Queensland Marine Turtle Network

2025 Spring Member Organisation Survey

Executive Summary

This report summarises survey responses from 31 QMTN member organisations on current activities, capacity, threats, barriers, and collaboration interests. Responses indicate a highly motivated network delivering substantial monitoring, education, threat mitigation and response work, but facing consistent, system-level constraints that limit sustainability and growth.

Key takeaways

- Most organisations contribute to community engagement/education and monitoring, with many also undertaking threat mitigation, research and stranding response.
- The greatest constraints relate to volunteer capacity/time, funding stability, and access to training/accreditation pathways.
- Organisations report consistent statewide threats (e.g., predation, disturbance, debris, lighting, vessel strike and erosion), suggesting strong potential for coordinated action.
- There is strong interest in QMTN-facilitated collaboration, especially around training, shared data/reporting, and coordinated conservation and research projects.

How QMTN will use this feedback

These findings will guide QMTN's 2026 priorities by informing where coordination, support, and facilitation can most effectively address the shared constraints, threats, and collaboration opportunities identified by member organisations, helping to strengthen capacity, consistency, and impact across the Network.

Introduction

This report summarises the findings from the Queensland Marine Turtle Network (QMTN) Member Organisation Snapshot Survey conducted in Spring of 2025. The survey was distributed to all known marine turtle monitoring groups across Queensland to:

1. Identify the types of monitoring and conservation activities currently undertaken and understand organisational capacity.
2. Document key threats to marine turtles and identify opportunities to better support conservation efforts.
3. Understand interest in cross-organisation collaboration and opportunities to strengthen statewide monitoring capacity.

A total of 31 organisations completed the survey. The dataset provides a comprehensive overview of Queensland's community-led, Traditional Owner and Indigenous Ranger, government, research institution, and NGO-led turtle conservation activities.

Key Messages from the Survey

The survey highlights a highly engaged and motivated network delivering a broad range of marine turtle conservation outcomes across Queensland. At the same time, it identified opportunities to address capacity constraints and system-level barriers that limit program effectiveness, sustainability and growth. Key messages include:

- Community and Indigenous-led programs form the backbone of marine turtle conservation in Queensland and are predominantly volunteer-driven.
- Access to training, accreditation, equipment, and sustained funding results in bottlenecks to program sustainability and expansion.
- Organisations show strong willingness to collaborate, share data, and participate in coordinated projects when supported by clear facilitation and governance mechanisms.
- Predation, marine debris, vessel strike, and light pollution are priority threats across most regions, indicating strong potential for coordinated statewide action.

