Suite 1, 122 Para Road, Montmorency VIC 3094
t +61 (0) 413 935 497
e info@aquaticaenvironmental.com.au
www.aquaticaenvironmental.com.au

Our Ref: 000118.10

8 March 2026

Narre Warren Central Pty Ltd
Attention: **Mr Paul Nio**
Via email: pnio@osanrae.com.au
CC: cmistica@fidus.com.au; amandad@natureadvisory.com.au; inga@natureadvisory.com.au

Dear Paul

Re: Casey Green Offset Site – 2025 Annual Report of Dwarf Galaxias and Water Quality Monitoring

Narre Warren Central Pty Ltd engaged Aquatica Environmental to implement the dwarf galaxias (*Galaxiella pusilla*) and water quality monitoring components of the Dwarf Galaxias Offset Management Plan (DGOMP; Aquatica Environmental and BL&A 2015) for 96-166 Centre Road, Narre Warren (the development site). The DGOMP was developed to support a Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) referral and subsequent project approval (DE 2016), and to guide the management and enhancement of the offset site following the approved clearing of dwarf galaxias habitat at the development site.

The DGOMP outlines:

- The location of the offset site;
- The design and modification of existing wetland areas to enhance habitat suitability for dwarf galaxias;
- Hydrological requirements;
- Management actions and targets for habitat maintenance;
- Methods and frequencies for long-term protection of the offset site;
- Implementation and monitoring procedures;
- Timeframes for ongoing monitoring and assessment.

Construction of the offset site commenced on 18 January 2021 and was completed on 7 December 2023. This triggered the DGOMP requirement for quarterly dwarf galaxias and water quality monitoring during the first year post-construction, commencing three months after completion of construction. Years two and three post completion of construction require biannual monitoring of dwarf galaxias and water quality, implemented to meet the management actions specified in the DGOMP, specifically (see also DGOMP Table 6, Year 2-3 Actions):

- **Dwarf galaxias monitoring**: *"Assess Dwarf Galaxias presence / absence and population on offset site and existing site. Biannually in April-May (adult survival) and November-December (juveniles)".*
- **Water quality monitoring**: *"Assess water quality at inlets and outlet to offset site, in pools and drain at existing site. Biannually in spring and autumn. Parameters to include temperature, turbidity, pH, dissolved oxygen and electrical conductivity".*

- **Dwarf galaxias and water quality**: "*Monitoring results to be documented and retained for reporting purposes. Results should also inform management approaches and techniques*".
- **Reporting**: "*Fish/ water quality monitoring report to be prepared documenting management actions undertaken and monitoring results. Due 31st December of year 2 and year 3. Report delivered to Melbourne Water and DoE no later than three months after the due date*".

The EPBC Act approval does not specify monitoring requirements, but instead details that (DE 2016):

> "*After a period of 10 years from the commencement of construction, the offset site must contain at least two hectares of dwarf galaxias habitat which contains a self-sustaining population of dwarf galaxias and is connected to known dwarf galaxias habitat in the local area. This outcome must meet the following milestones:*
>
> - *dwarf galaxias habitat in the offset site must be constructed within one year of commencement of construction;*
> - *dwarf galaxias must be identified as present in the dwarf galaxias habitat in the offset site within two years of commencement of construction; and*
> - *dwarf galaxias presence and abundance must be consistent with that of control site after two years of commencement of construction and for the life of the approval*".

This report summarises the second year of post-construction monitoring, documenting dwarf galaxias presence and water quality trends observed during the 2025 monitoring year in accordance with the DGOMP and EPBC Act approval. In accordance with the DGOMP, this included biannual surveys with one being completed in May (B1) and the second in December (B2).

In response to survey results B1 survey, a supplementary dwarf galaxias and predatory fish monitoring survey was also undertaken with the aim of maximising chances of dwarf galaxias detection, trialling additional survey methods and undertaking an initial round of predatory fish removal. The results of the supplementary survey will also be provided in this report.

The monitoring program is intended to generate the information required to evaluate progress toward the offset outcomes and milestones defined in the EPBC approval and the DGOMP.

