Wet Tropics Waterways

WET TROPICS REPORT CARD 2025

URBAN WATER STEWARDSHIP FRAMEWORK REPORT

wettropicswaterways.org.au

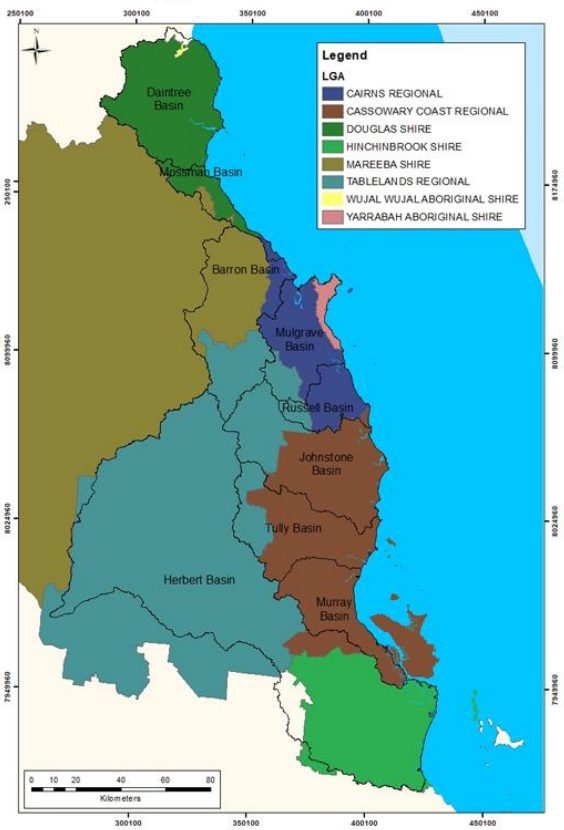
1. Executive Summary

Nutrients, sediments, and pesticides are pollutants that affect the resilience of coral reefs. Understanding and addressing the flow of these contaminants from urban landscapes into the Great Barrier Reef lagoon is vital for meeting the water quality goals outlined in the Reef 2050 Water Quality Improvement Plan (WQIP). True environmental stewardship means going beyond compliance—investing in smarter technologies and better practices that not only prevent harm but actively protect and improve the health of our marine environment.

The Urban Water Stewardship Framework (UWSF) is a tool used for benchmarking urban stormwater water and wastewater management (urban water management) activities against best practice and legislative standards for Local Government Areas (LGA). The framework provides a consistent means of evaluating and reporting on the level of practice applied to urban water management related activities. This intern can be used to support decision making and planning by LGA's, government department and agencies and the community to support urban water management practice improvement within the LGAs.

This report presents a summary of findings from Urban Water Stewardship Framework workshops conducted with 5 of the 8 LGAs across the Wet Tropics region between April 2025 and May 2025. The workshops evaluated each LGA's performance in managing potential sources of nutrient and sediment loads against the benchmarked standards of the UWSF. This is the third time LGAs have applied the UWSF to their urban water management practices with the first 2 rounds completed in 2021 and 2023.

Figure 1. The eight local government areas (LGAs) in the Wet Topics region.



This summery report aims to inform an ongoing conversation on how to enhance urban water stewardship locally and regionally.

Urban water management activities and their relationship with diffuse pollution were assessed using an A, B, C, D rating system across three primary components of LGA business:

- Developing Urban areas.
- Established Urban areas.
- Point Source pollution (associated with sewage treatment and management).

The management practice areas assessed under each of the 3 components are:

- Planning and governance
- Infrastructure management and maintenance
- Social approaches
- Monitoring, evaluation, reporting and improvement.

Table 1: *Overall UWSF scores and grades for Local Government areas (LGAs) and the Wet Tropics region - 2025*

	Overall	Established Urban	Developing Urban	Point Source
Wet Tropics Region combined – rating and score	**B** **14.4 / 20**	**C** **11.7 / 20**	**B** **14.5 / 20**	**B** **16.8 / 20**

1.1 Key Points:

- The **Overall 2025** urban water quality stewardship rating and score for the Wet Tropics Region LGAs, **B – 14 / 20** moved positively into the middle of the rating range of **'current best management practice'**

- Between the first UWSF round in 2021 and this third round in 2025 stewardship scores have improved each round for each of the components (Established Urban, Developing Urban, Point Source) between years.

- The **Established Urban**, urban water stewardship standard is rated at **C** (**minimum standards**) and lags behind in the **B** ratings (**current best management practice standards**) for the **Developing Urban** and **Point Source** components.

    - The difference in stewardship standards between the Established Urban component, and the Developing Urban and Point Source components is driven by the minimum standards demonstrated within sub elements of *Planning and Governance* and *Monitoring Evaluation and Reporting (MERI)* in the Established Urban component.

