# Queensland Marine Turtle Network

# Priority Collaborative Projects – May 2026

## Summary

The Queensland Marine Turtle Network (QMTN) is a statewide network of community groups, Traditional Owner and Indigenous ranger organisations, councils, researchers, and NGOs working to protect marine turtles and their habitats across Queensland. QMTN plays a coordinating role by connecting organisations, sharing knowledge and tools, and enabling collaboration where collective action can deliver greater impact than individual efforts alone.

This report outlines potential collaborative projects that could be activated with network members in 2026. Projects have been identified based on feedback provided through the 2025 QMTN Member Organisation Survey, alongside a review of key marine turtle conservation strategy documents and discussions with network advisors, to ensure alignment with both member needs and broader policy priorities.

**Recommendation**

- Proceed with the four enabling activities (Table 2) that respond to feedback from the network, align with strategic priorities and have potential further catalyse collaboration. They are actionable within the existing resourcing.
- Discuss and agree on prioritisation for potential collaboration pilot projects (Table 2) to help build a pipeline of opportunities that benefit the network.

**Background**

The QMTN 2025 Member Organisation Survey provided a statewide snapshot of marine turtle conservation activities, capacity, threats, and collaboration interests from 31 QMTN member organisations that can inform planning and prioritisation of collaborative projects. Shared priorities create strong potential for coordinated action and there is strong interest in network collaboration.

- Opportunities to sustain current activities and unlock future growth lie in targeted, and practical network-wide enablers. These were identified as:
    - enhancing training and accreditation pathways
    - statewide data sharing and reporting alignment
    - coordinated threat mitigation and community engagement
    - peer to peer learning to support collaboration (including Indigenous ranger exchange)
    - monitoring tools and methods to support adaptation

The *Queensland marine turtle conservation strategy 2021–2031* aims to stop the decline and support the recovery of depleted genetic stocks of the six species of marine turtles found in Queensland. The strategy outlines a threat risk assessment for each Queensland marine turtle stock. The ranking reflected from both of these information sources are outlined below to demonstrate alignment that guides thinking behind potential collaborative project areas and enabling projects.

*Table 1. Displays the high-level rankings of threats outlined in the Queensland marine turtle conservation strategy 2021–2031, mapped to threats observed and reported through QMTN members to provide an indicative rationale for key priority areas to explore for collaborative projects.*

| Summary ranking from QMTC strategy (pooled across specific species) | Percent of member groups identifying as a key observed threat at their sites |
|---|---|
| Climate change and variability | 30% |
| Marine debris–entanglement | 40% (marine debris generally) |
| Terrestrial predation | 47% |
| Light pollution | 37% |
| Habitat modification–infrastructure/coastal development | 33% (beach erosion)<br>30% (coastal development) |
| Vessel disturbance | 33% |
| Recreational activities | 43% human disturbance (this category encompasses multiple types of threats such as vehicles on beaches and hatchling interactions)<br>30% fishing impacts<br>7% vehicles on beaches |

**Prioritisation for collaborative projects**

Work supported through QMTN is intended to better connect efforts and learnings across groups who are caring for turtles to further amplify the collective work of many.

Potential prioritisation criteria for collaborative projects:

- Fill a clear gap/need
- Accelerate impact potential for turtles & habitats
- Enable participation and benefits across multiple locations & groups
- Can be planned and set in motion ahead of 2026 turtle season, with legacy opportunities