***Note**: Vegetation and weed monitoring is not included within this report as these aspects of the DGOMP and EPBC Act approval are being undertaken by Nature Advisory and are being reported separately.*

1. METHODOLOGY

1.1. Timing

With construction of the offset site completed on 7 December 2023, and the DGOMP requirement that monitoring transitions to biannual surveys in the second year post-construction, monitoring during 2025 was undertaken as follows:

- **B1**: 26-27 May 2025
- **Supplementary survey**: 29-30 July 2025
- **B2**: 22-23 December 2025.

1.2. Sites

During the first round of post-construction monitoring, sampling sites were established at three locations (Figure 1):

1. **Dwarf galaxias habitat pond** (offset site) – primary habitat area.

2. **Sediment pond** (upstream of habitat pond) – previously supported dwarf galaxias due to its direct connectivity to upstream Centre Road southern roadside drains.
3. **Melbourne Water dwarf galaxias refuge** (MW refuge) – control site located on the western side of Hallam Road.

The DGOMP only stipulates surveying the habitat pond and MW refuge. The sediment pond was included due to its upstream connectivity to the habitat pond and because it has previously supported relatively high abundances of dwarf galaxias as a result of its direct connectivity with the upstream southern Centre Road roadside drains.

The MW refuge was dry during the 2025 monitoring events (i.e. B1 and B2). Consequently, the adjacent stormwater drain to the west of the refuge was used as a surrogate control site (Figure 1).

1.3. Dwarf Galaxias Monitoring

Dwarf galaxias (and other fish) monitoring was undertaken across two separate survey events at the three pre-established dwarf galaxias monitoring locations. One sampling point was established in the sediment pond and MW refuge, while four were established in the habitat pond.

In accordance with the DGOMP, sampling was undertaken using standard 350 × 250 × 250 mm, 50 mm dual-opening bait traps, set in established permanent locations. The traps were baited with phosphorescent light attractants (glow sticks) to act as a mild attractant. A total of 16 traps were set in the habitat pond (four traps at each of four locations), and four traps were set in each of the sediment pond and Melbourne Water refuge.

Active sampling using bait traps is a standard method for surveying dwarf galaxias and is recognised as one of the most effective techniques outlined in the *Survey Guidelines for Australia's Threatened Fish* (DSEWPaC 2004) and the *Biodiversity Precinct Structure Planning Kit* (DSE 2010). It is also the most appropriate method for sampling in waterbodies with low vegetation density, with dip-netting requiring higher vegetation abundance to be as effective.

The supplementary survey involved increased survey effort in the habitat pond, utilising fyke nets, seine netting and the standard bait-trapping method, in order to detect and catch the range of fish potentially present in the pond. The MW refuge and sediment pond were not included in this monitoring round as the focus was on the habitat pond.

1.4. Water Quality Monitoring

Water quality monitoring was undertaken in conjunction with the biannual dwarf galaxias surveys. In situ water quality data was collected using calibrated Hanna Instruments HI9829 or YSI ProDSS multiparameter water quality sondes. The parameters collected included:

- Temperature;
- Electrical conductivity;
- pH;
- Dissolved oxygen; and
- Turbidity.

A steel water-level gauge was installed on 12 June 2024 within the habitat pond to provide an indication of seasonal fluctuations in water level.

1.5. Aquatic and Riparian Habitat Condition Monitoring

Although not specifically required under the DGOMP or EPBC Act approval, aquatic and riparian habitat condition was visually assessed during the 2025 dwarf galaxias surveys to provide context to the survey results and to inform potential adaptive management actions. The assessment was primarily based on a comparison of aquatic and riparian vegetation condition over time, with monitoring involving the documentation of vegetation establishment and changes.

0 25 50
m

Spatial Reference
Name: GDA2020 Vicgrid
PCS: GDA2020 Vicgrid
GCS: GDA2020
Datum: GDA2020

Date Exported:
6/02/2025 10:00 AM

N

- Sampling Point
- Melbourne Water Refuge
- Channel
- Drain
- Connector
- Swamp

Sampling Sites

Project: Casey Green Offset – Dwarf Galaxias, Water Quality and Vegetation Monitoring

Client: Narre Warren Central

Figure 1

AQUATICA ENVIRONMENTAL

2. RESULTS

2.1. Dwarf Galaxias Population Trends

Dwarf galaxias monitoring undertaken during the 2025 monitoring year identified marked seasonal variation in detections within the habitat pond, with the species not detected during either the B1 or supplementary surveys but subsequently recorded in high numbers during the B2 survey (Table 1; Figure 2).

