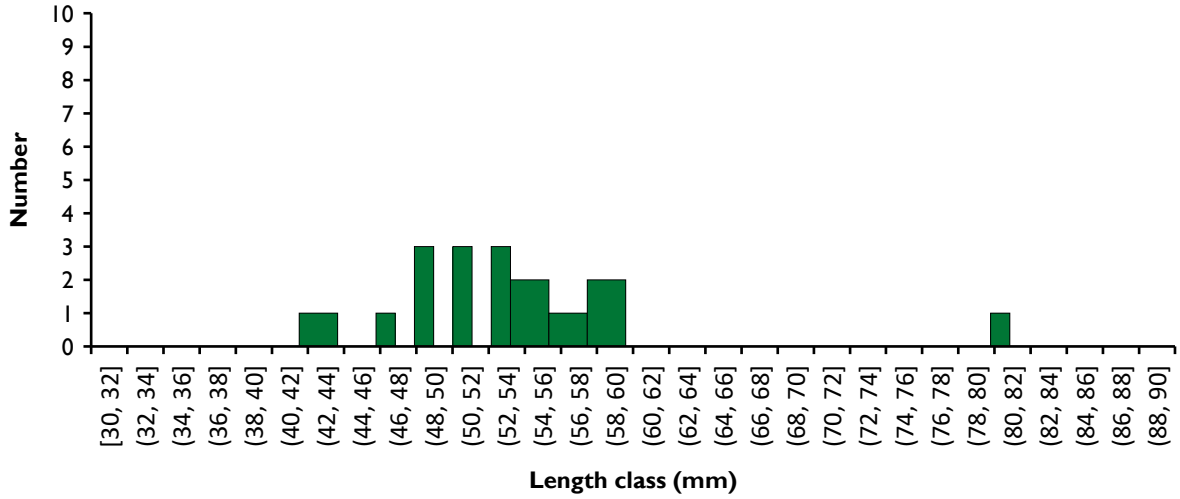

Figure 6: Length frequency for the Saddled galaxias captures, Arthurs Lake, September 2024, (n=17).

The length frequency plot (Figure 6) shows two cohorts, with a moderate number of young of the year fish in the 40-60 mm length range and only one individual over 80 mm. This is indicative of moderate recruitment during 2024 but low survival of adult fish.

Saddled galaxias – Woods Lake

During 2-3 October 2024, twenty-four fine mesh fyke nets were deployed, consisting of four nets set across six sites (Figure 1). At the time of the survey, Woods Lake was 0.38 m below full supply level. Additional monitoring was undertaken 20-21 February 2025 to examine the low CPUE result during October 2024.

The average CPUE for catches of Saddled galaxias from Woods Lake over the ten-year period 2015-24 was 2.2 fish per net, with the CPUE for 2024 at 1.4 fish per net (33 fish captured) (Figure 7). This result was lower than expected and indicated a decline in abundance. Due to this result and the unknown impacts of the persistent algae bloom, an additional survey was conducted early February 2025, using the same effort and locations as the October 2024 survey. The result from this additional survey was unexpected, with a record high capture of 1,508 Saddled galaxias for a CPUE of 62.8 fish per net. A review of comparable surveys (effort and dates i.e. January-April) at Woods Lake indicates the result was not related to the timing of the survey and therefore represents a real and significant increase in abundance.

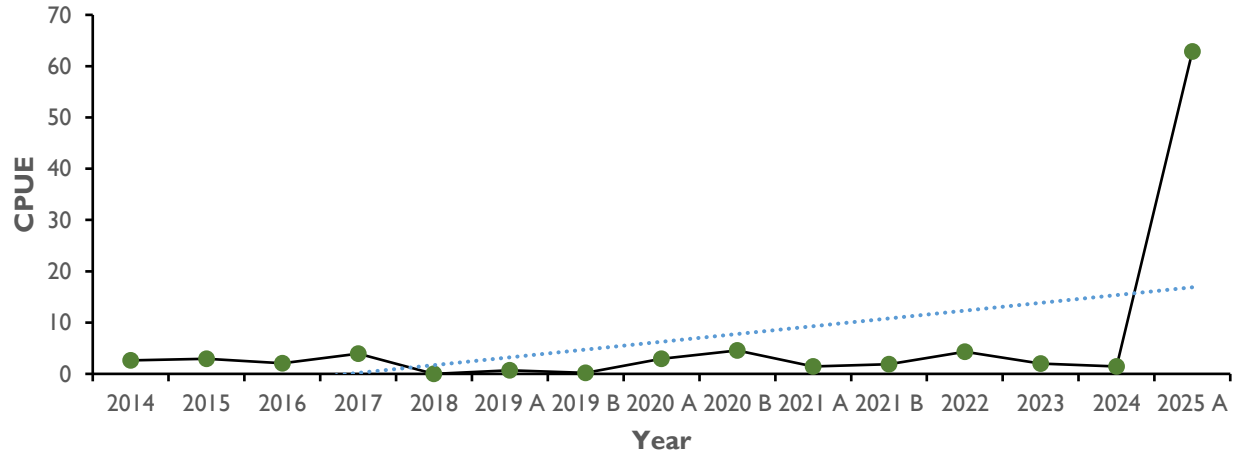

Figure 7: Catch per unit effort (CPUE) for Saddled galaxias, captured during normal annual fyke netting surveys and supplementary surveys, Woods Lake, 2014 –February 2025 (showing linear trendline).

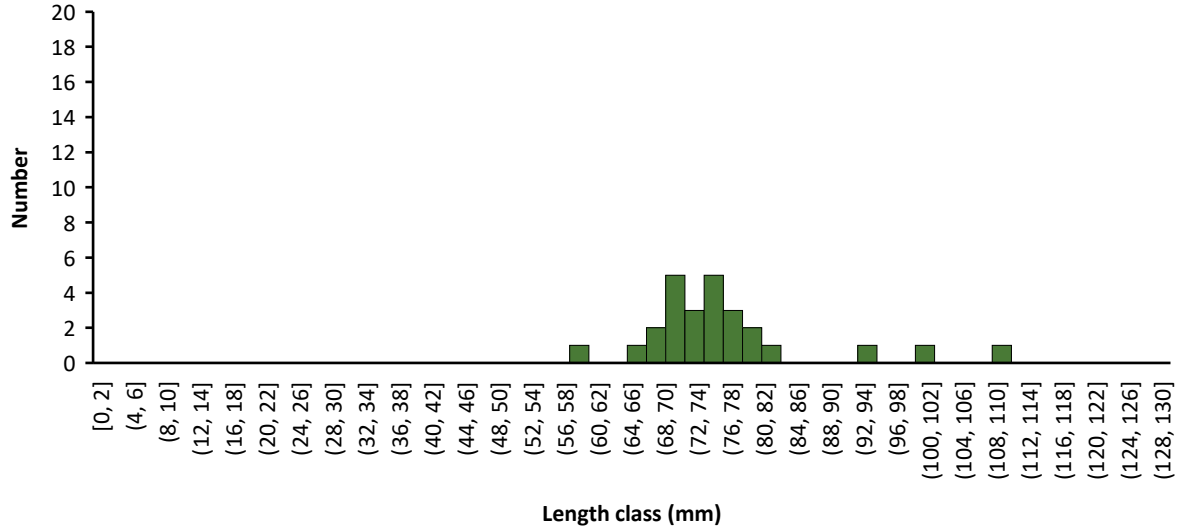

Figure 8a: Length frequency for the Saddled galaxias captures, Woods Lake, October 2024, (n=33).

