



Australian Government

Great Barrier Reef  
Marine Park Authority



Queensland  
Government

REEF JOINT FIELD MANAGEMENT PROGRAM

# ANNUAL REPORT SUMMARY

# EXECUTIVE SUMMARY

**The Great Barrier Reef World Heritage Area is one of the most complex ecosystems on the planet and an integral part of Australia's identity. It is home to some of the world's most iconic plant and animal species, some of which are found nowhere else on earth. With more than 2,900 individual reefs and 1,050 islands spread across 348,000 square kilometres, a world-class field management program is crucial for protecting Australia's greatest natural wonder for future generations.**

The Australian and Queensland governments' Reef Joint Field Management Program (the Program) operates in the Commonwealth Great Barrier Reef Marine Park and the state Great Barrier Reef Coast Marine Park, as well as Commonwealth islands and state island protected areas. The Program is delivered jointly by the Great Barrier Reef Marine Park Authority (Reef Authority) and the Queensland Parks and Wildlife Service (QPWS), part of the Department of Environment, Science and Innovation (DESI).

The Program provides a constant, in-park presence delivering conservation actions, checking for change, responding to incidents, welcoming people and upholding compliance.

Our field management activities combat threats and build resilience of reefs, islands and species, so all Australians and international visitors can enjoy the Great Barrier Reef World Heritage Area (World Heritage Area) now and in the future.

Patrolling these waters and islands, the Program delivers a range of crucial activities. These include monitoring and maintaining internationally important turtle and seabird breeding sites, eliminating island pests, and managing walking tracks, camping areas and lookouts.

In-water activities include maintaining a network of reef protection markers and moorings, and surveying reefs to help us understand and manage the impacts of cyclones, crown-of-thorns starfish and bleaching.

Field management staff interact regularly with stakeholders and the broader community, providing information to park users and ensuring they visit responsibly and abide by the rules that protect this iconic place.

The Program acknowledges the continuing management and custodianship of the World Heritage Area by First Nations peoples and works with Traditional Owners to get them back on Country and engaged in Land and Sea Country management.

Field management activities are at the heart of Australia's obligation to protect the World Heritage Area. First agreed in 1979 by the (then) Prime Minister Malcolm Fraser and Queensland Premier Joh Bjelke Petersen, the 'Emerald Agreement' established the foundation for joint management of the Great Barrier Reef (the Reef). The current *Great Barrier Reef Intergovernmental Agreement 2015* cements the Australian and Queensland governments' commitments to long-term protection of the World Heritage Area and the Program. Across four decades, the Program has grown from a small handful of officers managing the 12,000 km<sup>2</sup> Capricornia section, to 166 officers managing 348,000 km<sup>2</sup> of marine parks, 470 island national parks and Commonwealth islands.

The Program has undergone a significant expansion and transformation, which commenced in 2017–18 following the Australian and Queensland governments' commitments to additional funding. Expansion was staged to enable considered and sustained growth from a joint base funding commitment of around \$17 million to over \$38 million by 2021–22 and an increase in staff from 115 to 194 people. While 2021–22 was the fifth and final year of the expansion, COVID-19 and high staff turnover had a significant impact on the Program's planned expansion. The Program's expansion therefore extended into 2022–23 to attain the full staffing and capability envisaged.

The Program is now delivering against all 12 key investment areas identified in the *Periodic Review Report 2017* including:

- maintaining essential field management capabilities
- a safe, fit-for-purpose vessel fleet
- island restoration and supporting reef restoration
- tourism and recreation infrastructure
- enhancing compliance through vessel tracking
- enhancing compliance through increased in-park presence, public contact and education
- incident response and recovery
- technology and data management
- collaborating with First Nations peoples
- collaborating with interest groups
- streamlining permissions
- increasing island protection.

This document summarises the Program's achievements in delivering the *Annual Business Plan 2022–23* and complements the Program's *Annual Report 2022–23*.

Some statistics in this annual report summary may differ from that provided in the Reef Authority's *Corporate Report 2022–23* and DESI's *Annual Report 2022–23* due to differences in timing of data extraction and validation.