## Summary of potential QMTN projects

| | Project | Primary purpose | Activities | Marine turtle strategy alignment | Priority identified by members |
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| **Enabling activities coordinated by QMTN – Recommend to proceed** | ***A summary of terms and processes for delivering marine turtle work in QLD*** | Clarify training, authorization and permitting terminology and requirements for various marine turtle monitoring, conservation and stranding response activities to enable consistent understanding and use. | Work with DETSI to outline a concise resource that outlines set of shared definitions for activities and a decision tree to outline requirements for undertaking different types of activities. As part of this process, work with DETSI to outline the specific role and activities for how QMTN can support connections with members. | OA4.3 | **Enhancing training & accreditation pathways** This responds to requests for clarity from the network and discussions with DETSI |
| | ***Statewide snapshot*** | Address member feedback on ambitions to see community marine turtle data showcased and available in a format that can be used to show collective efforts and inform on-ground activities, research and management. | Work with DETSI and member groups to coordinate a statewide report generated from content in the member survey, and additional key summary metrics from the 2025/26 season provided by members. The short report will include spatial insights and recommendations to inform future work. Share at the 2026 online season forum, including feature speaking spots on key topics.<br>In the future, expanded reporting could be considered via opt-in sharing of seasonal data from members to answer more specific research and monitoring questions. | OA1.3 | **Statewide data sharing and reporting alignment** This responds to strong member feedback around collective data reporting and accessibility |
| | ***Compile nesting beach protection & adaptation resources*** | Consolidate resources for proven practical actions that protect nesting habitat and improve hatchling outcomes, and encourage opportunities for replicating or adapting proven approaches. | Develop a section on the QMTN website that consolidates listings of existing resources (including how to guides and case studies) could be relevant to the broader network. The listing will include suggestions from the Management Committee and the wider network. | OA1.7<br>QA3.1<br>QA3.2 | **Monitoring tools & methods** Nest predation (47%), beach erosion (33%), climate change (30%) and coastal development (30%) |
| | ***Social benefits survey*** | Gather insights into if and how volunteer and participant experiences in community turtle monitoring, protection and rehabilitation activities deliver outcomes for people as well as turtles and turtle habitats. | Provide access and support to implement a simple toolkit for monitoring and measuring community stewardship with network members. The results for their program will be summarized for their use and the snapshot across participating QMTN member groups can be shared to illustrate the far-reaching benefits of the collective efforts. | OA4.3 | **Statewide data sharing and reporting** Members highlighted the importance of volunteer recognition, support and retention |

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| **On-ground collaboration projects – QMTN Management Committee to review and agree on priorities** | ***Nesting Beach Protection & Adaptation*** | Support pilots for practical on-ground actions that protect nesting habitat and improve hatchling outcomes, including response to: predation, erosion and heat/inundation risk | Nest relocation, shading and irrigation pilot with multi sites across network – potential option to build on existing work | OA1.7<br>QA3.1<br>QA3.2 | **Coordinated threat mitigation & engagement** Nest predation (47%), beach erosion (33%), climate change (30%) and coastal development (30%) |
| | | | Support coordinated beach and/or nest temperature monitoring activities to generate a standardised data set across the network. | | |
| | | | Habitat protection – Explore ways member groups could partner with Landcare groups to deliver relevant beach habitat protection and restoration activities that benefit turtles | | |
| | | | Nest predation – TBD. workshop to facilitate knowledge exchange from across the state about what works, with follow up trials? | | |
| | | | Look at standardized marine debris data collection at clean ups across member sites ahead of turtle season | | |
| | | | Others? | | |
| | ***Turtle-friendly Lighting Best Practice & Monitoring*** | Increase consistency of turtle-friendly lighting monitoring and management to support councils and community groups to implement more turtle-friendly lighting outcomes | Provide ALAN cameras to member groups, with support for using them for this turtle season to generate a standarised data set. Deliver a short summary report and take away lessons with alignment to National Light Pollution Guidelines. | OA1.8<br>OA2.7<br>OA2.8 | **Coordinated threat mitigation & engagement** Lighting / ALAN (37%) and coastal development (30%) |
| | ***Drone-based Beach Change Monitoring*** | Enable collection of simple, consistent evidence of beach profile change, erosion and inundation risk for local management and statewide reporting | Outline existing beach habitat data and develop a drone monitoring field guide and training package for drone-based beach profiling and inundation mapping. | OA1.7<br>QA3.5 | **Coordinated threat mitigation & engagement** Beach erosion (33%), coastal development and climate change (both 30%) |
| | ***Threat Mitigation Educational Toolkit*** | Deliver shared statewide awareness materials for priority community-centred actions to address threats to marine turtles | Outline consistent messaging and simple to use templates for materials that can be adapted locally. This could include consolidating existing resources. | OA1.8<br>OA4.3<br>OA4.4 | **Coordinated threat mitigation & engagement** Human disturbance (43%), marine debris (40%), lighting (37%), boat strike (33%), fishing impacts (30%), and vehicles on beaches (7%) |