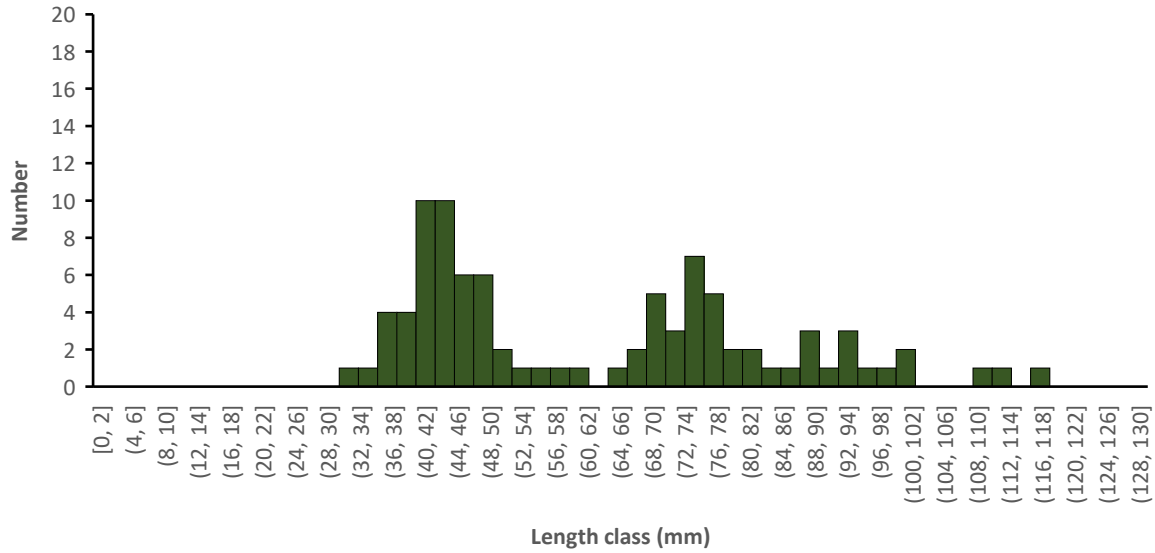

Figure 8b: Length frequency for the Saddled galaxias captures, Woods Lake, February 2025, (n=82).

The length frequency results for the October 2024 survey (Figure 8a) indicates a very low abundance of young of the year Saddled galaxias. This result is almost certainly due to a delay in spawning and the slightly earlier timing of the survey (early October 2024), although similar timed surveys (Sept – Oct) have resulted in significant captures of new recruits. There was a strong cohort of fish in the 68-84 mm size range but very few fish over this size.

The length frequency plot (Figure 8b) is from the additional survey during February 2025, where a record number of Saddled galaxias were captured. The high capture was largely related to a very large young of the year cohort (32-52 mm), although the strong cohort detected during the October 2024 survey remain present. Interestingly, this cohort displayed an almost identical structure within both surveys. Survival of larger (older) fish over 84 mm was also high.

The results from the February 2025 survey provides strong evidence the Saddled galaxias population within Woods Lake is robust, with high abundance and multiple year classes present. The Dolichospermum bloom had no detectable negative impact on the population.

Pedder galaxias

Overview

Since the translocation of 353 Pedder galaxias *(Galaxias pedderensis)* from Lake Oberon to the Strathgordon water supply dam between 2001 and 2007, the abundance of fish within the dam has increased to consistently high levels until 2022. After 2022, there has been a consistent decline in CPUE driven by low recruitment.

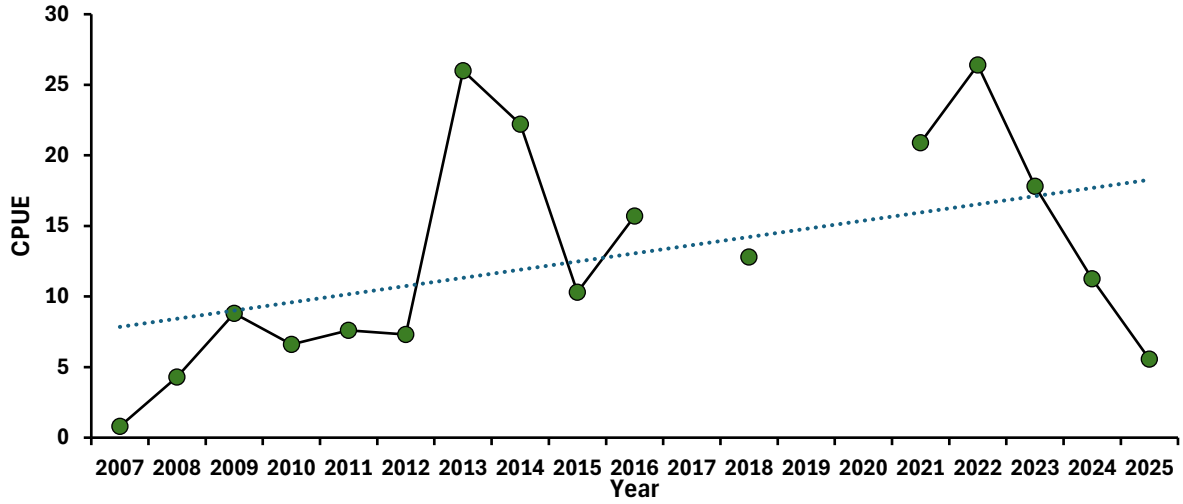

Figure 9: Catch per unit effort (CPUE) from annual fyke net monitoring for the Pedder galaxias at Strathgordon water supply dam 2007-25 (showing linear trendline).

During 14-15 April 2025, the Pedder galaxias population at the Strathgordon water supply dam was monitored by setting 16 fine mesh fyke nets overnight along the shoreline. A total of 89 Pedder galaxias were captured, resulting in a CPUE of 5.6 fish per net (Figure 9). This result indicates the population abundance has continued to decline between 2023 and 2025. This decline has been driven by very low levels of recruitment, with young of the year fish not evident since 2023. Presently, the population is dominated by longer/older fish between 86-120 mm (Figure 10). The Strathgordon water supply population will need to be monitored closely during the 2025-26 period.