Table 1 Dwarf galaxias records throughout 2025

Survey Event	Habitat Pond	Sediment Pond	MW Refuge
B1 (May 2025)	0	4 (2m, 2f)	0
Supplementary (July 2025)	0	Not surveyed	Not surveyed
B2 (December 2025)	350+	0	6

Key: m = male, f = female

The marked increase in dwarf galaxias detections during the B2 survey is encouraging, however, the underlying drivers of this increase remain uncertain. Several rainfall events occurred in the period leading up to the B2 survey, resulting in elevated water levels and increased hydrological connectivity within the surrounding drainage network. Given the absence of dwarf galaxias during the preceding autumn and winter surveys (including during enhanced survey effort), it is considered unlikely that the B2 detections represent a resident population that persisted undetected throughout the year. A more plausible explanation is that a proportion of individuals entered the habitat pond during high-flow events. Similar observations have occurred previously at the site, where large numbers of dwarf galaxias were recorded in the sediment pond following rainfall events and were interpreted as individuals being flushed in from the southern roadside drains along Centre Road. In the case of the B2 survey, the absence of similarly elevated numbers within the sediment pond suggests that the individuals detected in the habitat pond were more likely to have entered via the culverts beneath Hallam Road from the Melbourne Water refuge or adjacent drainage network. While this represents the most plausible explanation based on current observations, alternative ingress pathways cannot be ruled out.

At present, there is insufficient evidence to confirm successful breeding within the habitat pond. No juveniles, eggs, or spawning activity were observed, and the absence of detections during the earlier monitoring events suggests the pond may not currently support consistent year-round occupancy. Accordingly, the elevated summer abundance is most reasonably interpreted as episodic or seasonal occupancy, potentially driven by hydrological connectivity rather than persistence of a self-sustaining resident population.