The *Island Guardian* barge is the latest addition to the fleet of our world-class field management program dedicated to protecting the Reef.  
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Strategic investment in action: *Barcoo*, our \$1.83M patrol vessel, in Keppel Bay. As one of the two new additions, our 21-vessel fleet ensures safe and efficient field operations, supported by a robust financial foundation.  
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## 2022–23 FINANCE SUMMARY

**The Australian and Queensland governments allocated funding of \$42,315,717 through the *Reef Joint Field Management Program Annual Business Plan 2022–23* and carryover funds to deliver field activities across the World Heritage Area.**

At the start of 2022–23, the Reef Authority held funds of \$1,633,146 from the previous year's carryover and QPWS held funds of \$2,027,379.

The Australian and Queensland governments contributed appropriation funding of \$18,990,069 and \$19,218,069 respectively in 2022–23. DESI also contributed \$9,000 in discretionary funding towards *Reef Resilience* vessel operations.

Additional revenue of \$438,054 was received by the Program in 2022–23, including \$260,000 from the Reef Authority for additional crown-of-thorns starfish surveys, \$163,420 from sale of vessels and equipment, \$14,634 from commercial activities in protected areas and rent received for Dungeness premises.

The Program's expenditure of \$39,661,369 was within 6.7% of the budget allocation of \$42,315,717. This is an improvement from the 8.7% in 2021–22.

At the end of 2022–23, QPWS held funds of \$431,118 and the Reef Authority held funds of \$2,223,230 on behalf of the Program.

The Program also received funding from other sources that contributed to field delivery in 2022–23, including:

- offset funding for Australian and Queensland government approvals associated with Curtis Island Liquid Natural Gas projects
- Australian and Queensland government funding for restoration of the Raine Island beacon
- Australian Government funding for the Reef Islands Restoration projects and the Great Barrier Reef Green Turtle Research Project
- Queensland Government funding for Green Island Recreation Area Management, the Reef Management Technology Initiative and joint management of national parks (Cape York Peninsula Aboriginal Land)
- Australian Government funding for summer Reef health and RIMReP knowledge gaps
- Queensland Government funding for Whitsunday Island walking tracks, Island Ark acquisitions and Reef Trails
- Queensland and Australian government funding for *Magnetic Island Master Plan 2019* projects.

# OUR ACHIEVEMENTS



## DELIVERING CONSERVATION ACTIONS



**SAVING FLATBACK TURTLES**  
with eradication of deer from  
**Wild Duck Island** on track for 2024



**PROTECTING HERITAGE** with restoration  
of the **Raine Island beacon** completed with  
**Traditional Owners**



**PROTECTING CORAL AND  
SEAGRASS** 321 moorings and  
293 reef protection markers inspected  
and maintained

### EXPANDING ISLAND PROTECTION

with 3 leasehold properties purchased to  
expand on the protected area estate



**PROTECTING KEY ISLAND  
VALUES** with 4 fire strategies and  
3 pest strategies developed

### REEF REHABILITATION

including a **planting blitz** of  
1,100 corals across the Reef



## RESPONDING TO INCIDENTS



**UNDERSTANDING REEF THREATS**  
pre-summer workshop assessed the risk  
of coral bleaching and cyclones

### MONITORING REEF THREATS

maintaining situational awareness of  
environmental and reef health conditions  
and forecasting, with regular checks  
of conditions, forecasts, modelling and reef health  
reporting, with **no mass coral bleaching events**  
**detected over the 2022–23 summer**



**PROTECTING ENVIRONMENTS**  
mitigating risk associated with  
152 maritime events, including 81  
groundings, sinkings, abandonment of vessels,  
up from 117 events in 2021–22



## CHECKING FOR CHANGE



**MONITORING REEF HEALTH**  
1,122 in-water surveys across 169 reefs

### ENSURING EARLY DETECTION

3,118 manta tow surveys that monitor  
reefs for **crown-of-thorns starfish**,  
covering 618km of reef-margin across  
the World Heritage Area



### KEEPING TABS ON SEABIRDS

212 bird surveys at 135 locations identified  
92 species, including 22 shorebird and  
26 seabird species



### UNDERSTANDING POPULATIONS

supported or delivered monitoring at **90% of**  
**priority marine turtle nesting and foraging**  
**index sites** within the World Heritage Area  
— **seven nesting index sites** (Raine, Wild Duck, Milman,  
Heron, Lady Musgrave, Curtis and Peak islands) and **two**  
**foraging sites** (Port Curtis and Howick Reefs)



**WATCHING ISLANDS** health checks on 45  
islands that haven't been surveyed previously with  
a total of 159 **Island Watch** surveys completed