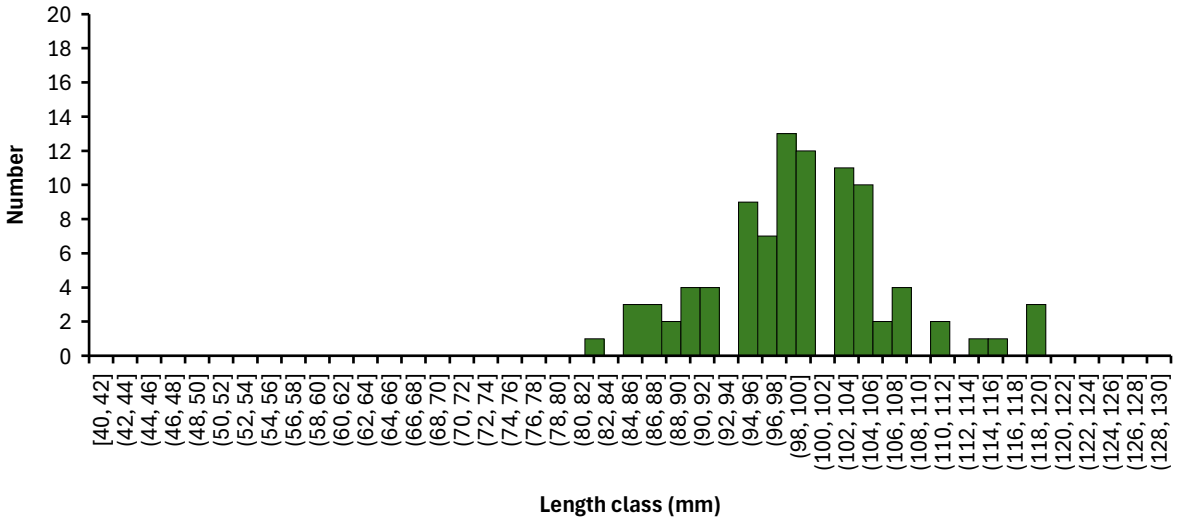

Figure 10: Length frequency for the Pedder galaxias captures, Strathgordon water supply dam, April 2025, (n=89).

Golden galaxias

Overview

The Golden galaxias populations of lakes Crescent and Sorell have over the past 25 years 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 (September 2023), with movement between the two lakes restored. Additionally, contrasting cycles of El Niño and La Niña combined with water releases, have resulted in significant lake level fluctuations and elevated turbidity, placing stresses on the lake ecosystem and galaxiid populations. The trout population in both lakes has also influenced the galaxiid populations, particularly as turbidity has decreased and the trout population has begun to increase. The IFS has reviewed its stocking policy and as of 2024, will no longer stock this system with trout.

Golden galaxias - lakes Crescent and Sorell

The annual Golden galaxias *(Galaxias auratus)* monitoring survey was conducted during 8-9 April 2025. This is the twentieth consecutive year this action from the *Lakes Sorell and Crescent Water Management Plan 2005* has been completed.

Figure 11: Lakes Crescent and Sorell, showing annual monitoring sites.

Within each lake, twelve fine-mesh fyke nets were set overnight, with four nets set across three locations (Figure 11), with the number of Golden galaxias captured per site recorded (Table 2). The fork lengths of 100 Golden galaxias from each lake were recorded. Lake levels at both waters were moderately high, Lake Sorell 803.79 m ASL and Lake Crescent 803.13

m ASL, consequently some areas of marshland habitat were inundated. These areas were not surveyed at either lake.

Table 2: Captures of Golden galaxias in fyke nets, set at three locations in lakes Crescent and Sorell (2025).

Lake	Site	Number of. Fyke Nets	Number Captured
Crescent	Site 1 Agnews Creek Shore	3	941
	Site 2 Boathouse Shore	4	488
	Site 3 Lower Clyde Marsh	4	482
	Total	11	1,911 (159/net)
Sorell	Site 1 East side of Island	4	304
	Site 2 Inside Grassy Point	4	107
	Site 3 Dogshead Point	4	382
	Total	12	793 (66/net)

The total catch of Golden galaxias from Lake Crescent was 1,911, for an average catch effort of 159 fish per net (Table 2). This result is slightly down on the long-term average CPUE (2011-25) of 191 fish per net (Figure 12) but is a noted increase over the last two years.

At Lake Sorell, 793 Golden galaxias were captured (Table 2), for an average catch effort of 66 fish per net (Figure 12). Based on CPUE, this is the lowest result since 2014. By comparison, Lake Crescent is now returning a higher CPUE.

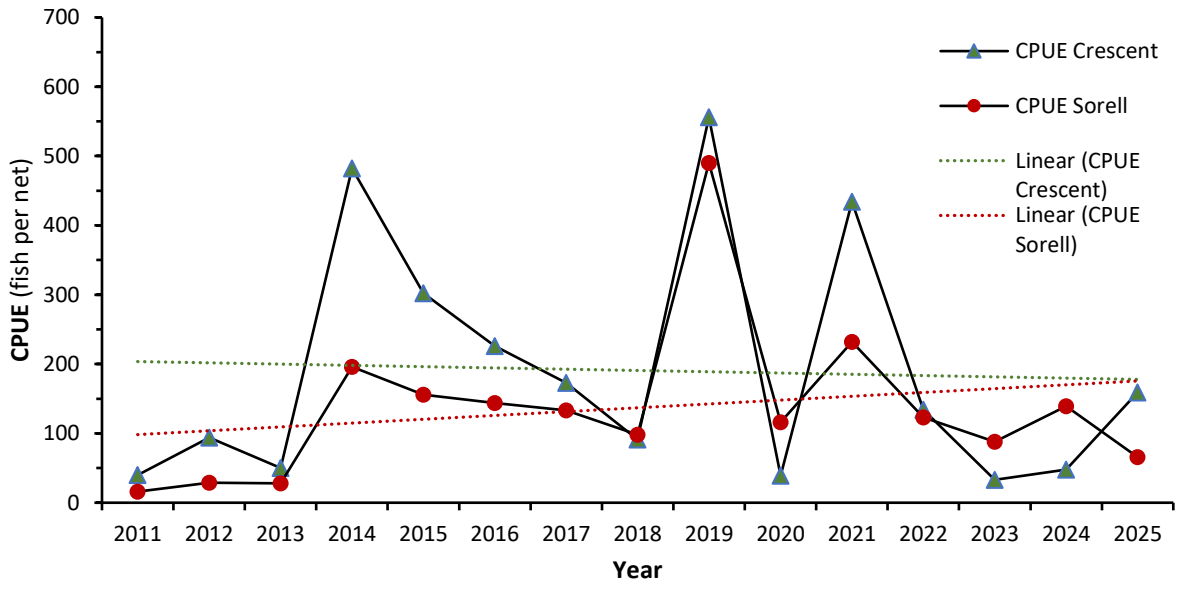

Figure 12: Average catch per unit effort (CPUE) of Golden galaxias for lakes Crescent and Sorell (2011-25), with associated linear trend lines.