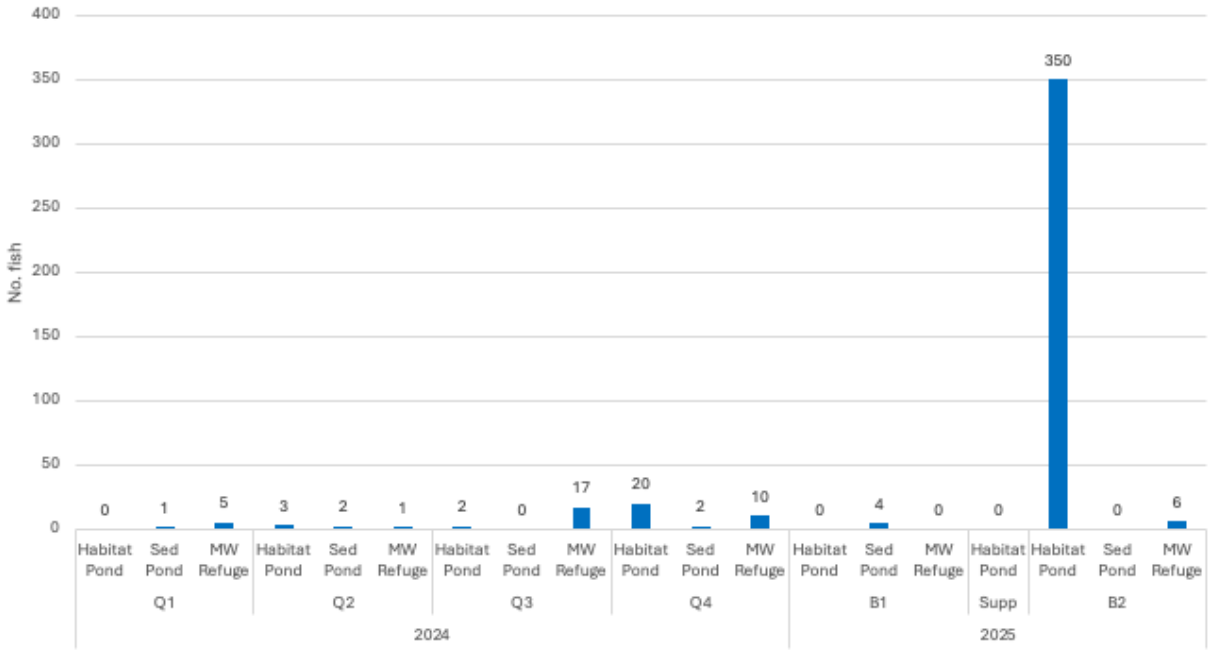

Figure 2 Dwarf galaxias numbers trend

Photo 1 Dwarf galaxias from habitat pond during B2 survey

Photo 2 Male (left) and female (right) dwarf galaxias from habitat pond during B2 survey

2.2. Key Uncertainties

The 2025 monitoring results highlight several unresolved questions that are critical to assessing long-term offset performance:

- Whether the habitat pond supports a self-sustaining resident population, or functions primarily as a temporary or opportunistic habitat during periods of increased connectivity; and
- The extent to which hydrological connectivity during rainfall events influences dwarf galaxias movement into and out of the habitat pond.

Further surveys in 2026 should assist in confirming whether the habitat pond supports a self-sustaining population or whether dwarf galaxias numbers are primarily seasonally driven from external habitats. Consistent with the adaptive management framework outlined in the DGOMP, these monitoring outcomes provide important information to guide ongoing management actions aimed at improving habitat suitability and reducing pressures on dwarf galaxias where practicable. In addition, a further supplementary survey is planned for early 2026 to reassess pest fish presence within the habitat pond and to help inform any subsequent management response.

2.3. Other Fish Observations

Several non-target fish species were recorded within the habitat pond during all monitoring events in 2025 (Table 2), including both introduced pest species and native species such as common galaxias. Figure 3 presents the ongoing records of all species recorded as part of the monitoring program to date.

Table 2 Habitat pond pest and predatory fish recorded during 2025 monitoring

Common name	Scientific name	B1	Supp.	B2
common galaxias (Photo 3)	*Galaxias maculatus*	13	0	30
flathead gudgeon* (Photo 4)	*Philypnodon grandiceps*	500+	500+	50+
oriental weather loach (Photo 5)	*Misgurnus anguillicaudatus*	300+	200+	6
European carp (Photo 6)	*Cyprinus carpio*	7	1	0
eastern gambusia (Photo 7)	*Gambusia holbrooki*	20	100+	350

***Note**: "+" indicates counts exceeding the trap capacity or visual estimates of abundance where precise counts were not practicable.*

Eastern gambusia was detected during all surveys and exhibited pronounced seasonal variation, with relatively low abundance during autumn and winter and substantially higher abundance during the summer (B2) survey. This species represents a significant risk to dwarf galaxias due to aggressive behaviour and predation on eggs and juveniles, particularly during periods of peak dwarf galaxias presence.

Oriental weather loach was recorded at high abundance during the autumn and winter surveys, with markedly reduced numbers recorded during the B2 survey.

European carp were recorded at low abundance during the monitoring program, with individuals captured during the B1 and supplementary surveys and a single individual visually observed during the B2 survey. Although present in relatively low numbers, their continued occurrence is of concern due to their potential to increase turbidity and degrade aquatic habitat.

Flathead gudgeon, while native, were recorded in high abundance during several surveys, although substantially lower numbers were recorded during B2. High densities of this species may contribute additional predation pressure on dwarf galaxias, particularly where aquatic vegetation density remains limited.