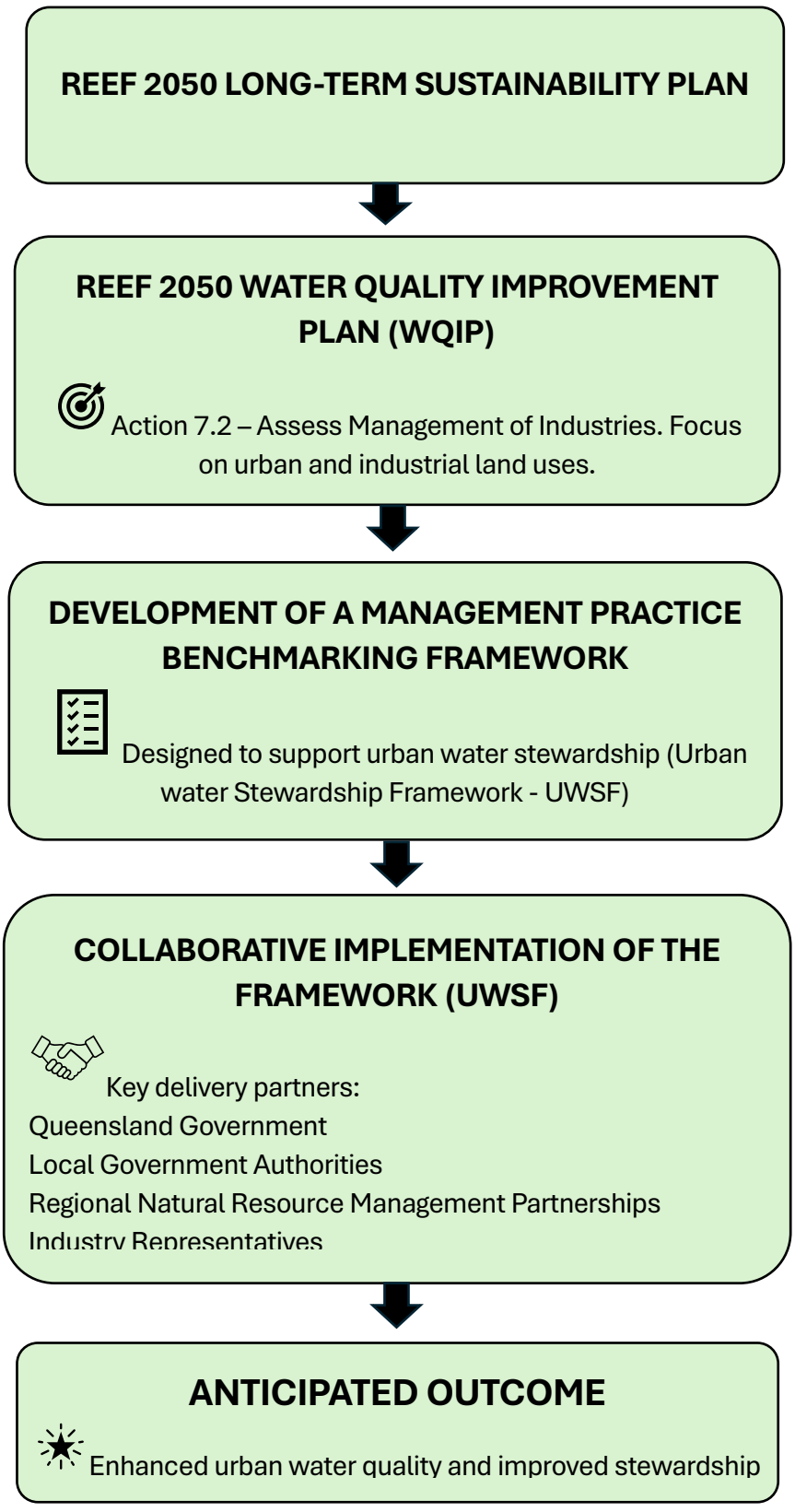
2. About the Urban Water Stewardship Framework:

Developed by the Office of the Great Barrier Reef (Department of the Environment, Tourism, Science and Innovation (DETSI), Queensland) the UWSF addresses *action 7.2* from the Reef 2050 Water Quality Improvement Plan which sits within The Reef 2050 Plan

A regional summary of the Wet Tropics Region LGA's assessments of their urban water stewardship using the framework is reported by the Wet Tropics Waterways, one of the 5 Regional report cards in the Great Barrier Reef catchment.

In addition to their use by LGAs for planning to support urban water stewardship management practice improvement, the results and reports presented to each LGA will be used to guide decision making by Federal and State governments with respect to funding to support the Reef Plan 2050. Additional background information about the UWSF can be found within the Urban Water Stewardship Framework Factsheet.

Figure 2: UWSF relationship to Reef Plan 2050



3. Completing the Urban Water Stewardship Framework assessment:

Each LGA took part in a facilitated workshop to benchmark their urban water stewardship using the UWSF. This collaborative process involves subject matter experts and relevant practitioners from within each LGA supported by the facilitator. During the workshop, participants assessed 66 questions (activity ratings) distributed across three key components:

- Developing Urban areas (DU).
- Established Urban areas (EU).
- Point Source pollution (associated with sewage treatment and management) (PS).

Guided by the facilitator, the group collaboratively assessed each question to develop a shared understanding of the organisation's performance. Each question is rated using four defined operational performance standards (A to D), with indicative scores of:

- A = 20
- B = 15
- C = 10
- D = 0.

To reflect the potential impact on water quality, each question also carries a weighting (ranging from 0.5 to 1.5). The selected rating score is multiplied by this weighting to generate a numerical score for each activity.

Table 2: *A to D rating – performance and risk*

Terminology	**Practice Standard**			
Practice level rating	**A**	**B**	**C**	**D**
Practice level performance	Innovative and/or aspirational	Current best practice	Minimum standard	Superseded practices
Water quality risk framework	Lowest risk	Low-moderate risk	Moderate risk	High risk
Score range	> 17.5	12.5– 17.4	5 – 12.4	< 5

Questions are clustered within Management Activity Groups (MAGs) that are typical areas of LGA business. *(Table 3)*

- Developing Urban – 6 Management Activity Groups - 28 Questions (Activity ratings)
- Established Urban – 5 Management Activity Groups – 21 Questions (Activity ratings)
- Point Source – 5 Management Activity Groups – 17 Questions (Activity ratings)

Table 3: *UWSF components, management activity groups (MAGs) and operational goals.*