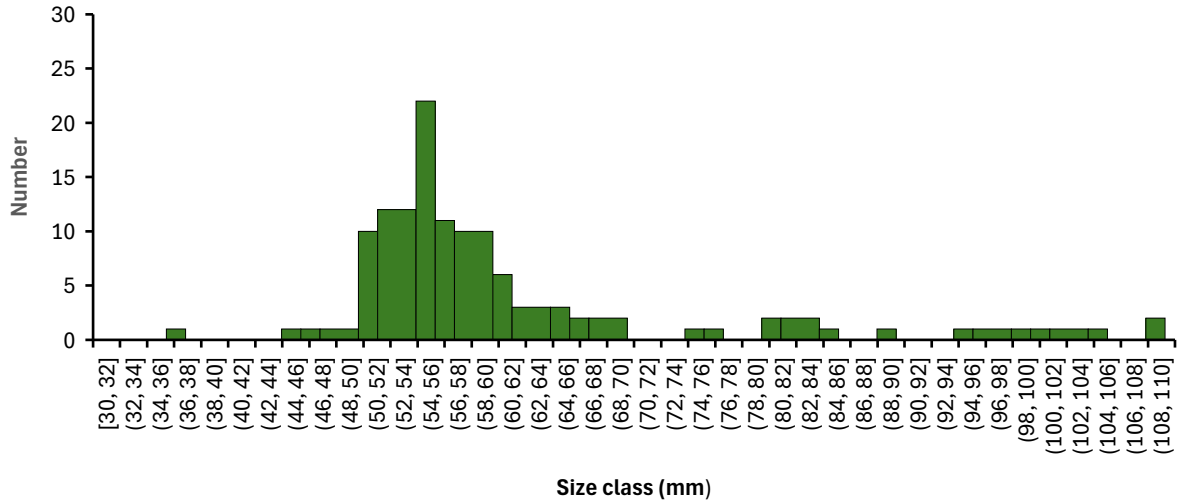

Figure 13. Length frequency for the Golden galaxias captures, Lake Crescent, March 2025 (n=100)

While the total number of Golden galaxias captured at Lake Crescent was below the long term average, there were signs of significant recruitment, with 84 per cent of fish in the 30-70 mm length range (Figure 13). The number of fish over 70 mm was low and there were no defined cohorts.

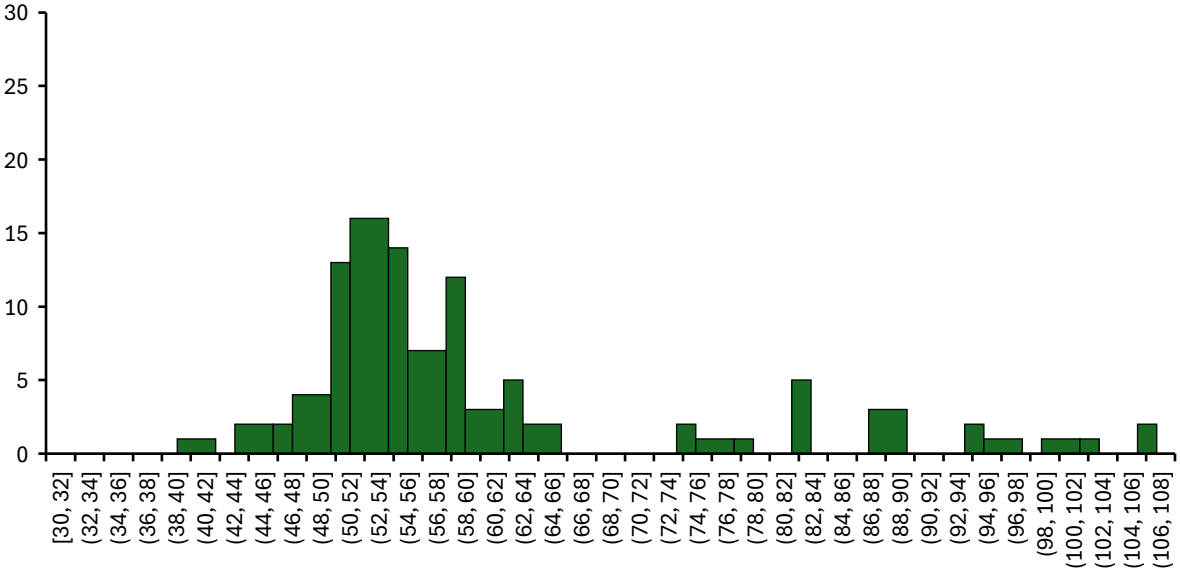

Figure 14. Length frequency for the Golden galaxias captures, Lake Sorell, April 2025 (n=100).

Recruitment of Golden galaxias at Lake Sorell was high, with 81 per cent of fish in the 40-70 mm length range (Figure 14). Similar to Lake Crescent, the number of fish over 70 mm was low and there were no defined cohorts.

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 15). In addition, under the recovery plan for the species, nine translocated insurance populations were established between 1989-95 within headwater streams. The ongoing viability of several natural and translocated populations is uncertain, with many sub-populations having vastly reduced numbers (Appendix 1 and 2) or are restricted to a small length of stream. Some populations have become locally extinct while others are under severe stress due to cycling drought and extreme flood events, and the presence of brown trout (and in some cases redfin perch).

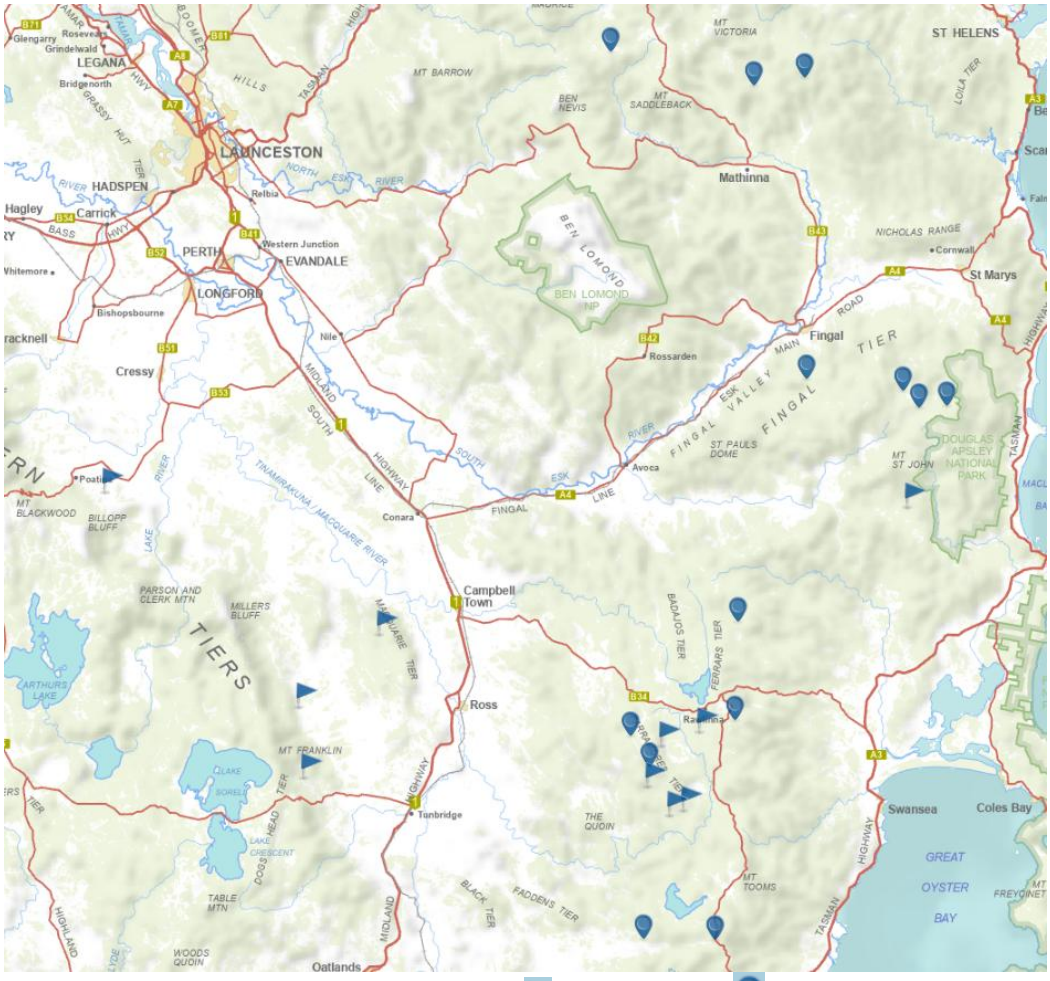

Figure 15: Swan galaxias locations, showing natural and translocated populations, current at June 2025.