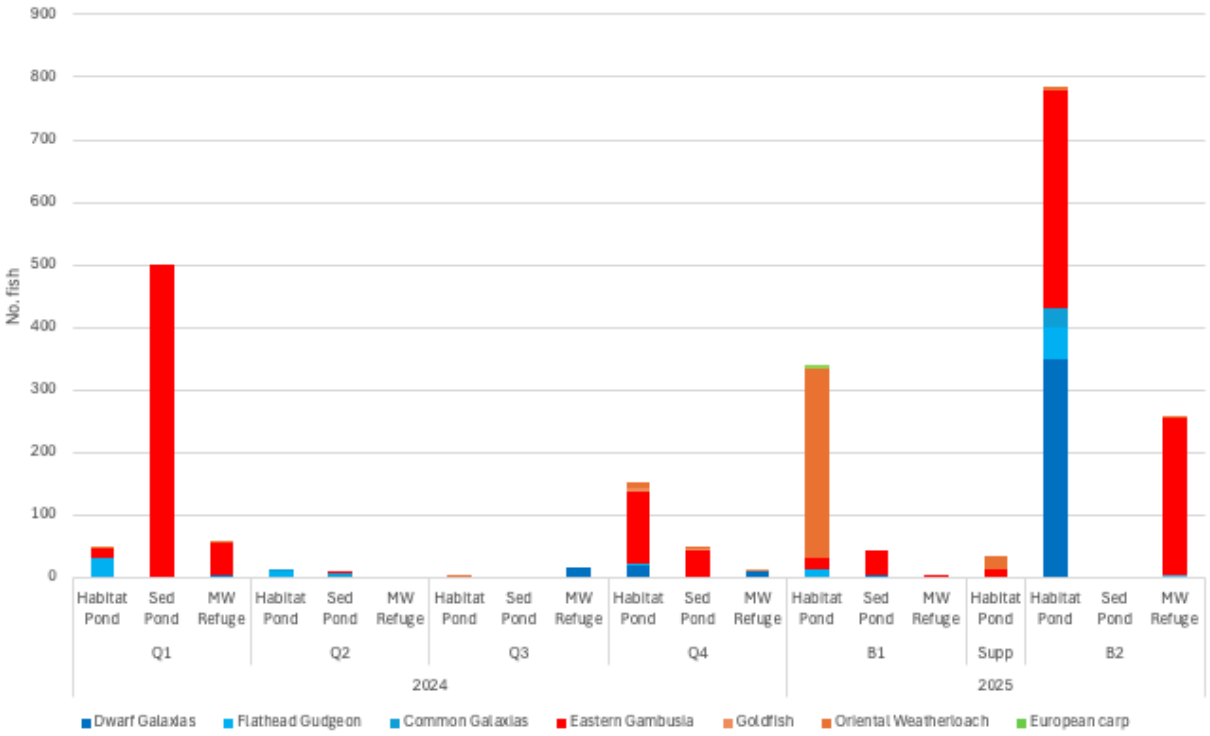

Figure 3 All fish species results

2.4. Pest Fish Ingress Pathways

The continued presence of pest fish species within the habitat pond indicates that some level of fish movement into the pond is occurring. While fish exclusion measures are present on the inlet between the sediment pond and the habitat pond, the site was intentionally designed to maintain hydrological connectivity with surrounding drainage systems to facilitate movement of dwarf galaxias.

However, the culverts beneath Hallam Road were intentionally designed to provide connectivity between the habitat pond and the Melbourne Water dwarf galaxias refuge to facilitate natural movement of dwarf galaxias. While this connectivity is important for colonisation and broader population linkage, it also provides a potential pathway for other fish species to access the habitat pond. Based on current observations, movement through the culverts during periods of elevated flow is considered the most plausible pathway for fish ingress. Similar challenges have been observed in a number of constructed wetlands and offset sites in the broader region, where complete exclusion of small-bodied or highly mobile fish species can be difficult to achieve.

Potential additional pathways could include overtopping or bypass of exclusion structures during rainfall events, screening that allows passage of smaller fish, or previously unrecognised surface or subsurface hydrological connections. Further investigation of these pathways will assist in informing any future management responses if required.

Photo 3 Common galaxias from sediment pond during B1 survey

Photo 4 Flathead gudgeon from habitat pond during the B2 survey

Photo 5 Oriental weather loach from habitat pond in B2 survey

Photo 6 European carp from habitat pond during supplementary survey

Photo 7 Gravid female eastern gambusia from habitat pond during B2 survey

2.5. Water Quality

Comparison of B1 and B2 water quality data indicates several clear differences between the two survey events. Table 3 Presents the water quality results of both B1 and B2 surveys.