Respondent Profile

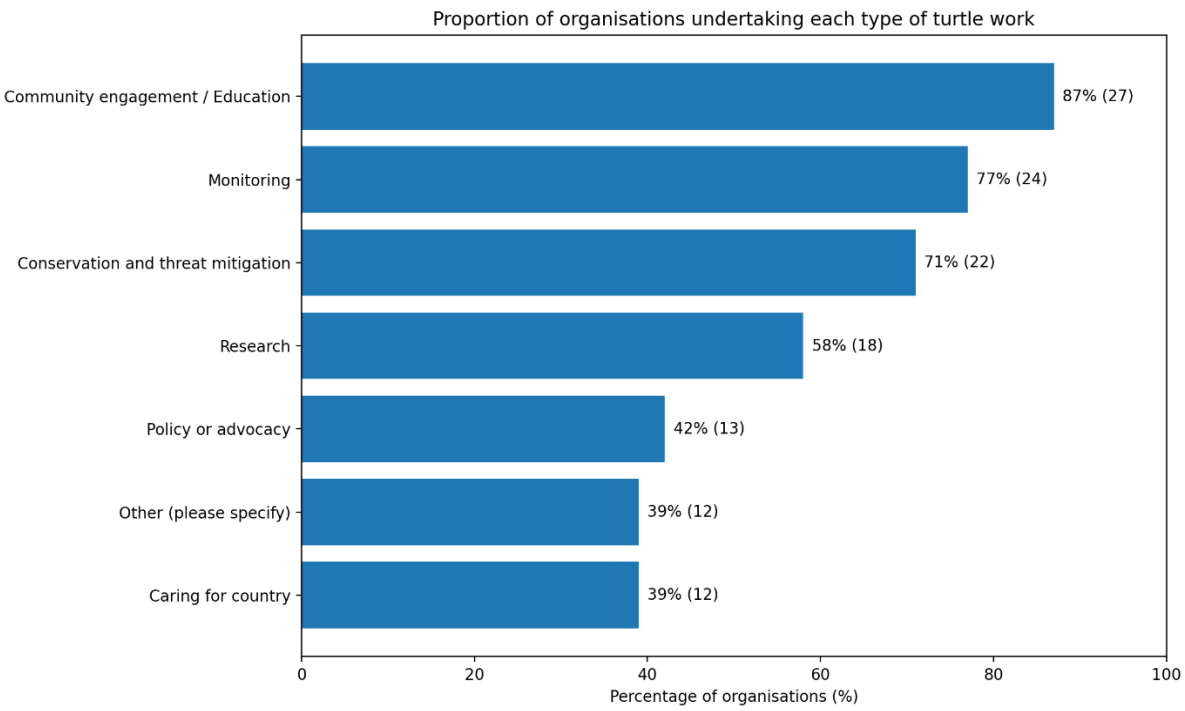
Organisation types

Respondents represented a broad mix of organisation types. Incorporated community groups accounted for the largest proportion of respondents (14 organisations; ~45%) followed by Aboriginal corporations and Indigenous ranger groups (7 organisations; ~23%). The remaining respondents included rehabilitation and stranding centres (3), local councils (2), universities or research institutions (2), unincorporated community groups (2), and one Natural Resource Management (NRM) organisation.

Current Marine Turtle Activities

Types of Work Undertaken

Across the QMTN network, organisations reported undertaking a broad mix of marine turtle activities, with the strongest participation in community engagement and education (27 organisations; 87%) and monitoring (24; 77%). A substantial proportion of organisations are also involved in conservation and threat mitigation (22; 71%) and research (18; 58%), highlighting that many groups contribute beyond core nesting beach surveys. Policy or advocacy activities were reported by 13 organisations (42%), suggesting a meaningful role for some members in influencing local planning, compliance, or community behaviours. The majority of the 12 organisations that selected “Other (please specify)” clarified that they respond to turtle strandings and/or conduct turtle rehabilitation. Caring for Country was reported by 12 organisations (39%), reflecting the important contribution of Traditional Owner-led approaches and a diversity of locally tailored work across Queensland. Organisations could select multiple activity types, so percentages do not sum to 100%.