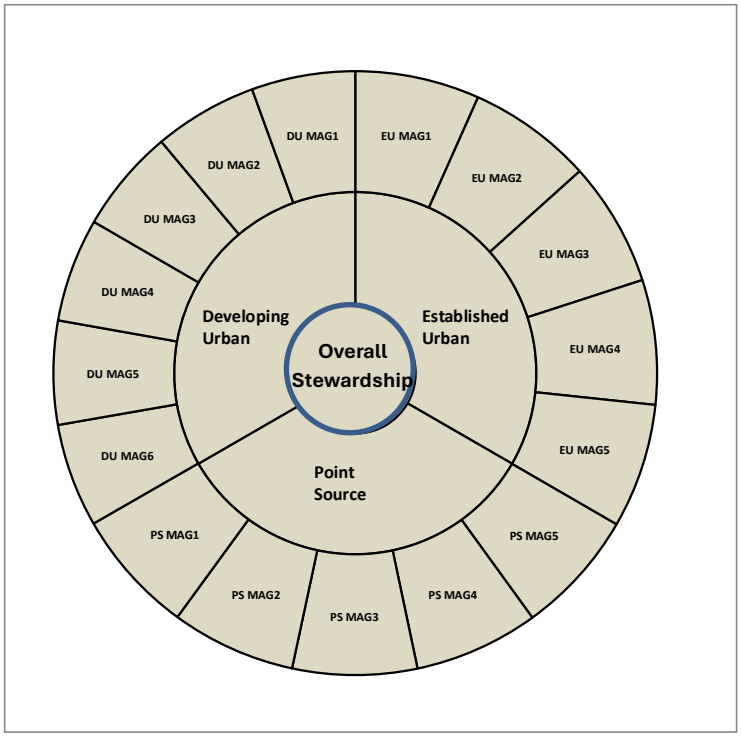
Component	Management Activity Group number	Sub-Element	Group theme	Operational goal
Developing Urban (DU)	1	1.1	Local government policy associated with stormwater management and erosion and sediment control	Stormwater infrastructure planning and design objectives support water quality improvement by being aligned with total water cycle management principles, with Council leading by example in terms of how it manages its own developments.
	2	1.1	Development applications, development assessment and associated condition enforcement	The development assessment process promotes and supports improved water quality through the use of permitting conditions that are site-specific, developed by suitably qualified persons and properly assessed and enforced.
	3	1.1	Site-based stormwater management and erosion and sediment control (ESC) plan development	Site-based stormwater management and ESC plans are capable of delivering outcomes that meet the water quality objectives defined in the development approvals process
	4	2.1	Site-based stormwater management and ESC implementation	Desired water quality objectives are met through effective implementation of site-based stormwater management and ESC plans
	5	3.1	Partnerships and collaboration [including science and research]	Increased capacity to identify, apply and enforce best practice ESC and WSUD principles leads to more effective ESC and WSUD outcomes
		3.2	Guidance material development, training, capacity building and community involvement	
	6	4.1	Urban water monitoring, modelling, and evaluation program	Risk of severe erosion impacts is reduced through site inspections at appropriate times and the monitoring of downstream water quality for high-risk developments
		4.2	Reporting program	
Established Urban (EU)	1	1.2	Total water cycle management-based stormwater planning and design	Effective stormwater management is supported by policy objectives based on total water cycle management principles
	2	1.2	Stormwater Management Plan development	New stormwater treatment assets are created at priority locations and treatment using solutions that satisfy multiple objectives
	3	2.2 and 2.3	Stormwater Management implementation	SPP stormwater quality objectives for established urban areas continue to be met through effective and ongoing asset maintenance process and the protection of natural ecosystem features that provide pollution reduction services
	4	3.1	Partnerships and collaboration [including science and research]	Level of collaboration, training and knowledge sharing is high, resulting in greater capacity to implement catchment-based total water cycle-based management and waterway protection and restoration effectively
		3.2	Guidance materials, training, capacity building and community involvement	
	5	4.1	Urban water monitoring, modelling and evaluation program	Understanding of stormwater runoff influence on catchment water quality and the effectiveness of approved stormwater treatment devices is sufficient to inform policy and planning regarding where adjustments to stormwater management practices are required.
		4.2	Reporting program	

Table 3 Continued:

Component	Management Activity Group number	Sub-Element	Group theme	Operational goal
Point Source (PS)	1	1	Policy, planning, and governance associated with sewage wastewater management	Fewer license exceedances and reduced nutrient loads are achieved by good governance with respect to planning and operation and, through minimising the volume of wastewater discharge wherever practical
	2	2.1	Sewerage network asset management and maintenance	Potential for network system failure reduced through effective planning of sewerage network asset management and maintenance activities
	3	2.2	Implementation of the STP and sewer network infrastructure planning process	Urban planning takes into account wastewater infrastructure capacity requirements for expected population increases, while the design of new infrastructure adequately balances costs with risk associated with the potential for wet weather overflow-related environmental impacts
	4	3	Partnerships, collaboration, capacity building and training	Water quality improvement outcomes are achieved through a combination of innovation derived from collaborative R&D programs, effective staff capacity building and training and effective customer education programs
	5	4	Monitoring, evaluation, reporting and improvement process	Environmental impacts of releases reduced through effective monitoring, early detection and ongoing reporting, review and improvement

A rating for each MAG is calculated as the average of the activity ratings assigned to each question within that MAG. The rating for each of the 3 components is calculated as the average of the MAG ratings within each component. The overall urban water stewardship rating is calculated as the average of the component ratings.

Figure 3: *Example Coaster demonstrating the stepped rating calculations.*



4. Wet Tropics Region LGA Urban Water Stewardship results

4.1 Overall results

The **Overall 2025** urban water quality stewardship rating and score for the Wet Tropics Region LGAs, **B – 14 / 20** moved positively into the middle of the rating range of **'current best management practice'**. The overall scores for the region are an average of the combined overall scores for each of the participating LGAs. The same method is applied to calculate the overall score for each of the components (Established Urban EU, Developing Urban DU and Point Source PS).

The overall score 2025 rating and score for the **Established Urban** component, **C – 11.7 / 20** places the regions water quality stewardship for this area at the upper end of the **minimum standards** range and presenting a **moderate risk** to water quality. Pleasingly the **Developing Urban** and **Point Source** components demonstrate water quality stewardship strongly within the **current best management practice** range in 2025.

Table 4. *Overall results for the urban water stewardship framework assessment across the three major themes for the Wet Tropics Region LGA urban water stewardship 2025*.

Component	Rating	Rating description	Water Quality Risk	Rating score*
Established Urban	**C**	**Minimum Standards**	**Moderate Risk**	**11.7 / 20**
Developing Urban	**B**	**Current best management practice**	**Low/Moderate Risk**	**14.5 / 20**
Point Source	**B**	**Current best management practice**	**Low/Moderate Risk**	**16.8 / 20**
Overall	**B**	**Current best management practice**	**Low/Moderate Risk**	**14.4 / 20**

*Rating score ranges: A >17.5 B 12.5 – 17.4 C 5 – 12.4 D < 5

When we compare the **Overall** results between years, **2021** (**C – 12.3 / 20**) and **2023** (**B – 13.4 / 20**), we notice there is a trend of improving water quality stewardship across the region (Table 6). The overall score for the region is an average of the combined overall scores for each of the participating LGAs.