Table 3 2025 Water quality results

Survey	Parameter	Unit	Habitat Pond	MW Refuge	Sed Pond
B1	**Temperature**	**°C**	10.6	13	10.9
	Dissolved Oxygen	**%DO**	93.5	43.4	49.3
		mg/L	10.39	4.6	5.44
	Electrical Conductivity	**µS/cm**	197	282	325
	pH	**pH units**	8.06	7.65	7.28
	Turbidity	**NTU**	59.1	13.7	11.5
B2	**Temperature**	**°C**	17.8	17.9	17.3
	Dissolved Oxygen	**%DO**	32	35	16.5
		mg/L	3.04	3.3	1.58
	Electrical Conductivity	**uS/cm**	305	199	295
	pH	**pH units**	7.96	7.74	7.93
	Turbidity	**NTU**	26.3	15.3	14.2

Water temperatures were higher at all sites during the December survey, consistent with summer conditions. Correspondingly, dissolved oxygen levels were lower in B2 across all locations, both in percentage saturation and concentration. This reduction was most pronounced in the DG habitat pond and sediment pond.

Electrical conductivity showed mixed changes between surveys, increasing in the DG habitat pond while decreasing in the Melbourne Water refuge and slightly declining in the sediment pond. pH remained broadly similar between the two events, with only minor variation across sites. Turbidity decreased in the habitat pond between surveys, while the Melbourne Water refuge and sediment pond recorded slight increases.

Water depth remained relatively stable across sampling events, ranging from approximately 0.6 m during B1 and B2 surveys to around 0.8 m during the supplemental survey.

It is noted that these results represent point-in-time measurements collected during two discrete sampling events only. As such, they provide a snapshot of conditions at the time of sampling and are not sufficient to characterise temporal trends or fully describe water quality dynamics across the broader 2025 monitoring period. No ecologically significant water quality concerns were identified during the 2025 monitoring period.

2.6. Habitat Condition

Throughout the 2025 monitoring program, establishment of aquatic and emergent vegetation within the project area has progressed more slowly than initially anticipated.

Melaleuca ericifolia (swamp paperbark) has shown stronger growth around the sediment pond and in the area between the sediment and habitat ponds; however, establishment around the habitat pond itself has been limited. As a result, overstorey vegetation remains sparse in this area. To improve future shading and cooling, *Eucalyptus* spp. (gum trees) have been planted along the northern margin of the habitat pond. While these plantings are expected to contribute to canopy development over time, meaningful shading benefits will not be realised for several years.

The development of overstorey vegetation is an important component of suitable habitat for dwarf galaxias. Increased canopy cover provides structural complexity and refuge, while also contributing to cooler water

temperatures and potentially limiting the suitability of conditions for invasive species such as eastern gambusia, which continues to present an ongoing risk to the site.

In contrast, macrophyte species have exhibited comparatively stronger growth, as shown in Photo 8, Photo 9 and Photo 10 from the B1, supplementary and B2 surveys, respectively. Additional aquatic plantings were undertaken in spring 2025 to support habitat development, and their establishment and performance will be assessed as part of the 2026 monitoring program.

Photo 8 Habitat pond vegetation during B1 survey

Photo 9 Habitat pond vegetation during supplementary survey

Photo 10 Habitat pond vegetation during B2 survey

3. SUMMARY

Monitoring undertaken during the 2025 monitoring year indicates that dwarf galaxias are able to utilise the habitat pond under certain conditions, however evidence of a persistent self-sustaining population has not yet been demonstrated. Dwarf galaxias were absent during the autumn B1 and supplementary monitoring events but were subsequently detected in high numbers during the spring B2 survey. The large number of individuals recorded during B2 confirms that the habitat pond is capable of supporting relatively high abundances of dwarf galaxias when individuals enter the system, indicating that habitat conditions within the pond are suitable for the species even if occupancy currently appears episodic. The mechanism driving these episodic increases, however, remains uncertain.

These results indicate that the offset habitat is functionally accessible to dwarf galaxias and that hydrological connectivity with surrounding drainage systems is occurring under certain flow conditions. This connectivity is consistent with the design intent of the offset site to maintain movement pathways between the habitat pond, surrounding drainage network and the MW dwarf galaxias refuge.