Monitoring is conducted annually, with around half of most populations checked each year.

During March 2023, two new translocated populations were established. Early results from monitoring suggest these populations are establishing, with signs of recruitment within Delvin Creek and adult fish within Evercreech Rivulet. A third translocated population was established during March - May 2025 at Newitts Creek, with Swan galaxias sourced from lower Blue Tier Creek (50 fish) and Rocka Rivulet (10 fish).

Establishment of new translocated population 2025

During 2024-25, under the Commonwealth Government's, Environment Restoration Fund for Priority Threatened Species, NRM South in partnership with the IFS and CSIRO, undertook a project to improve the long-term conservation trajectory of the Swan galaxias by establishing an additional translocated insurance population within a trout free sections of Newitts Creek, north east Tasmania. Using the results of the 2022-23 translocation site assessment model, Newitts Creek (GDA94: 558682E, 5421778N) was selected to establish a third new translocated population.

On 10 April 2025, fifty Swan galaxias were collected from Blue Tier Creek by electrofishing. Ten fish were collected from below the instream barrier and 40 above the barrier to the old logging track (approx. 700m upstream). All fish were measured for total length, with a mix of juvenile (60%) and adults (40%) collected (Appendix 2). The total shock time (electrofishing on-time) was 1,075 seconds, giving a catch per unit effort (CPUE) of 2.79 fish per minute. All fifty Swan galaxias were transferred to Newitts Creek, with all fish healthy upon release.

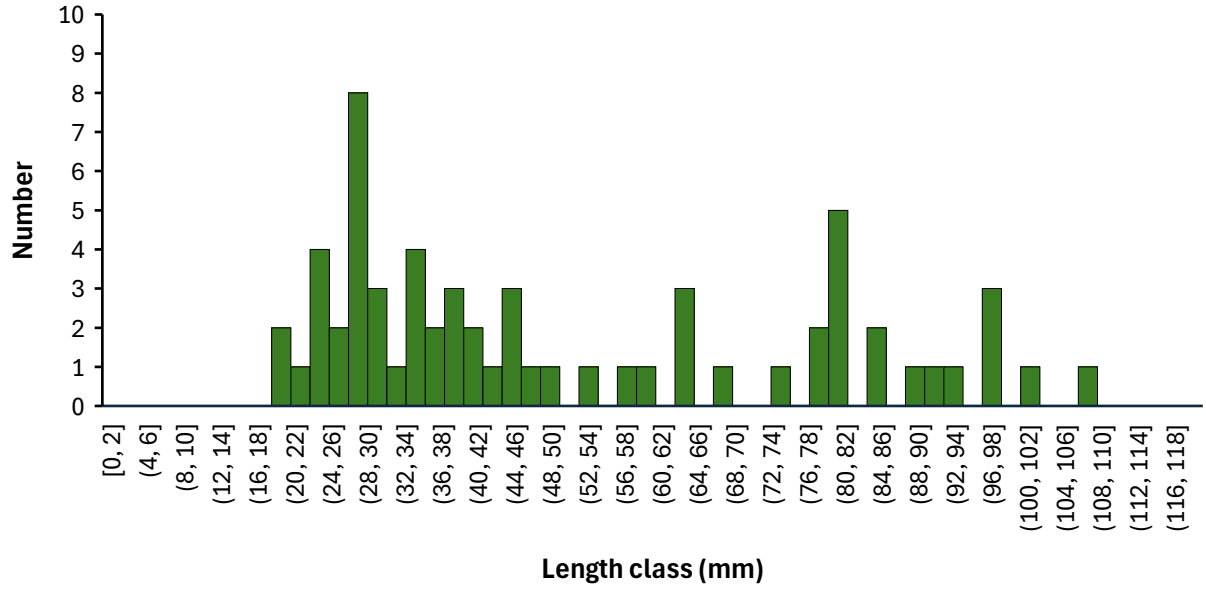

Figure 16: Length frequency for the Swan galaxias captures for translocation, from Blue Tier Creek to Newitts Creek, March 2025 (n=60).

On the 21 May 2025, ten Swan galaxias were captured from Rocka Rivulet by backpack electrofishing, for a total on-time of 1,100 seconds, for a CPUE of 0.55 fish per minute. All

fish were adults (85 – 100 mm total length). All Swan galaxias were transferred to Newitts Creek, with all in good health upon release. Fish were observed moving into the heavy cover of macrophytes both up and downstream.

No Swan galaxias were collected from the Cygnet River despite being planned for. The reasons for this were, the low numbers present and the occurrence of a substantial number of the climbing galaxias. The risk of potentially translocating climbing galaxias outweighed the benefits of taking a small number of Swan galaxias (especially juvenile fish, as they can be difficult to separate on a morphological basis within the field).

Swan galaxias monitoring – translocation source populations

Dukes River

On the 9 April 2025, the Dukes River at the old bridge pool site was electrofished for 595 seconds electrofishing on-time, with the capture of twenty three Swan galaxias, for a CPUE of 2.3 fish per minute. Most were between 85-90 mm length, with several around 100 mm and two juveniles approximately 50 mm. The stream flow was extremely low but there was limited algal growth compared to the 2024 monitoring survey.

St Pauls River

On 9 April 2025, the pool downstream of the Valley Road floodway on the St Pauls River was electrofished for 975 seconds, with no Swan galaxias captured or observed. The pool contained a high abundance of shrimp (Paratya). This section and a stretch of 650 m upstream were monitored during January 2024, for one Swan galaxias. At that time, survey conditions were difficult with high levels of filamentous algae present.

A section of the St Pauls River approximately 4.3 km downstream of the Valley Road floodway at GDA94: 590072E, 5378681N, was visually checked on 9 April 2025, with no Swan galaxias observed. Environmental DNA water samples were collected at this site (by CSIRO), but the results were not available when compiling this report. Previous monitoring during January 2024 resulted in the capture of five Swan galaxias at this site and a previous survey during January 2021 resulted in the capture and sighting of 30-40 fish, mostly juveniles.

Cygnet River

On 22 May 2025, the Cygnet River downstream of McKays Road for a distance of 250 m, (including the pool immediately downstream of the road) was electrofished for 923 seconds on-time. A total of six climbing galaxias were captured (160 - 230 mm length), along with one Swan galaxias (75 mm), for a CPUE of 0.07 fish (Swan galaxias) per minute. It was planned to capture ten Swan galaxias from this site to supplement the new translocated population at Newitts Creek. However, no fish were taken due to the presence of climbing galaxias.