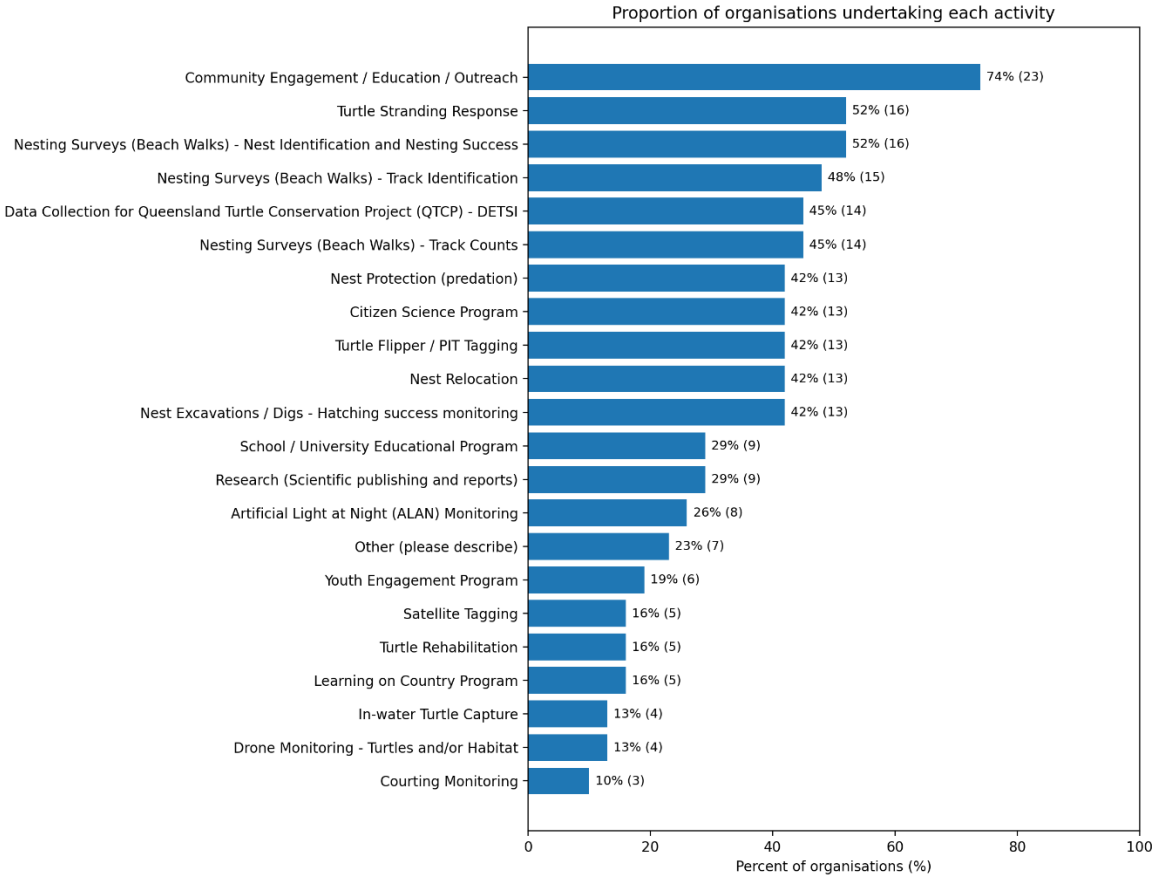
Types of Activities Undertaken

Across the network, organisations reported a strong focus on community-facing work and beach-based monitoring. The most common activity was Community Engagement / Education / Outreach (23 organisations; 74%), highlighting that public awareness, volunteer engagement, and local stewardship are central components of turtle conservation for QMTN member organisations. Beach monitoring is also widespread, with around half of organisations undertaking nest identification and nesting success monitoring (16; 52%), turtle stranding response (16; 52%), and track identification (15; 48%). A further 45% of organisations reported conducting track counts (14) and contributing to QTCP data collection (DETSI) (14), indicating strong participation in structured statewide monitoring and reporting.

A substantial proportion of organisations also undertake hands-on conservation actions and applied monitoring that typically require additional resourcing or coordination. Nest relocation, nest protection (predation), and nest excavations/digs for hatching success monitoring were each reported by 13 organisations (42%), demonstrating that many groups are actively supporting on-ground actions to improve nesting outcomes. Research and scientific contribution are also well

represented, with flipper/PIT tagging and citizen science programs each undertaken by 13 organisations (42%), and research outputs (scientific publishing and reports) undertaken by 9 organisations (29%).

More specialised or resource-intensive activities were less common, reflecting both the diversity of roles across the network and potential opportunities for targeted capacity building if desired. Artificial Light at Night (ALAN) monitoring was reported by 8 organisations (26%), and smaller proportions undertake youth engagement programs (6; 19%) or Learning on Country programs (5; 16%). Advanced methods such as satellite tagging (5; 16%), in-water turtle capture (4; 13%) and drone monitoring (4; 13%) are currently undertaken by a minority of organisations. Courting monitoring, while relatively uncommon, was reported by 3 organisations (10%), indicating that a small subset of programs are engaging in more specialised behavioural monitoring.