Several rainfall events occurred in the period leading up to the B2 survey, resulting in elevated water levels and increased hydrological connectivity within the surrounding drainage network. Given the absence of dwarf galaxias during earlier monitoring events, it is considered unlikely that the B2 detections represent a resident population that persisted undetected throughout the year. A more plausible explanation is that a proportion of individuals entered the habitat pond during high-flow events.

Similar observations have previously been made at the site where large numbers of dwarf galaxias were recorded in the sediment pond following rainfall events and were interpreted as individuals being flushed in from the southern roadside drains along Centre Road. In the case of the B2 survey, the absence of similarly elevated numbers within the sediment pond suggests that individuals detected in the habitat pond were more likely to have entered via the culverts beneath Hallam Road from the MW dwarf galaxias refuge or adjacent drainage network. While this represents the most plausible explanation based on current observations, alternative ingress pathways cannot be entirely ruled out.

At present, there is insufficient evidence to confirm successful breeding within the habitat pond. No juveniles, eggs or spawning activity were observed during the monitoring program, and the absence of detections during earlier monitoring events suggests that the pond may not currently support consistent year-round occupancy. Accordingly, the elevated abundance recorded during the B2 survey is most reasonably interpreted as episodic or seasonal occupancy rather than persistence of a self-sustaining resident population.

Pest fish species were recorded within the habitat pond during all monitoring events in 2025 and remain a potential constraint to establishment of a self-sustaining dwarf galaxias population. Species such as eastern gambusia and oriental weather loach may exert predation pressure on eggs and juveniles and may compete for habitat resources. The presence of these species indicates that fish ingress to the habitat pond is occurring to some extent. Based on current observations, hydrological connectivity associated with rainfall events and movement through the culverts beneath Hallam Road represent the most plausible mechanisms for fish movement into the habitat pond. While these culverts were intentionally designed to allow connectivity between the habitat pond and the MW refuge to facilitate natural movement of dwarf galaxias, they may also provide access for other fish species.

Habitat condition within the pond is expected to continue improving as aquatic and riparian vegetation becomes more established. Increased structural complexity and shading associated with maturing vegetation is likely to improve habitat suitability for dwarf galaxias by increasing refuge availability and potentially reducing predation pressure from larger fish species.

The monitoring program implemented at the offset site continues to generate information necessary to evaluate progress toward the milestones and outcomes defined in the EPBC approval and the DGOMP. In particular, ongoing monitoring provides data relevant to:

- presence and abundance of dwarf galaxias within the offset habitat;
- pest fish occurrence and potential ecological pressures; and
- habitat condition and vegetation establishment within the constructed wetland system.

Continued monitoring in accordance with the DGOMP will therefore remain important to:

- track population trends over time;
- improve understanding of the hydrological and ecological processes influencing dwarf galaxias presence at the site; and
- inform adaptive management where required.

It is also possible that the habitat pond functions as part of a broader local metapopulation network in which dwarf galaxias periodically colonise suitable habitats during favourable hydrological conditions. Under this scenario, episodic occupancy of the pond may still represent a positive ecological outcome, provided that habitat quality and connectivity are maintained.

4. RECOMMENDATIONS AND NEXT STEPS

The following are recommendations and next steps as the project moves into year three of the monitoring program:

- **Continue monitoring in accordance with the DGOMP.**
  Continued monitoring in accordance with the DGOMP is recommended to track dwarf galaxias population trends within the habitat pond and determine whether the site begins to support more consistent occupancy over time. Ongoing monitoring will also continue to provide information relevant to the EPBC approval milestones and long-term objective of establishing a self-sustaining population of dwarf galaxias within the offset site.
- **Continue monitoring to assess potential breeding and population establishment.**
  Given the episodic nature of dwarf galaxias detections during the monitoring program to date, continued monitoring will be important to determine whether the habitat pond begins to support breeding and more persistent occupancy as habitat condition matures and aquatic vegetation becomes more established.
- **Undertake opportunistic pest fish suppression where practicable.**
  The continued presence of pest fish species within the habitat pond represents a potential constraint to establishment of a self-sustaining dwarf galaxias population. Opportunistic pest fish removal during monitoring events, similar to that undertaken during the supplementary survey, may assist in reducing pest fish pressure where practicable.
  An additional supplementary survey is planned for early 2026 to reassess fish assemblages within the habitat pond, with particular focus on pest fish abundance and the effectiveness of existing exclusion and connectivity structures.
- **Improve understanding of fish ingress pathways.**
  Further investigation of potential fish ingress pathways may assist in improving understanding of how fish species are accessing the habitat pond. Based on current observations, hydrological connectivity associated with rainfall events and movement through the culverts beneath Hallam Road represent the most plausible mechanisms for fish movement into the pond. This connectivity is an intentional design