***Table 5**. A comparison of the overall results for the urban water stewardship framework assessment across the three major themes for the Wet Tropics Region LGA urban water stewardship between 2021, 2023 and 2025.*

	2021	2023	2025
Overall (combined)	**12.3**	**13.7**	**14.4**
EU Overall	**9.1**	**10.4**	**11.7**
DU Overall	**12.8**	**13.6**	**14.5**
PS Overall	**15.1**	**16.1**	**16.8**

It is pleasing to see the same improving stewardship trend for each of the components (EU, DU, PS) between years. Though as discussed above **EU (minimum standards)** lags behind in the **current best management practice** standards of **DU** and **PS**.

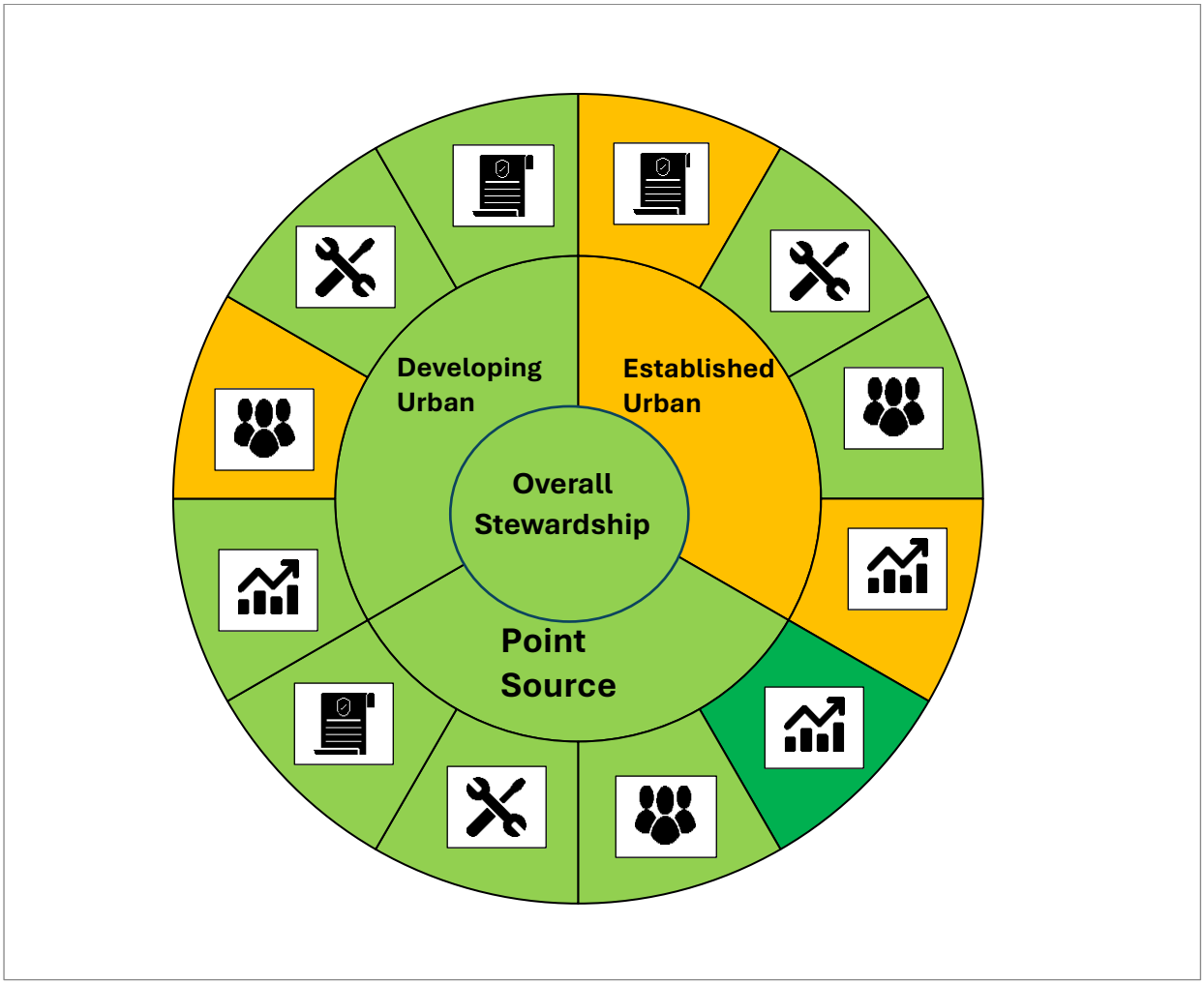
Figure 4 shows this difference in stewardship standards between the **EU** area, and the **DU** and **PS** areas is driven by the LGA business sub elements of Planning and Governance and Monitoring Evaluation and Reporting (MERI) applied in the Established Urban area.

In the **DU** area there remains the opportunity for some improvement across the region in the LGA business sub element, Social Approaches (staff training, and stakeholder knowledge and application of Water Sensitive Urban Design (WSUD).

Opportunities for the region to consider for supporting improved urban water stewardship are discussed below in sections 5 and 6 for the Establish Urban, Developing Urban and Points Source components at both the Management Activity Group (MAG) level and individual activity level.

4.2 Element results

Figure 4*. Ratings for each of the four sub- elements associated with the Established urban, Developing urban and Point source components*



Key

Planning and governance

Infrastructure management and maintenance

Social approaches

Monitoring, Evaluation, Reporting and Improvement (MERI)

Above best practice performance (A)

Current best practice performance (B)

Current minimum standard (C)

Superseded / out of date standards (D)

5. Comparing Results with Previous Years

All the participating the LGAs improved their overall urban water quality stewardship scores and maintained their **B** ratings between 2021 and 2025 except for LGA 1 that improved from a **C** rating in 2021 to a **B** in 2023 which was maintained this in 2025.