Top Local Threats to Marine Turtles

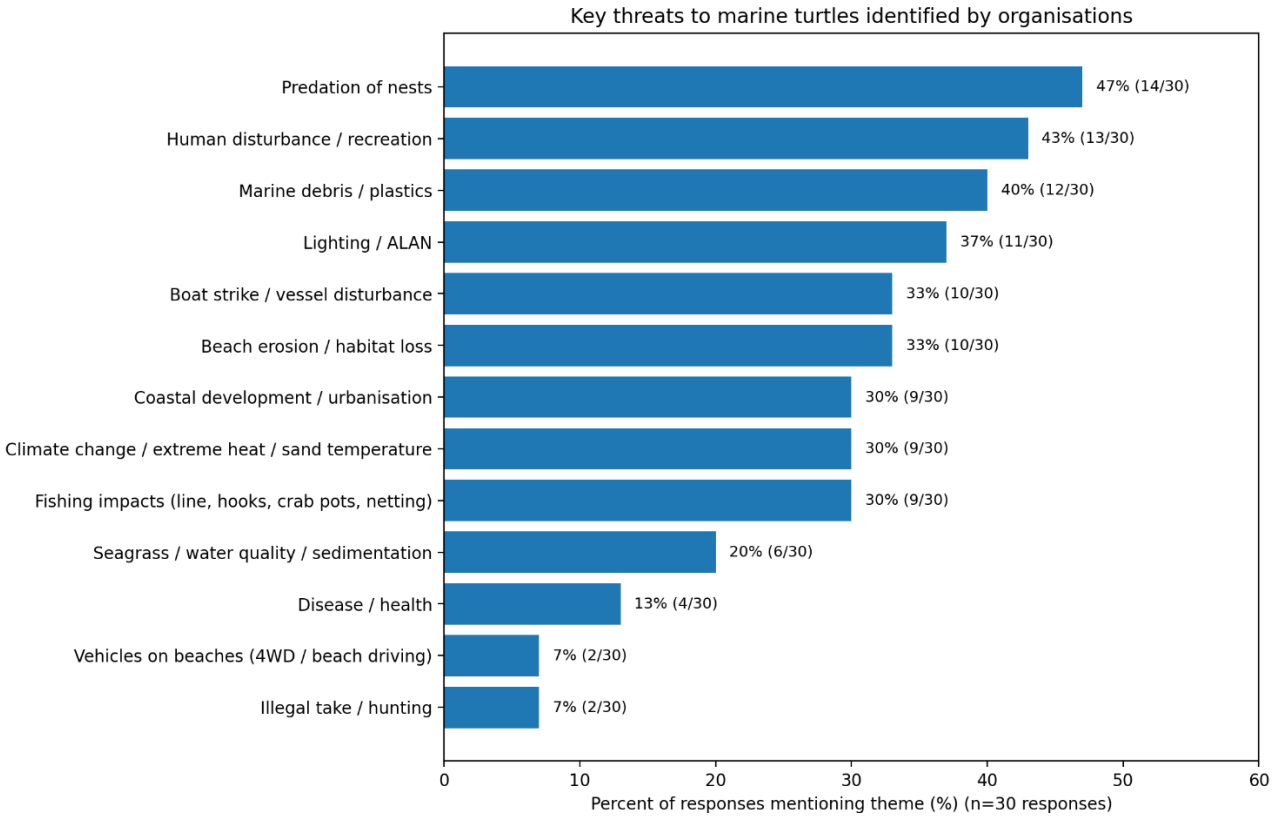
Survey responses highlighted a small number of dominant, statewide threats to marine turtles, led by nest predation and human disturbance on nesting beaches, followed by marine debris and plastics, and lighting and habitat change associated with coastal development.

Across survey responses (n=30), the most frequently identified threats to marine turtles were nest predation and human disturbance. Predation of nests (often attributed to foxes, goannas, pigs and dogs) was mentioned in 47% of responses (14/30), while human disturbance/recreation (e.g., disturbance of nesting turtles, increasing beach use, and non-compliance with go-slow areas) was mentioned in 43% (13/30). Threats linked to marine debris and plastics were also prominent (40%; 12/30), highlighting widespread concern about ingestion and entanglement, including fishing-related debris.