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| **Support member groups to build collective capacity - Could be considered through future investments** | ***Support to enhance the conservation of marine turtles in Queensland by linking local and QLD-wide efforts*** | Support member groups in activities that support local action and enable solutions for key network priorities | Could include opportunities to support:<br>- Equipment to enable work on a priority topic<br>- Collaborations to pilot new activities or deliver practical tools/guides that or activity grants<br>-Citizen science exchange opportunities – Enabling peer to peer learning and exchange opportunities across the network to connect groups with existing skills and expertise and tools to support those interested in specific topics. (eg. Nest predation workshop to facilitate knowledge exchange from across the state about what works)<br>-General training or development opportunities outside of DETSI authorisations. | | **Peer to peer learning to support collaboration**<br>Facilitating resource and equipment sharing, and strengthening coordinated investment were priorities identified by member groups |
| **Opportunities for QMTN to support other organisations in delivery – For future discussion** | ***Enhancing Training & Accreditation Pathways*** | Work with DETSI to identify how QMTN can support access to training, authorisations and trainer capacity across the network for ongoing monitoring at priority nesting and foraging sites activities across regions. | TBD with DETSI. This could include identifying opportunities for how QMTN can support information exchange between member groups and DETSI. This could also include training beyond authorisations to expand the range of tools that member groups have to monitor and care for turtles. | Target 4.2<br>OA4.3<br>OA4.3 | **Enhancing training & accreditation pathways** |
| | ***Statewide Data Reporting and availability*** | Work with DETSI to enable two-way communications with the QMTN members around how community data is provided, stored and used. | TBD with DETSI. Enable opportunities for QMTN members to contribute feedback to DETSI's process on designing database systems and reporting mechanisms that make community information more accessible and visible. | OA1.3 | N/A |
| | ***Indigenous Ranger Exchange & Caring for Country*** | Responding to member feedback for QMTN to support Traditional Owner-led turtle conservation aspirations. projects led by Traditional Owner organisations. | TBD. Ideas would need to be developed with Traditional Owners groups. Some ideas raised include enabling peer to peer learning and collaboratively designed. Potential to explore opportunities to enhance reconciliation through building connections with non-Indigenous organisations where appropriate. This could be in partnership with DETSI - Nest to Ocean in particular. | OA1.6<br>OA4.1 | **Peer to peer learning to support collaboration** |