feature to allow movement of dwarf galaxias between the habitat pond and surrounding drainage systems.

- **Continue habitat establishment and vegetation management.**
  Continued establishment and management of aquatic and riparian vegetation within the habitat pond will be important to improve habitat complexity and refuge availability for dwarf galaxias. Increasing vegetation density and structural complexity may also assist in reducing predation pressure from pest fish species and improve the overall suitability of the habitat for dwarf galaxias.

If you have any questions or would like to discuss this assessment, report or any other matter further, please do not hesitate to call me on 0413 935 497.

Kind Regards,

Aaron Jenkin
Director and Principal Ecologist
Aquatica Environmental

t +61 (0) 413 935 497
e aaron@aquaticaenvironmental.com.au
www.aquaticaenvironmental.com.au

5. REFERENCES

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APPENDIX A: FISH SURVEY RESULTS

Table 4 B1 survey results

	Location		
	DG Habitat Pond	Melb. Water Refuge	Sed Pond
Trapping times			
Dates	26/27 May 2024		
Trap set time	10:30	11:15	10:00
Trap haul time	13:00	14:30	12:15
Total trap set hours	26.5	27.5	26.25
No traps	24	4	4
Total trap hours	636	110	105
Survey Results			
dwarf galaxias			4
flathead gudgeon	500		5
burrowing crayfish			
common galaxias	13		
tadpole			
eastern gambusia	20	6	40
goldfish			
oriental weather loach	300+		2
European carp	7		
CPUE (fish caught per 1 trap hour)			
dwarf galaxias			0.15
flathead gudgeon	18.87		0.19
burrowing crayfish			
common galaxias	0.49		
tadpole sp.			
goldfish			
eastern gambusia	0.75	0.22	1.52
oriental weather loach	11.32		0.08
European carp	0.26		

Table 5 Supplementary survey results

	Location: Habitat pond only	
	Bait traps	All methods
Details		
Dates	29-30 July	
Trap set time	11:30	
Trap haul time	8:45	
Total trap set hours	21.25	
No traps	41	
Total trap hours	871.25	
Numbers Recorded		
dwarf galaxias		
flathead gudgeon	150	500+
burrowing crayfish		
common galaxias		2
freshwater shrimp		1,000s
eastern gambusia	15	100+
goldfish		
oriental weather loach	21	200+
European carp		1

Table 6 B2 survey results

	Location		
	DG Habitat Pond	Melb. Water Refuge	Sed Pond
Trapping times			
Dates	22/23 Dec 2025		
Trap set time	9:45	10:30	9:45
Trap haul time	8:30	10:00	8:30
Total trap set hours	22.75	23.50	22.75
No traps	16	4	4
Total trap hours	364	94	91
Survey Results			
dwarf galaxias	350	6	
flathead gudgeon	50		15

	Location		
	DG Habitat Pond	Melb. Water Refuge	Sed Pond
burrowing crayfish	1		
common galaxias	30		3
tadpole	1	1	
eastern gambusia	350	250	35
goldfish			
oriental weather loach	6		2
European carp			
CPUE (fish caught per 1 trap hour)			
dwarf galaxias	0.962	0.064	
flathead gudgeon	0.137		0.165
burrowing crayfish			
common galaxias	0.082		0.033
tadpole sp.	0.003	0.011	
goldfish			
eastern gambusia	0.962	2.660	
oriental weather loach	0.016		0.08
European carp			