### FILLING KNOWLEDGE GAPS

with surveys completed to **improve the**  
**vegetation mapping of 70 national park islands**



## WELCOMING PEOPLE



**ENGAGING WITH WORLD HERITAGE  
AREA VISITORS** 3,045 contacts with park  
users while on patrol

### ENCOURAGING STEWARDSHIP

**volunteers and Indigenous Land and Sea  
Rangers** responded to **74% of marine**  
**strandings, down from 84% in 2021–22**



### ENABLING SUSTAINABLE USE

decisions made on **285 joint marine parks**  
**permit applications**, 21 state marine parks  
permit applications and 79 national park  
permit applications

### COLLABORATING WITH VOLUNTEERS

supporting **22 volunteers** assisting with **weed**  
**control across protected islands** (10 at Heron  
and Lady Musgrave islands; 12 at Magnetic  
Island), with **2,000 volunteer work hours**  
**delivered**



### INFORMING THE COMMUNITY

111 social media posts, 22 media releases

### CREATING NEW VISITOR OPPORTUNITIES

**Curtis Island Turtle Street** campground  
and **Lady Musgrave Island** visitor amenities  
**upgraded**, visitor amenities upgraded and **new**  
**walking track at Orpheus Island** completed



## UPHOLDING COMPLIANCE



**PROTECTING YOUR PATCH**  
park users provided **61 compliance incident**  
**reports of illegal activity**

### PROTECTING THE REEF

**AND ISLANDS** 1,110 dedicated  
**compliance days** to deter illegal  
activity: **994 vessel, 32 land** and  
**84 aerials**



### UNDERSTANDING REEF USE

**74% of dedicated compliance days**  
undertaken during **high-risk illegal**  
**recreational fishing periods**



### PROMOTING INDUSTRY

**STEWARDSHIP** over 1,000  
**commercial fisheries vessels**  
**tracked**, leading to **44 offences**  
**prosecuted** and **66 advisory**  
**letters sent**

### IMPOSING CONSEQUENCES FOR ENVIRONMENTAL HARM

**71 court prosecutions**, **49 infringement**  
**notices**, **19 caution notices** and  
**540 advisory letters**



## WORKING WITH FIRST NATIONS PEOPLE



### MANAGING COUNTRY TOGETHER

First Nations peoples spent  
**948 person-days** on Program vessels,  
431 from outside the Program and  
527 from within

### RESPECTING COUNTRY

**Cultural awareness videos** produced for the  
**Manduburra Aboriginal Corporation** and  
**Darumbal People Aboriginal Corporation**  
**Registered Native Title Body** for Program staff  
to watch before visiting Country



**SHARING WORKPLACES** creating  
opportunities for Traditional Owners through  
four temporary ranger placement programs  
developed between QPWS and Mandubarra,  
Gimuy Walubara Yidinji, Darumbal and  
Woppaburra Traditional Owner groups and an additional  
three embedded Wulgurukaba rangers working with  
QPWS at Yunbenun (Magnetic Island)



### BUILDING CAPACITY

**28 Indigenous rangers** from **14 First**  
**Nations groups** completed **diver training**

### STRENGTHENING PARTNERSHIPS

**16 fee-for-service** arrangements with  
**Indigenous ranger groups**



### ENCOURAGING COMPLIANCE

**AWARENESS** 86 of the 1,110 days  
of **dedicated compliance patrols** were  
conducted with **Indigenous Compliance**  
**Rangers** that are **external to the Program**



Preserving paradise: Aerial view of Lady Elliot Island, a testament to collective conservation efforts, enhancing native vegetation, supporting coastal birds and safeguarding marine turtles. In 2022–23, over 17,000 m<sup>2</sup> of native species were planted, promoting resilience against climate change. © Reef Authority

# 2022–2023 HIGHLIGHTS



## DELIVERING CONSERVATION ACTIONS

The Program delivers conservation actions to protect and recover important natural and heritage values, including coral reefs, seagrass meadows, mangrove forests, coral cays, continental islands, wetlands, threatened species and heritage values.

### GREAT BARRIER REEF ISLAND INTERVENTION AND REHABILITATION

#### Lady Elliot Island

The rehabilitation of Lady Elliot Island is increasing the island’s resilience to the adverse impacts of climate change and other ecosystem stressors by enhancing the native cay vegetation communities, maximising the breeding opportunities for important coastal birds and marine turtle species, and minimising the impacts of introduced flora and fauna. The rehabilitation program is guided by the Lady Elliot Island Ecosystem Resilience Plan (LEIERP) and is undertaken by the Lady Elliot Island Eco Resort and volunteers in partnership with the Program and the Great Barrier Reef Foundation.