**Detailed alignment mapping to Queensland marine turtle conservation strategy 2021–2031**

| | Summary action | Strategic priority rank |
|---|---|---|
| Objective 1 – Foundational knowledge | | |
| OA1.1 | Continue to improve marine turtle species knowledge with a focus on less well-understood stocks, including in relation to species ecology, mapping and modelling of habitats and species/ stock distribution, population condition and trend information, threats and management requirement | High |
| OA1.3 | Maintain integrated databases for marine turtle field data collected using standardised methods, allowing for the collation and editing of data state-wide. | High |
| OA1.5 | Monitor temperature at a minimum of one index nesting beach for each Queensland marine turtle stock | High |
| OA1.6 | Maintain and enhance engagement with Traditional Owners and First Nations Land and Sea managers through dialogue, knowledge and data exchange, co-design and collaborative management approaches | Very high |
| OA1.7 | Identify and plan for the implementation of feasible management techniques that can be applied at an ecologically meaningful scale to increase climate change resilience<br>• development of a fine-scale mapping and modelling tool to identify and assess the quality of current and potential alternative refugial marine turtle nesting and foraging habitat<br>• improving the monitoring of habitat quality to include foraging habitat (i.e. seagrass, coral, etc.)<br>• recording changes over time, especially in relation to climate change impacts and associated changes in marine turtle behaviour and survivorship, nesting and foraging habitat assess the suitability of future large-scale relocation of turtle nests or hatchlings to address climate change and feminisation risks (i.e. Torres Strait, eastern Cape York Peninsula) (see action OA3.5)<br>• recording outcomes from trials of practical, nest cooling techniques (see action OA3.2) | Very high |
| OA1.8 | Expand and share knowledge regarding best practice low-light solutions<br>Maintain and make available (to the public and agencies) accurate maps of turtle nesting areas on the State Planning Policy Interactive Mapping System to inform local government planning<br>and decision making | High |
| OA2.3 | Ensure opportunities for education and participation in marine turtle management is incorporated into Indigenous and non Indigenous ranger training and land and sea country programs | Medium |
| OA2.7 | Review existing land use planning tools and light mitigation techniques to better manage impacts of light pollution, beach access and other threats to marine turtle nesting sites, and where appropriate develop or strengthen regulations and guideline | Medium |
| OA2.8 | Prepare dark sky buffer strategies around significant and very significant turtle nesting areas (up to 20km wide buffer areas), focusing on actions to reduce existing light pollution and avoid<br>increases in light | High |

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| Direct management | | |
| OA3.1 | Maintain, adapt and strengthen existing direct management efforts at key individual nesting beaches and foraging grounds for each genetic stock to implement management practices that<br>promote successful hatching of at least 70% of clutches laid (including rescuing doomed eggs where feasible), and mean hatchling emergence success in excess of 80% from clutches<br>producing hatchlings | High |
| OA3.2 | Design, trial and implement practical nest cooling techniques that can be applied at an ecologically meaningful scale to increase the production of male hatchlings (to achieve ecologically appropriate sex ratios) | High |
| OA3.3 | Collaborate with Traditional Owners, Indigenous Land and Sea Ranger Groups, relevant government agencies and NGOs to reduce the impacts of marine debris ingestion and entanglement on turtle health. | Medium |
| OA3.5 | Identify suitable beaches and islands that could provide refugial nesting habitat under a rising sea level scenario and implement appropriate planning controls and management actions to safeguard and optimise their potential future | High |
| OA3.6 | Manage the effects of feral animals (including pigs, dogs and deer) on marine turtles by developing effective predator control zones around current and potential future critical nesting<br>beaches | Very high |
| Community education and engagement | | |
| OA4.1 | Explore Indigenous engagement and partnership opportunities to further refine and build shared ownership for marine turtle conservation in Queensland. Identify relevant key messages<br>and promote opportunities to enter into co-management arrangements with Traditional Owners across all stock | Very high |
| OA4.3 | Develop a State-wide community engagement framework to:<br>• increase community and industry awareness, support and involvement in marine turtle conservation initiatives and practice change<br>• provide community-based programs with clear guidelines for marine turtle species recovery activities and monitoring, ensuring quality assurance and control and generation of standardised data that enables informed management decisions<br>• develop measures of assessing educational impact, including increased community awareness and behavioural change<br>• further develop citizen science and volunteering programs (including training that meets needs of volunteers and citizen scientist | Medium |
| OA4.4 | Continue to provide advice to all stakeholders and the community<br>in relation to:<br>• habitat management of nesting beaches to minimise alteration of nesting habitat resulting from human activities and to maximise hatchling production<br>• marine and terrestrial protected areas with associated zoning for habitat management<br>• maintaining dark horizons surrounding marine turtle nesting beaches in Queensland | High |