Blue Tier Creek

On the 7 April 2025, Blue Tier Creek was visually checked for the presence of Swan galaxias before collecting fish for the 2025 translocation program. Additionally, several pools were electrofished to confirm numbers. There were over forty Swan galaxias seen or electrofished from the instream barrier to the old logging track (~900 m). Additionally, there were a considerable number of Swan galaxias downstream of the barrier.

On 10 April, fifty Swan galaxias were collected for translocation by electrofishing from below the instream barrier, upstream to the old logging track. The total shock time (electrofishing on-time) was 1,075 seconds for a CPUE of 2.79 fish per minute.

Swan galaxias monitoring – new translocated populations

Evercreech Rivulet

On the 8 April 2025, the new translocated population of Swan galaxias at Evercreech Rivulet 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 250 m upstream was electrofished for 1,203 seconds on-time. Four Swan galaxias, between 90 - 100 mm were captured, for a CPUE of 0.2 fish per minute. Two small *Astacopsis franklinii* (approx. 25 - 30 mm cpl) were captured and released.

Delvin Creek

On the 8 April 2025, the new translocated population of Swan galaxias at Delvin Creek 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 300 m upstream was electrofished for 1,457 seconds on-time. Six Swan galaxias, all between 85 - 100 mm were captured, for a CPUE of 0.25 fish per minute. Five small *Astacopsis franklinii* (approx. 25 - 30 mm cpl) were captured and released.

Swan galaxias monitoring – routine annual monitoring

During May 2025, four Swan galaxias populations were checked by backpack electrofishing. These were in addition to the translocated and source populations reported above. A summary of each location is presented below.

Tater Garden Creek

Tater Garden Creek (22 May 2025), was checked at the eastern branch from the downstream pools, where the east and west branches meet, upstream to the boundary fence of Currawong Lakes. No Swan galaxias found. However, during February and March 2023, e-DNA sampling returned a positive result for their presence within this section.

Rocka Rivulet

Rocka Rivulet (21 May 2025), ten Swan galaxias were captured from Rocka Rivulet by backpack electrofishing, for a total on-time of 1,100 seconds for a CPUE of 0.55 fish per

minute. All fish were adults (85 - 100 mm total length). All ten fish were transferred to Newitts Creek to assist in establishing the new translocated population.

Lost Falls Creek

Lost Falls Creek (22 May 2025), was checked at the normal monitoring site at the old bridge 1.4 km upstream of Lost Falls. There was no flow and only residual pools present. No Swan galaxias were present. None have been found at this site since 2015.

Tullochgorum Creek

Tullochgorum Creek (9 April 2025), was checked at the road crossing at Mount Foster Road (GDA94 580929E, 5383947N). The creek was not flowing and only a few small pools remained. Two small pools were electrofished for just 65 seconds for the capture of four Swan galaxias.

Shannon paragalaxias and Great Lake paragalaxias

Overview

The Shannon paragalxias *(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, at Shannon and Penstock lagoons, the Great Lake paragalaxias is less common. The spotted galaxias is abundant within Shannon and Penstock lagoons but less common within Yingina / Great Lake. While this species is widespread and abundant throughout the state and is not listed as threatened, it has been included in this section for context in relation to Shannon and Penstock lagoons.

Monitoring of Shannon and Penstock lagoons is typically undertaken annually. Monitoring for 2025 has yet to be completed. Consequently, only the summary CPUE data for 2013-24 has been included. Monitoring of the Yingina / Great Lake native fish fauna is generally done by Hydro Tasmania as part of their environmental program and is not reported here.

Shannon paragalaxias - Shannon Lagoon

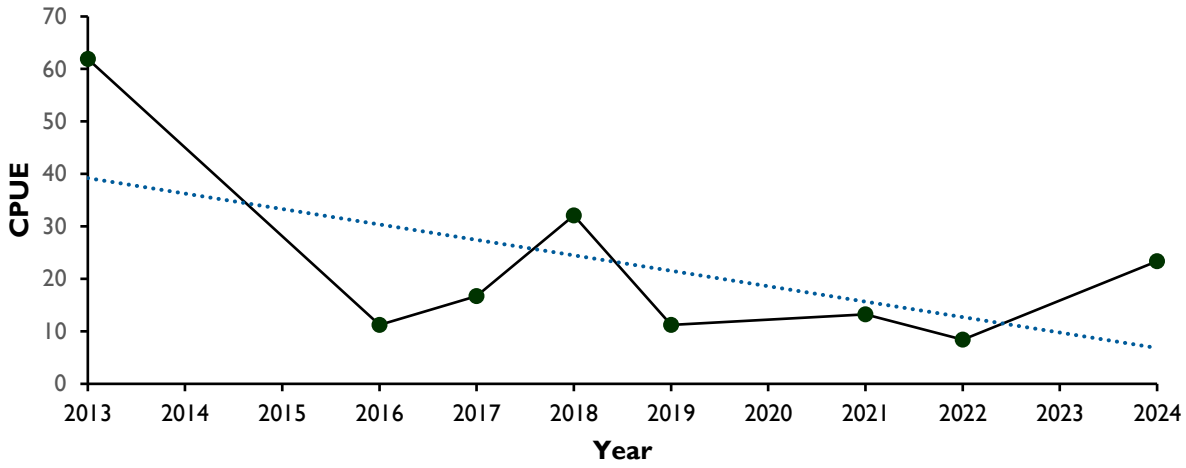

Figure 17: Catch per unit effort (CPUE) from annual fyke net monitoring for the Shannon paragalaxias at Shannon Lagoon, 2013-24 (showing long term monitoring trend).

Between 2013 and 2016, the CPUE results for the Shannon paragalaxias within Shannon Lagoon declined significantly. Since 2016 the CPUE has generally remained stable, with a increase recorded between 2022 and 2024. (Figure 17).

Shannon paragalaxias - Penstock Lagoon

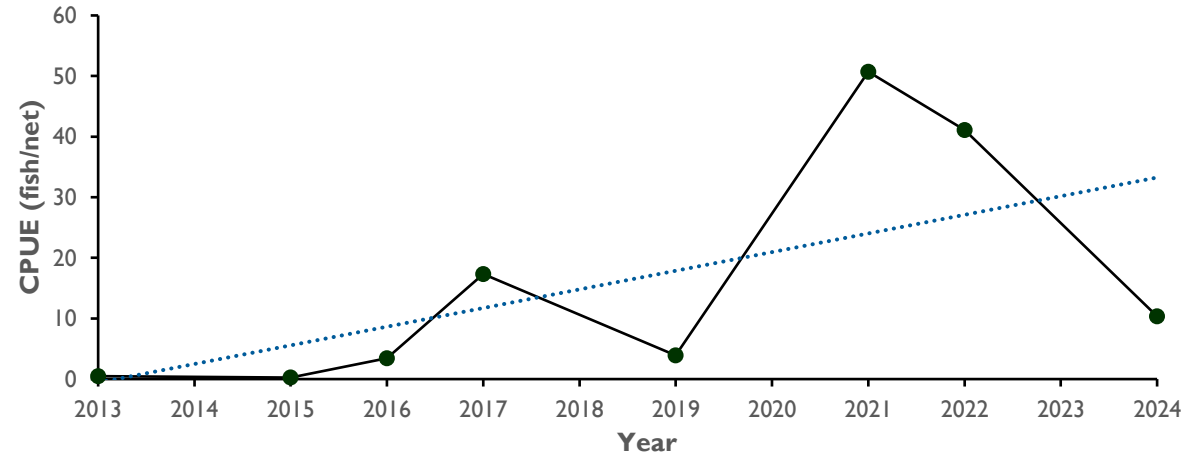

Figure 18: Catch per unit effort (CPUE) from annual fyke net monitoring for the Shannon paragalaxias at Penstock Lagoon, 2013-24 (showing long term monitoring trend).