A second tier of commonly reported threats related to lighting and habitat change on nesting beaches, alongside water-based impacts. Lighting / artificial light at night (ALAN) was mentioned in 37% of responses (11/30), often alongside concerns about development-driven light spill and hatchling disorientation. Beach erosion and habitat loss was raised in 33% (10/30), typically linked to storms, tidal surges, dune destabilisation and reduced nesting habitat. Boat strike and vessel disturbance was also cited in 33% (10/30), particularly in busy waterways with high recreational boating and jet ski activity.

Climate- and ecosystem-related pressures were also a consistent theme. Fishing impacts (e.g., fishing line ingestion, hooks, crab pot entanglement, netting/ghost gear) were mentioned in 30% of responses (9/30), alongside climate change/extreme heat/sand temperature impacts (30%; 9/30) and coastal development/urbanisation (30%; 9/30). A smaller number of respondents specifically highlighted seagrass loss, water quality and sedimentation (20%; 6/30) as drivers of reduced food availability and increased strandings, and some raised disease/health issues (13%; 4/30). Overall, the responses point to clear statewide priorities for collaborative action: reducing predation and disturbance on nesting

beaches, addressing lighting and coastal development pressures, and strengthening coordinated responses to debris, fishing interactions, and vessel strike.



Organisational Capacity

In this survey, organisational capacity was explored through questions on staffing, volunteer involvement, and access to accreditation and training pathways, to better understand how organisations deliver marine turtle conservation work. Across the 31 organisations, self-reported capacity to deliver marine turtle work is highly variable and strongly volunteer-dependent. Among organisations that provided staffing numbers, the median number of paid staff involved in turtle work was 2 (range 0–60), with many organisations reporting no paid staff and relying entirely on volunteers. Volunteer involvement was typically much higher, with a median of ~30 unpaid volunteers (range 0–1600+), indicating that while many programs operate with modest volunteer teams, a small number of larger organisations coordinate very large volunteer cohorts.

Accreditation capacity under the Queensland Turtle Conservation Project (QTCP) is uneven and represents a key opportunity to strengthen and unlock capacity across the network. Among organisations that answered the question, the median number of authorised Individual Citizen Scientists was 3 people (range 0–97), with several organisations reporting none or being in transition from older authorisations. Only three organisations reported having QTCP-approved citizen scientist trainers, with approximately four trainers in total reported across the dataset. While the network has strong operational reach through volunteers, greater trainer availability and improved pathways for authorisation would support program expansion and more consistent delivery of permitted monitoring and protection activities across regions.

Opportunities for Growth

Survey responses about activities organisations would like to undertake (but currently do not) point to several consistent growth opportunities. In particular, organisations expressed interest in expanding:

Core monitoring and reporting

- Surveying additional or more remote beaches and islands
- Increasing nest counts and spatial coverage
- Strengthening data collection and reporting to DETSI/QTCP

Specialised monitoring and research

- Turtle tagging (flipper, PIT, and satellite)
- Drone-based monitoring, particularly to reduce reliance on on-ground effort in challenging or remote conditions
- Environmental and climate monitoring (e.g. sand temperature monitoring to understand hatchling sex ratios and inform adaptive management)

Targeted and emerging focus areas

- ALAN / light monitoring
- Genetics
- Broader research partnerships

The survey indicates that motivation is high across the Network, and that the main limitations to growth relate to a consistent set of shared areas for development. The most commonly reported areas for growth include volunteer capacity and time, funding stability, and improved access to training, accreditation, and authorisation pathways (particularly QTCP/Mon Repos pathways and limited training places). Organisations also identified practical constraints such as access to equipment and infrastructure (e.g. vehicles, vessels, monitoring tools, and outreach materials), as well as the higher costs and logistical complexity associated with remote monitoring.

Taken together, responses suggest that the strongest opportunities to sustain current activities and unlock future growth lie in targeted, network-wide enablers: improving regional and accessible training pathways, supporting accreditation and trainer development, facilitating resource and equipment sharing, and strengthening coordinated investment to support volunteer retention and program delivery. These findings directly inform QMTN's future priorities by clarifying where shared needs overlap across regions and where coordinated action can most effectively amplify collective impact.