In 2025, three Wet Tropics LGAs were unable to participate in the Urban Water Stewardship Framework (UWSF) workshops. Two of these LGAs remain in flood recovery mode following the severe summer weather events of 2023/24 and 2024/25. Recovery efforts are focused on planning, designing, and replacing stormwater infrastructure in Established Urban areas; updating planning tools and policies for Developing Urban areas; and repairing or replacing damaged wastewater networks and treatment systems (Point Source). Given the scale of works and policy review in each of these LGAs that is underway—particularly across the Planning and Governance, Infrastructure Management and Maintenance, Social Approaches, and Monitoring, Evaluation and Reporting sub-elements—these LGAs were not in a position to meaningfully assess their urban water stewardship against the UWSF during this period (Table 6).

Table 6: *A comparison of the rating and score for each* LGA *in 2021, 2023 and 2025 together with the desired outcome of each of these groups for context.*

	Region	LGA 1	LGA 2	LGA 3	LGA 4	LGA 5	LGA 6	LGA 7	LGA 8
Overall score 2025 **5 LGA Participating	**14.4**	**13**	**16**	**14**	DNC*	**13**	DNC*	DNC*	**16**
Overall score 2023 **7 LGA Participating	**13.4**	**12.9**	**16.5**	**13**	**9.3**	**12.9**	**14.5**	DNC*	**14.1**
Overall score 2021 **8 LGA participating	**12.3**	**10.3**	**14.9**	**12.8**	**7.9**	**13.2**	**13.6**	**11.5**	**14.5**

Rating score ranges: A >17.5 B 12.5 – 17.4 C 5 – 12.4 D < 5 : ** - Number of LGA completing UWSF that year : * - DNC - Did not complete

It is unlikely that the absence of data from the 3 non-participating LGAs had any significant impact on the overall scores and ratings for 2025. If we look at the 2023 results for LGAs 4 and 6 and consider the general trend of improving urban water stewardship outcomes across all LGAs between 2021 and 2023 it is fair to assume that this improving practice trend would have been maintained by these 2 LGAs and supported the **current best management practice** rating demonstrated by the region. Having not participated in 2023 it is hard to make comment on the likely contribution of LGA 7 to the overall result should they have participated.

5.1 Comparing 2025 Management Activity Group (MAG) results with previous years

The MAGs for all of the components (Table 7, 9 and 11) demonstrate the general improving stewardship trend across the region. The stewardship scores that are lower in 2025 (EU_MAG 2 and DU_MAG 3) when compared with 2023 are only slightly so (0.5 and 0.9 points respectively) and may be likely the result of how the questions and rating explanations were interpreted. Shifting the ranking for just one question from a C to a B could explain the small changes to the scores produced during the 2025 UWSF review. It does however indicate that for these 2 MAGs, and for those MAGs where the positive score change upwards was less than 1 point, that the impact of the small drop or increase in urban water stewardship standard would have a relatively minor impact on water quality when compared with potential outcomes being achieved in 2023.

6. Review of 2025 UWSF MAG scores and ratings: *What is working well or on track and stewardship improvement opportunities.*

6.1 Established Urban (EU) Management Activity Group (MAG) – comparing overall results for the region with previous years

Table 7: *A comparison of the overall rating and score for each EU MAG in 2021, 2023 and 2025 together with the desired outcome of each of these MAGs for context.*

Established Urban			
Year	2021	2023	2025
EU Overall	**9.1**	**10.4**	**11.7**
MAG 1	**10.9**	**9.7**	**11.8**
MAG 2	**6.5**	**10.3**	**9.8**
MAG 3	**9.6**	**12.3**	**13**
MAG 4	**10.1**	**12.4**	**13.7**
MAG 5	**8.1**	**7.1**	**10**
	**8 LGA Participating	**7 LGA Participating	**5 LGA Participating

** - Number of LGA completing UWSF that year

MAG 1 - Continuous improvement in catchment management through integrated total water cycle planning and design.

MAG 2 - Continuous improvement in stormwater system management through integrated total water cycle planning. *Stormwater Management Plan development*

MAG 3 - Reduction in nutrients and sediments leaving established urban areas.

MAG 4 - Increased capacity to implement catchment based total water cycle management and landscape restoration through collaboration with industry and the community.

MAG 5 - Greater knowledge base to improve the way catchment and water management activities are implemented to achieve the desired outcomes.

EU_MAG 1 and **EU_MAG 2** inform the Planning and Governance sub-element and **EU_MAG 5** the MEREI sub element highlighted in section 4 as the drivers behind the overall **C (minimum standards)** rating for EU. **EU_MAG 1** and **EU_MAG 2** present the greatest opportunity in the region to improve water stewardship overall in Established Urban areas.

These 2 MAGs deal with using an understanding of the *drivers, pressures, state of the receiving catchment, catchment processes, environmental values and water quality objectives* related to stormwater management standards that equally consider quality, quantity and flow and how these are applied to stormwater management planning supporting the instillation, retrofit and upgrade opportunities in the context of Water Sensitive Urban Design strategies and practices This is a challenging space in the Wet Tropics where the intensity and volume of normal seasonal rainfall events and the steep short catchment and sub catchments in the landscape that challenge WSUD principles and place a premium on a LGA's focus on managing quantity and flow in the interests of community safety.

None of the region's LGA undertake their storm water management from a *catchment based total water cycle management approach*. This requires complex and costly monitoring, modeling and evaluation to create a model that could overlay established urban footprints and be used to inform planning and decision making to retrofit or upgrade often multi-generational old infrastructure built at a time when WQ considerations were not a factor.

Undoing old infrastructure and replacing it with new infrastructure that considers WSUD principles is not only costly but often limited in scope by available space in these areas. It must be acknowledged that some of the regional LGAs have an issue with a stagnant or even declining rates base affecting decisions in budget planning, allocations and capacity. This is driven by in some cases dormant population growth and or the rising costs of supporting LGAs services and infrastructure upgrades.

The recent significant flood impacts across the Wet Tropics have in some LGAs initiated catchment level modeling to support the planning and design of post flood infrastructure reconstruction and upgrades to support future flood security. This new information presents an opportunity for LGA's to strengthen the consideration of water quality now they have the data available and build in WSUD principles where possible during these reconstructions and upgrades. There is an opportunity here for Federal and State disaster response funding to include funding support to the LGAs to enable a greater use of WSUD to support the actions and related outcomes identified for urban areas in the Reef 2050 Water Quality Improvement Plan.