The CPUE for the Shannon paragalaxias within Penstock Lagoon has since 2013 trended to relatively high levels (Figure 18). However, a significant decrease occurred between 2022 and 2024.

Great Lake paragalaxias - Shannon Lagoon

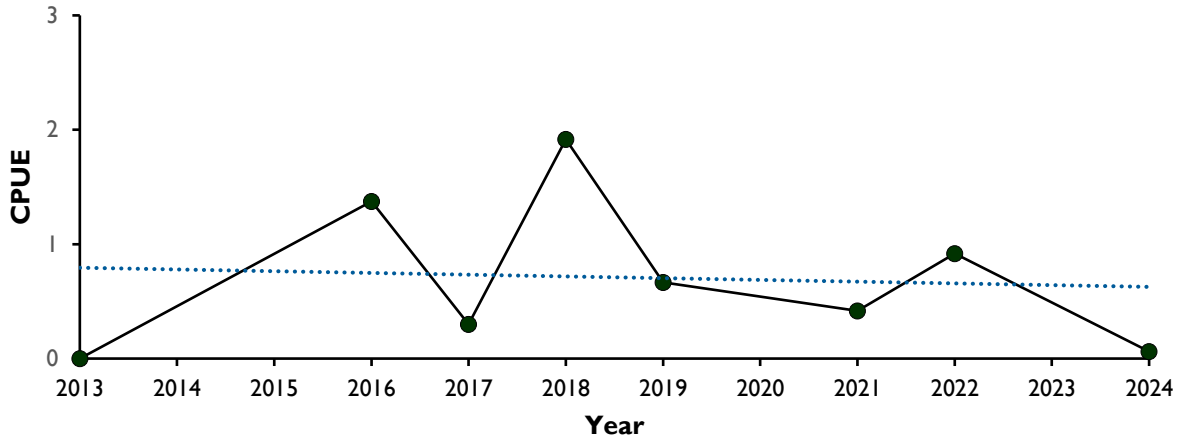

Figure 19: Catch per unit effort (CPUE) from annual fyke net monitoring for the Great Lake paragalaxias at Shannon Lagoon, 2013 – 2024 (showing long term monitoring trend).

The Great Lake paragalaxias is present in Shannon Lagoon at low numbers, with CPUE typically low at 1–2 fish per net for most surveys (Figure 19). The habitat within Shannon Lagoon and Penstock Lagoon is by comparison to yingina / Great Lake, not preferred, with spawning and feeding areas limited. No Great Lake paragalaxias were captured during 2024.

Great Lake paragalaxias - Penstock Lagoon

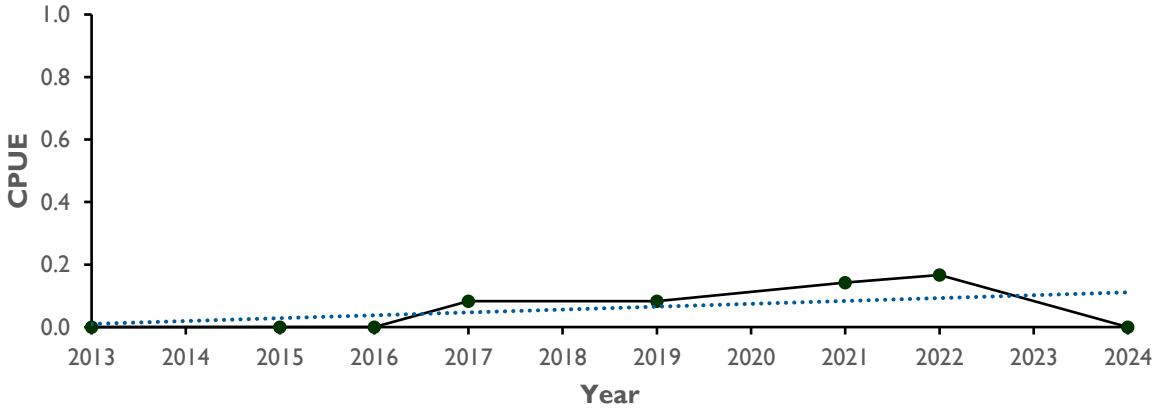

Figure 20: Catch per unit effort (CPUE) from annual fyke net monitoring for the Great Lake paragalaxias at Penstock Lagoon, 2013-23 (showing long term monitoring trend).

The Great Lake paragalaxias is rare within Penstock Lagoon, with CPUE extremely low at less than one fish per net (Figure 20). The lack of rocky habitat within the lagoon is limiting in terms of feeding and spawning. No Great Lake paragalaxias were captured during 2024.

Spotted galaxias – Shannon Lagoon

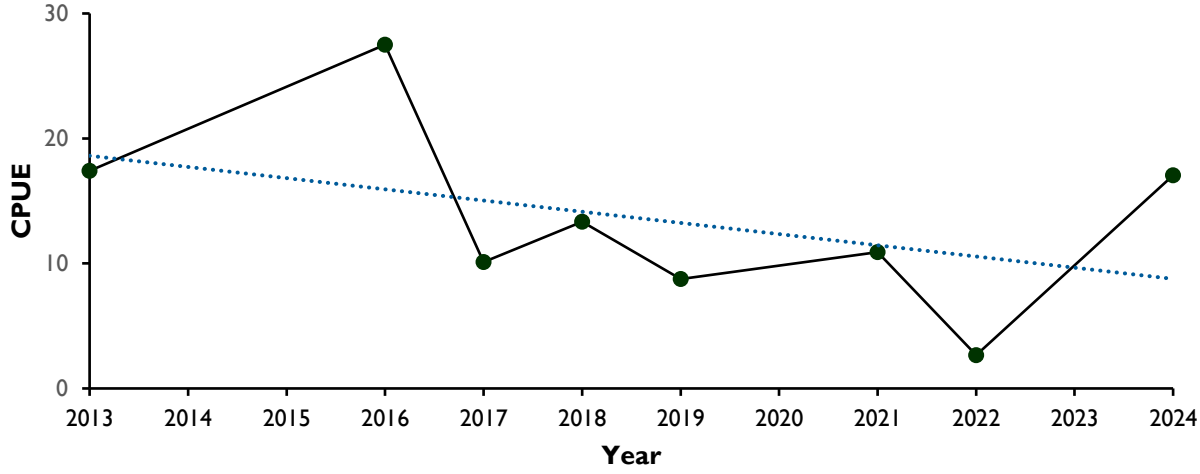

Figure 21: Catch per unit effort (CPUE) from annual fyke net monitoring for the spotted galaxias at Shannon Lagoon, 2013-24 (showing long term monitoring trend).