In 2022–23, the resort and volunteers removed weeds, including large areas of lantana, and planted over 17,000 m<sup>2</sup> of native cay species propagated in the island’s nursery, including *Pisonia* forest, native elm, native mulberry and sandpaper figs.

Post-planting care, including the establishment of watering systems and ongoing weed management, was undertaken to maintain the revegetated areas. Vegetation monitoring and bio condition assessments were also undertaken in early September 2022 and indicate an overall increase in species and genetic diversity on the island. Weed management and biosecurity have been highlighted as areas that require ongoing management attention.

In 2023, the Reef Authority received \$1.9 million Reef Trust funding to continue the revegetation program for the next five years. A review of the implementation of the LEIERP will be undertaken by an independent consultant to assess performance against objectives and provide recommendations that will set the direction for the development of a work program for the next five years of the rehabilitation program.



Rangers triumph: Our successful long-term mouse eradication program on North West Island (Capricornia Cays National Park) used innovative tools like Black Trakka trapping tunnels, helping protect vital seabird rookeries.  
© Queensland Government

## Wild Duck Island

Wild Duck Island, located to the north of Shoalwater Bay, supports the largest and best protected nesting rookery for the eastern Australian stock of the flatback turtle. Prior to 2021, the island had a small block of protected area estate on the western and eastern ends of the island, separated by a 118 ha leasehold block with an abandoned eco-resort (built in the 1980s).

The Queensland Government purchased the leasehold block as part of the Island Arks election commitment, with Reef Trust Curtis Island Indirect Offsets funds being committed to the demolition and rehabilitation of the site. In 2022–23 QPWS contracted specialist demolition company Demex to undertake the demolition and cleanup of the old 20 bungalow eco-resort. In August 2023, over 900 tonne of material was removed and disposed of. In 2023–24 work will begin in collaboration with Traditional Owners to rehabilitate the site and return the area to a more natural state.

## North West Island mice eradication

A meticulous long-term mouse eradication program using a helicopter, Black Trakka trapping tunnels and peanut butter on North West Island in the Capricornia Cays National Park was a success. The eradication program was part of the ongoing weed and feral animal pest strategy for islands in this national park.

In May 2020, QPWS and Gidarjil Land and Sea Country Rangers surveyed mouse activity in strategic locations across the island by using the Black Trakka trapping tunnels. One hundred and twenty traps were deployed for one night and when rangers examined the traps the next day mouse prints were found in 119 of the traps.

North West Island is the most significant breeding island for wedge-tailed shearwaters and black noddies on the east coast of Australia. Surveys conducted between 2013 and 2016 indicated the numbers of wedge-tailed shearwaters using the Capricornia Cays to breed had declined by approximately 40%. The population of common house mice on North West Island posed a significant threat to several seabird rookeries, as they eat the eggs and can also prey on the hatchlings.

In 2020, utilising Reef Trust Indirect Offsets funding through the Program, a helicopter and a bait dispenser were used to drop rodent bait across the island. Rangers used the trapping tunnels to conduct five post-treatment mice surveys from September 2020 to August 2022. There were no signs of mice in those surveys, which indicates successful eradication on North West Island. The biosecurity strategy for the Capricornia Cays National Park continues to be implemented, including the QPWS Be Pest Free program for park visitors.

## Restoration of Reef islands

The Program is facilitating habitat improvement at highly degraded islands, *Pisonia grandis* habitats at northern islands, or both. Achievements in 2022–23 include securing in-principal agreement from relevant Traditional Owners, identification of a service delivery model and release of an Approach to Market for provision of threat assessment and management strategy development at priority islands.



Conserving heritage: Restoring the Raine Island beacon, showcases our commitment to safeguarding not only natural values but also historic and cultural values. Guided by values, we prioritise conservation efforts, including the acquisitions of high conservation value islands.  
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## INCREASING PROTECTION OF GREAT BARRIER REEF ISLANDS

The Island Arks project aims to increase the protection of the islands in the World Heritage Area by facilitating the acquisition of high conservation value islands (and parts thereof) for addition to the protected area estate. Priority islands were identified through a comprehensive process, involving desktop analysis, expert input, regional workshops, site visits, ecological assessment and evaluation. The recommended priority islands were then endorsed to progress for acquisition. Subsequent land tenure dealings and dedication actions are in the process of being implemented.