With the new version of the WQIP being prepared for release in 2026, along with the funding to support it, there is an opportunity for Federal and State governments to consider how this may be used to support communities LGAs, Traditional Owners and regional communities to work together (co-management partnerships) to support the maintenance of green engineering solutions established for urban water quality improvement. During the workshops it was often cited that ongoing maintenance costs (mowing, weeds, excavation/cleaning) needed to support the performance of

green detention basins and other Stormwater Quality Improvement Devices (SQUIDs) are a significant factor guiding infrastructure planning decision making.

While **MAG 3** achieves a **B** ranking this is a soft B with the score for the region of 13 at the low end of the range. This MAG is about infrastructure management and maintenance relating to erosion and sediment control at work sites, maintenance practices in public spaces, the maintenance and management of SQUIDs and the use of WSUD principles to assist instillation, retrofitting and upgrades in accordance with stormwater management plans noted as being limited in how they are informed in the discussion above. Table 8 shows the soft B rating is shared by all but one of the LGAs in the region. This is largely driven by the low number of SQUIDs (larger structures designed with WQ improvement as the goal) to be found in the LGAs with numerous small Established Urban footprints. As a consequence, where they do occur there is a lack of formal monitoring or maintenance planning with this being handled by an "as needed' approach that likely suitable when managing a very small number of such assets.

The regions LGA's do **MAG 4** well universally supporting community groups engaged in natural resource management and being active long term participants in the Reef Guardian Councils | Reef Authority program.

MAG 5 is mostly about maintaining knowledge about the condition and performance of storm water management assets by using asset registers (what, where, condition) and how these are used to support maintenance scheduling. Table 8 shows that some LGAs do this better than others with those LGAs with a large area and small separated Established Urban footprints managing these assets on a generally "as needed" or "reactionary" basis. It would be worth exploring if there were efficiencies (time and costs) to be gained by employing a more strategic, risk-based process supported by asset mapping and condition monitoring

Table 8: *A comparison of the overall rating and score for each EU MAG within each LGA in 2021, 2023 and 2025.*

	Region			LGA 1			LGA 2			LGA 3			LGA 4			LGA 5			LGA 6			LGA 7			LGA 8		
Year	21	23	25	21	23	25	21	23	25	21	23	25	21	23	25	21	23	25	21	23	25	21	23	25	21	23	25
EU Overall	**9.1**	**10.4**	**11.7**	**4.3**	**8.8**	**9.9**	**10.8**	**12.4**	**11.7**	**12.8**	**10.2**	**13.2**	**5.1**	**8.0**	DNC	**9.3**	**9.4**	**10.2**	**13.7**	**13.7**	DNC	**5.7**	DNC	DNC	**10.7**	**10.1**	**13.7**
MAG 1	**10.9**	**9.7**	**11.8**	**10**	**10**	**10**	**11**	**12**	**15**	**15**	**12**	**12**	**4**	**11**	DNC	**11**	**5**	**10**	**15**	**13**	DNC	**11**	DNC	DNC	**10**	**5**	**12**
MAG 2	**6.5**	**10.3**	**9.8**	**1**	**11.5**	**6.5**	**7**	**12**	**7.5**	**8**	**14.5**	**14**	**1**	**5.5**	DNC	**6.5**	**7**	**10**	**16**	**15**	DNC	**5.5**	DNC	DNC	**7**	**6.5**	**11.5**
MAG 3	**9.6**	**12.3**	**13**	**2**	**9**	**12**	**12**	**16**	**12**	**15**	**8**	**13**	**8**	**2**	DNC	**8**	**14**	**13**	**14**	**15**	DNC	**9**	DNC	DNC	**9**	**12**	**15**
MAG 4	**10.1**	**12.4**	**13.7**	**8.5**	**10.5**	**12.8**	**12.3**	**12.5**	**14**	**11**	**11.5**	**14.3**	**5.5**	**9.3**	DNC	**17.8**	**16.3**	**12.7**	**12.8**	**11**	DNC	**1**	DNC	DNC	**12**	**15.5**	**14.3**
MAG 5	**8.1**	**7.1**	**10**	**0**	**3**	**8**	**11.5**	**9.5**	**10**	**15**	**5**	**12.5**	**7**	**2**	DNC	**3**	**4.5**	**5**	**10.5**	**14.5**	DNC	**2**	DNC	DNC	**15.5**	**11.5**	**14.5**

6.2 Developing Urban (DU) Management Activity Group (MAG) – comparing 2025 overall results for the region with previous years.

Table 9: *A comparison of the overall rating and score for each DU MAG in 2021, 2023 and 2025 together with the desired outcome of each of these MAGs for context.*

Developing Urban			
Year	2021	2023	2025
DU Overall	**12.8**	**13.6**	**14.5**
MAG 1	**12.1**	**14.4**	**13.9**
MAG 2	**15.7**	**16.4**	**17.1**
MAG 3	**9.4**	**9.5**	**13.1**
MAG 4	**14.9**	**14.4**	**15.7**
MAG 5	**10.2**	**13.2**	**12.3**
MAG 6	**14.4**	**13.5**	**14.7**
	**8 LGA Participating	**7 LGA Participating	**5 LGA Participating

** - Number of LGA completing UWSF that year

MAG 1 - Stormwater infrastructure planning and design is continually improving for more effective total water cycle management.

MAG 2 - The development assessment process promotes and supports improved water quality in terms of reducing sediment loads.

MAG 3 - Site based stormwater management planning is capable of delivering water quality improvement.

MAG 4 – Continuous improvement in stormwater management practices on development and construction sites, and reduced sediment loads reaching receiving waters

MAG 5 - Increased capacity to apply best practice ESC principles to deliver effective ESC measures on site and as part of ESC compliance auditing.

MAG 6 - Risk of severe erosion impacts reduced through site inspections at appropriate times and the monitoring and reporting of stormwater runoff treatment.