Network Highlights in the Last 12 Months

Survey responses highlighted a strong sense of achievement across the Network over the past year, particularly given challenging operating conditions. Key highlights are summarised below.

On-ground monitoring and nesting outcomes

- Record or high nesting seasons reported by several organisations
- Monitoring and protection of large numbers of nests across regions
- Effective responses to extreme events (e.g. cyclone-related disruptions) through adaptive management
- Emergency nest relocations undertaken with positive hatchling survival outcomes
- Strong volunteer and ranger commitment, enabling continuity of long-term datasets that support regional trend analysis and decision-making

Capacity-building and coordination

- Establishment or strengthening of paid coordinator roles
- Improved volunteer support systems, including equipment provision, data entry support, and clearer coordination structures
- Delivery of training to expand capability, particularly within ranger programs
- Creation or strengthening of regional coordinator roles to improve local coordination

Partnerships, collaboration, and learning

- Strengthened partnerships with Traditional Owners, government agencies, developers, NGOs, and local communities
- Collaborative efforts leading to improved protection measures, beach restoration activities, and enhanced management arrangements
- Hosting of forums, symposia, and milestone events that supported knowledge-sharing and collaboration across the Network

Education, response, and research

- Delivery of school and community education programs
- Expansion of stranding response capacity and successful rehabilitation outcomes
- Contributions to research and innovation, including satellite tracking, eDNA studies, health assessments, and flatback turtle satellite tracking

Collectively, these highlights demonstrate a Network delivering diverse and meaningful outcomes, spanning hands-on conservation action, community engagement, and applied science. These achievements were often realised with limited resourcing, underscoring the strong commitment, adaptability, and momentum across QMTN member organisations.

Collaboration across QMTN

Survey responses indicate a strong appetite for multi-organisation collaboration facilitated by QMTN, particularly where collaboration reduces duplication and helps organisations overcome shared constraints (e.g., training access, resourcing, and consistent data systems). The most commonly described collaboration opportunities centred on joint training and capacity-building, information/data sharing, and coordinated community engagement and advocacy. Where respondents were hesitant, this was largely conditional on time commitment, cost, and clear benefit, with a preference for collaborations that don't require major changes to existing programs and are supported by realistic resourcing.

Key Opportunities Raised by Members

Training and accreditation pathways: Expanding access to regionally accessible training (including options beyond Mon Repos), supporting trainer development, and strengthening pathways for maintaining authorisations and permits.

Statewide data sharing and reporting alignment: Sharing best practice and advocating for consistent, streamlined data collection and reporting systems (including alignment with DETSI/QTCP), so local monitoring contributes to statewide insight and advocacy.

Coordinated threat mitigation and community engagement: Developing shared education and awareness materials for priority threats (e.g. vessel strike/go-slow messaging, crab pot entanglement, lighting impacts, disturbance), reducing duplication across regions.

Indigenous ranger exchange and Caring for Country collaboration: Supporting ranger exchange and peer learning, capacity-building for on-Country monitoring, and culturally grounded approaches led by Traditional Owner organisations.

Monitoring tools and methods to support adaptation: Interest in tools such as drone-based monitoring and environmental/climate monitoring (e.g. sand temperature) to support beach management, adaptation planning, and decision relevant evidence.

Considerations and conditions for participation

Several respondents noted that collaboration is most feasible when projects are clearly scoped, have a low administrative burden, demonstrate tangible benefit for participants, and are supported by resources or funding (particularly where projects require extra travel, staffing, equipment, or changes to existing delivery models).

Conclusion and Next Steps

This survey confirms that QMTN member organisations are highly motivated and already delivering substantial outcomes for marine turtle conservation across Queensland. QMTN will use these insights to shape the 2026 work plan and prioritise collaborative projects that respond directly to member needs. Immediate next steps include confirming a small set of network-wide priority initiatives, convening working groups where required (e.g., training and data systems), and identifying resourcing pathways to support participation and delivery.