The spotted galaxias is relatively common within Shannon Lagoon, however, the CPUE has declined over time (Figure 21). This decline is similar to that seen for the Shannon paragalaxias (Figure 17).

Spotted galaxias – Penstock Lagoon

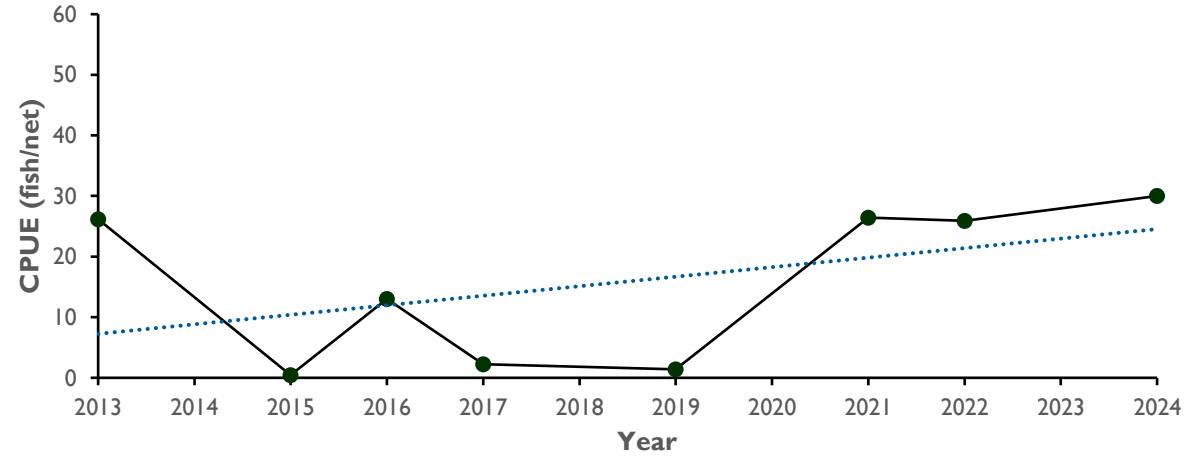

Figure 22: Catch per unit effort (CPUE) from annual fyke net monitoring for the spotted galaxias at Penstock Lagoon, 2013-23 (showing long term monitoring trend).

The spotted galaxias is present within Penstock Lagoon at low to moderate abundance. Declines in CPUE were evident during 2015-19 but returned to higher levels since 2021 (Figure 22).

Clarence galaxias

On 3 April 2025, Lake Knight (Wentworth Hills Lagoon) was surveyed with 13 Clarence galaxias captured by backpack electrofishing, ranging in length from 90mm to 135mm. The total shock time was 1,680 seconds, equivalent to a CPUE of 28 fish per hour.

Education and awareness

- During 2024-25 the IFS displayed material relevant to native fish conservation at Bushfest and Agfest.
- During June 2025, a presentation on threatened freshwater fish was given to the North Barker consultancy.
- News articles were published on the IFS website and the IFS Instagram account.
- During May 2025, the Swan galaxias was recognised with the issuing of a postal stamp and first day cover envelope, issued by Australia Post. The postal series was produced to raise public awareness of the dire situation of these freshwater fish across Australia and their habitats, including the Swan galaxias.
- NMR South commissioned an educational and information video on the management of the Swan galaxias and published newsletter articles on their website and Instagram account.
- During the 2024-25 period, the IFS provided advice to the Forest Practices Authority regarding threatened species matters.

Appendix

Appendix 1: Swan galaxias natural populations, with associated monitoring data and extent of occurrence information.

Location		Land Tenure	1:25 000 map sheet	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
Natural Populations											
1	Swan River tributary	State Forest	Henry	1978	2020	2020	2	1.5	0.5	Low numbers	Low numbers
2	Blue Tier Creek (lower)	State Forest	Colonels		2025	2025	2.5	2.5	0	Low numbers	High numbers, incl. juveniles
3	Parramores Creek	Private	Leake		2018	2006	1.5	0	1.5	Low numbers	Extinct
4A	Tater Garden Creek (east)	Private	Colonels		2025	2023 (e-DNA)	1	0	1	Low numbers	Very low numbers
4B	Tater Garden Creek (west)	Private	Colonels		2019	2008	1.5	0	1.5	Low numbers	Possibly extinct
5	Snaky Creek	State Forest	Colonels		2018	2008	1	0	1	Low numbers	Possibly extinct
6	Brodribb Creek	Private	Leake		2024	2012	1.5	0	1.5	Low numbers	Very low numbers
7	Macquarie Tier creek	Private	Jacobs	2004	2007	2007	1.5	1.5	0	Low numbers	unknown
8	Dairy Creek	Private	Delmont	2003	2023	2023	0.5	1	-0.5	Low numbers	Moderate numbers
9	Joes Creek	Private	Ellinthorpe	2004	2016	2025 observed	1	1	0	Low numbers	Low numbers
10	Floods Creek	State Forest	Tunbridge	2004	2022	2011	0.5	0	0.5	Low numbers	Possibly extinct

Appendix 2: Swan galaxias translocated populations, with associated monitoring data and extent of occurrence information.

Location		Land Tenure	1:25 000 map sheet	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	Colonels	1989	60 adults	2024	2015	2.5	0	2.5	Low numbers	Extinct
2	Lost Falls Creek	State Forest	Leake	1991	50	2025	2015	1.5	0	1.5	Low numbers	Possibly extinct
3	Dukes River	State Forest	St John	1991	50	2025	2025	10.5	10.5	0	Low numbers	High numbers
4	Cygnet River	State Forest	Snow	1993	50	2025	2025	1.3	1.3	0	Low numbers	Low numbers
5	St Pauls River	State Forest	Leake	1993	50	2025	2024	6	6	0	Low numbers	Low numbers
6	Rocka Rivulet	State Forest	Royalty	1993	50	2025	2025	5	5	0	Low numbers	Low numbers
7	Green Tier Creek	Private	Tooms	1995	87 (20 adults)	2019	2019	2	0.5	1.5	Low numbers	Very low numbers
8	Tullochgorum Creek	Private	Fingal	1995	64 (14 adults)	2025	2025	2	0.5	1.5	Low numbers	Low numbers
9	Coghlans Creek	State Forest	Leake	1995	56 (30 adults)	2018	2007	1.2	0	1.2	Low numbers	Extinct
10	Wye River (never established)	State Forest	Leake	1995	50 (42 adults)	Never established						Never established
11	Evercreech Rivulet	State Forest	Brilliant	2023	60 (36 adults & 24 juveniles)	2025	2025					New translocation Low numbers
12	Delvin Creek	State Forest	Saddleback	2023	60 (30 adults & 30 juveniles)	2025	2025					New translocation Low numbers
13	Newitts Creek	State Forest Regional Reserve	Maurice	2025	60 (24 adults & 36 juveniles)							New translocation 2025

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