As well as maintaining a focus on bench marking LGA urban water quality stewardship performance, the DU component of the UWSF also has a strong focus on the role of the development industry, and its associated service providers and contractors, can play in supporting urban water quality stewardship.

The Wet Tropics Region LGAs are well supported in terms of information to support the planning and governance sub-element (**DU_MAG 1**, **DU_MAG 2**, **DU_MAG 3**) by the Regional Development Manual - Far North Queensland Regional Organisation of Councils . Version 9 of the manual was adopted (2024) by all of the LGAs participating in the 2025 UWSF review. It is the intention of the Development Manual to set out procedures and requirements that are consistent with the Planning Act and its supporting legislation and represent 'best practice' in accordance with the accepted current state and national standards for design and construction. Embedding the information from the development manual within an LGA's planning policies, supporting tools and within documented development standards ensures they are delivering **current best management practice** in their areas of influence and control in Developing Urban areas.

The regions LGA's deliver high standards (**3** at **B** and **2** at **A**) of urban water stewardship in the delivery of **DU_MAG 2**. This MAG relates to the requirement for developers to prepare erosion and sediment control ESC plans and site-based stormwater management plans SBSMPs and the standards these must meet to secure development permits; the qualifications of the people preparing these plans; the qualifications of LGA officers assessing these plans and how well they are being implimented and maintained at the development; and the use of enforcement measures for breaches of these development conditions

DU_MAG 1 relates to the policies and plans a LGA has in place associated with stormwater management with a particular focus on WSUD in both planning instruments and design standards employed in the LGA's own development and construction projects. It also considers the standards applied to (ESC) by the LGA on their own building, construction and maintenance works and that there is evidence this is supported by policies and procedures. DU_MAG 1 also includes consideration of the LGA's commitment to supporting Water Quality State Interests in local planning instruments.

DU_MAG 3 is largely focused on the developer and their service providers (contractors, planning and design engineers) and the standards they voluntarily adopt and technical expertise of the engineers' designing things such as erosion and sediment control plans (ESC) and (SBSMPs).

When reviewing Table 10 any underperformance by an LGA in these 2 MAGs is the result of a number of common factors. For DU_MAG 1 the existence of, and extent to which planning instruments address stormwater management while the other is the strength to which polices support the use of WSUD. As discussed above WSUD is a challenging space in the Wet Tropics where the intensity and volume of normal seasonal rainfall events and the steep short catchments and sub catchments in the landscape challenge a standardised application WSUD principles across a LGA and place a premium on a LGA's focus on managing quantity and flow in the interests of community safety.

Factors affecting an LGA's stewardship standards in DU_MAG 3 are the detail developers and their engineers provided in ESC and SBSMPs (preference is for site specific information on WQ risks, specific measures implimented to address this, an understanding of site hydrology applied to inform the choice of ESC and SBSMPs tools and inspection and maintenance plans).

DU-MAG 4 deals with the timing or the installation of ESC measures (in conjunction with initial civil works - best practice; compliance with approved ESC plans and SBSMPs and their maintenance; the severity of outcomes from noncompliance. The LGA's maintain high urban water stewardship standards for this MAG.

That there is room for stewardship improvement in **DU_MAG 5** has already been noted in section 4 with reference to the **'minimum standards' C** rating for Social Approaches (staff training, and stakeholder knowledge and application of Water Sensitive Urban Design (WSUD)) in the Developing Urban component across the region. LGA's cite capacity to support staff to attend training, the availability of training in regional areas as contributing factors. The other contributor is limited engagement/education driven by the LGAs and directed to the developers and community.

DU_MAG 6 relates to an LGA's inspection of ESC and SBSMPs at "appropriate times" during the development cycle. These appropriate times are generally identified as conditions in the development approval/permit. From Table 10 we see 2 of the LGA's are not operating at best practice standards. During the workshops a "lack of capacity", in terms of having sufficient staff (number and qualifications) to support the number of inspections and their timing during the development cycle, was cited as the reason driving this minimum standard stewardship performance. This is no doubt compounded in these LGAs with a large area and small separated Established Urban footprints. A possible solution may be to provide ESC training across departments so that maintenance/works, NRM, community services, planning, and engineering officers can work together to boost the capacity of the LGA to inspect ESC and SBSMP compliance as they move around the LGA through actual inspections or the collection of photography for review by internal knowledge experts??

Table 10: *A comparison of the overall rating and score for each DU MAG within each LGA in 2021, 2023 and 2025.*

	Region			LGA 1			LGA 2			LGA 3			LGA 4			LGA 5			LGA 6			LGA 7			LGA 8		
Year	21	23	25	21	23	25	21	23	25	21	23	25	21	23	25	21	23	25	21	23	25	21	23	25	21	23	25
DU Overall	12.8	13.6	14.5	10.9	14.2	14.1	14.2	17	17	9.9	12.5	12.6	8.1	7.8	DNC	15	14.4	12.9	14.1	15.1	DNC	15.8	DNC	DNC	14.4	14	15.7
MAG 1	12.1	14.4	13.9	12.5	17	10.3	13.3	16.8	16.8	12	14.5	14.5	10.5	9.8	DNC	13.5	15.3	14.3	10.5	14.0	DNC	13	DNC	DNC	11.8	13.8	13.5
MAG 2	15.7	16.4	17.1	13.3	18.3	16.8	14.8	19	20	15.3	14.8	14.8	12.5	11.5	DNC	19.3	17.5	15.8	17.1	16.5	DNC	16.8	DNC	DNC	16.8	17.3	18
MAG 3	9.4	9.5	13.1	6	14	12	10	13.5	16.5	6	7	7	6	3	DNC	10	9	15	11.9	10	DNC	13.5	DNC	DNC	12	10	15
MAG 4	14.9	14.4	15.7	13.5	15	13.5	17.5	20	18.5	14.5	14.5	14.5	11.5	8	DNC	16.5	15	16	15	16	DNC	15	DNC	DNC	16	12.5	16
MAG 5	10.2	13.2	12.3	0	10	13.5	10	14.5	12	6	14.5	14.5	8	8	DNC	14	12	6	16.7	18.5	DNC	16.7	DNC	DNC	14	15	15.5
MAG 6	14.4	13.5	14.7	20	11	18.5	19.8	18.5	18.5	5.5	10	10	0	6.5	DNC	17	17.8	10	20	15.5	DNC	20	DNC	DNC	15.8	15.3	16.3

6.3 Point Source (PS) Management Activity Group (MAG) – comparing 2025 overall results for the region with previous years.

Table 11: *A comparison of the overall rating and score for each PS MAG in 2021, 2023 and 2025 together with the desired outcome of each of these MAGs for context.*

Point Source			
Year	2021	2023	2025
PS Overall	**15.1**	**16.1**	**16.8**
MAG 1	**16.3**	**16.3**	**16.6**
MAG 2	**14.4**	**16**	**16.4**
MAG 3	**14.7**	**16.1**	**17.6**
MAG 4	**14.7**	**16.4**	**16.6**
MAG 5	**15.5**	**15.9**	**18.4**
	**8 LGA Participating	**7 LGA Participating	**5 LGA Participating

** - Number of LGA completing UWSF that year

MAG 1 - Fewer license exceedances and reduced nutrient loads released to water as a result of WSP actively pursuing strategies for reducing discharge, including: managing issues associated ageing STP infrastructure before they get critical; and maximising the use of recycling and beneficial reuse options.

MAG 2 - Potential for failure reduced through effective planning of sewerage network asset management and maintenance activities.

MAG 3 - The capacity of wastewater treatment plant assets with respect to expected population increases is managed by collaboration between the WSP with other parts of council and State Planning, and additional wet weather overflow nutrient loads linked to Infiltration and Illegal Connection (I&I) issues are well understood and mitigated.

MAG 4 – Innovative approaches and whole of catchment total water cycle management solutions to reduce nutrient loads from effective networks and collaborations. Reduced frequency of unplanned releases from effective staff capacity building and training. Further nutrient emission reductions are achieved through customer education and improved influent quality.

MAG 5 - Environmental impacts of releases reduced through effective monitoring, early detection and ongoing reporting, review and improvement.

Unlike the EU and DU areas **Point Source** (Wastewater management and treatment) is highly regulated with Treatment plants and network operating under standards set within State issued permits informed by Regulations and Acts. This is largely responsible for the high water quality stewardship standards maintained across the region by the MAGs sitting within this component.

This area is not without some risks to the capacity to maintain these standards. Ageing treatment and network infrastructure poses the most significant risk in 3 of the 5 LGA's that participated in 2025. Costs associated with replacement or major upgrades of ageing treatment plants are significant and a challenge to build into budget planning without the support of significant rates increases and external funding and financing. At least one of these LGAs is going down this path announcing their commitment to build new treatment facilities to service their largest population centers and the financial plan to support this.

All LGAs have a network inflow/infiltration detection and network relining program in place, **PS_MAG 2.7.** The issue here is not what might escape the network (pipes, manholes and pumps) but about the capacity for infiltration from storm water to overwhelm the network (hydraulic load) or treatment plants (volumes that can be managed). While LGAs are dealing with this in a planned and well managed way across the public spaces in our region's urban areas the capacity to investigate and then remedy damaged or illegal network infrastructure on private property is a significant challenge LGAs are yet to find solutions for. The issue is property rights and the legal complexities facing LGAs to be able to legally enter private property.

Perhaps the most immediate opportunity to address the risk to water quality from the Point Source component is to be found in the second action that sits under **PS_MAG 2**

- **PS_MAG 2.8** - *Ensure that a risk-based sewerage network maintenance program is established as a priority.*

Such a program would support proactive maintenance over reactive maintenance reducing the risk of poor WQ outcomes from aging infrastructure and prolonging the life of new infrastructure. Both this program and the risk-based sewerage network maintenance programs (infiltration detection and relining) would get the best outcomes long-term forward budget allocations that support financial sustainability for these programs.

Table 12: *A comparison of the overall rating and score for each PS MAG within each LGA in 2021, 2023 and 2025.*

	Region			LGA 1			LGA 2			LGA 3			LGA 4			LGA 5			LGA 6			LGA 7			LGA 8		
Year	21	23	25	21	23	25	21	23	25	21	23	25	21	23	25	21	23	25	21	23	25	21	23	25	21	23	25
PS Overall	**15.1**	**16.1**	**16.8**	**15.7**	**15.8**	**16**	**19.6**	**20**	**18**	**15.6**	**16.4**	**16**	**10.6**	**12.1**	DNC	**15.4**	**15.8**	**15**	**12.8**	**14.7**	DNC	**13.1**	DNC	DNC	**18.3**	**18.2**	**19**
MAG 1	**16.3**	**16.3**	**16.6**	**15.3**	**17**	**16**	**20**	**20**	**16**	**16**	**16**	**16**	**10.5**	**12.3**	DNC	**15.8**	**16.5**	**16**	**14.2**	**15.8**	DNC	**20**	DNC	DNC	**18.8**	**16.5**	**19**
MAG 2	**14.4**	**16**	**16.4**	**15**	**15**	**14**	**20**	**20**	**20**	**15**	**15**	**15**	**10**	**13.5**	DNC	**15**	**15**	**14**	**10**	**15**	DNC	**10**	DNC	DNC	**20**	**18.5**	**19**
MAG 3	**14.7**	**16.1**	**17.6**	**15**	**18**	**15**	**20**	**20**	**20**	**12.5**	**15**	**15**	**10**	**10**	DNC	**15**	**17.5**	**18**	**12.5**	**12.5**	DNC	**15**	DNC	DNC	**17.5**	**20**	**20**
MAG 4	**14.7**	**16.4**	**16.6**	**13**	**15**	**18**	**17.8**	**20**	**18**	**16**	**16**	**16**	**9.5**	**13**	DNC	**17**	**15**	**13**	**15**	**16**	DNC	**12.5**	DNC	DNC	**17**	**19.5**	**18**
MAG 5	**15.5**	**15.9**	**18.4**	**20**	**14**	**16**	**20**	**20**	**18**	**18.5**	**20**	**20**	**13**	**11.5**	DNC	**14**	**15**	**18**	**12.5**	**14**	DNC	**8**	DNC	DNC	**18**	**16.5**	**19**

7. More Information

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