The acquisition of high conservation value islands across various tenures has proceeded in 2022–23. As a result of the project, acquisitions include:

- three leasehold properties purchased: Wild Duck Island (former tourism lease purchased in 2021), St Bees Island (former residential lease) and Long Island Broad Sound (former grazing lease). Total area approximately 3,620 ha.
- The closure of nine esplanade road reserves for addition into adjacent national park. Total area approximately 1,050 ha.

- 120 unallocated state land (USL) parcels and one Land Act Reserve for addition to the national park estate. Total area approximately 850 ha.
- Additional priority islands and properties are pending final negotiations and transfers, which will likely be completed by 2024–25.

These acquisitions were identified as containing significant conservation values and their dedication as protected area estate, under the *Nature Conservation Act 1992* (Qld), will ensure their values are protected into the future. Demolition works and rehabilitation planning have commenced at various sites (Wild Duck, St Bees and Collins islands) to restore values in disturbed locations and to promote ecological resilience of the species, communities and natural processes that the islands support.

The expansion of protected estate in the World Heritage Area afforded by these acquisitions will provide improved conservation outcomes, visitor experiences and opportunities to address Traditional Owner tenure and land management aspirations into the future.



Stars align: Field management staff and partners proudly display 'reef stars', vital tools for local-scale reef rehabilitation. The success of the Yarul Dhingiga project in Keppel Bay underscores our ongoing commitment to reef protection in collaboration with Traditional Owners, partners and stakeholders. © Reef Authority

## REEF PROTECTION AND REHABILITATION

The Program continues to develop its understanding and engagement in local scale reef rehabilitation actions. As of mid-June 2023, at least 16 projects have been either directly delivered or supported in some way. The Program is ensuring it has the trained staff, tools and technical and administrative support to deliver reef rehabilitation actions and support others as required (a key *Business Strategy 2023–2027* action).

Project highlights in 2022–2023 include:

### Yarul Dhingiga

This reef rehabilitation project in Keppel Bay was installed in October 2022 with strong support from the Woppaburra Traditional Owners, local tourism operators and Mars Incorporated. A total of three separate sites were chosen. This included Humpy Island where, for the first time, Mars Assisted Reef Restoration System (MARRS) Reef Stars were installed directly over the top of rubble completely covered in macroalgae. Early results are very encouraging with the coral at all three sites growing strongly.

### Green Island reef rehabilitation

Monitoring of coral and fish for this project (first installed in November 2020) was undertaken in December 2022. Coral size and fish diversity continues to increase. The site is regularly accessed by tourism partners showing visitors reef rehabilitation activities.

### Project Reefresh

This rehabilitation project at Bait Reef was first installed in October 2021. Monitoring in mid-2022 and February 2023 showed significant coral mortality (>50%) from the effects of high-water temperatures in early 2022 and rapidly expanding soft coral populations. A plan to attach more live coral and continue to monitor the site and its response to local environmental factors is set for the 2023–24 financial year.

### Coralclip® Standard Operating Procedure and training video

Using a site impacted by a vessel strike off Cape Tribulation, a small-scale rehabilitation project was implemented in March 2023 to provide training for Program staff and develop a Standard Operating Procedure and training video for the future use of Coralclip®. This training package and increased access to supplies of Coralclip® will be implemented in the 2023–24 financial year.

### Manta Ray Bay bommies

The final round of monitoring of the relocated coral bommies occurred in May 2023. Natural coral recruitment continues with 457 individual corals recorded in 2023 (up from 17 in 2018). Fish species have increased from 20 recorded in 2018 to 57 recorded in 2023. Communication material is being developed to help visitors understand how coral recovery can occur and how the Program is involved in this.



Seabird surveillance: Two rangers equipped with seabird monitoring gear. Our ongoing bird surveys, spanning 135 locations in 2022–23, play a crucial role in identifying changes and addressing threats, enabling appropriate management actions.  
© Queensland Government

## CHECKING FOR CHANGE

The Program checks for change on islands and in the water to monitor island and reef condition and the extent of existing or emerging threats. Checking for change identifies impacts from the main threats to the World Heritage Area and enables appropriate management actions to be implemented.

### RIMREP KNOWLEDGE GAPS

The *Priority Monitoring Gaps Prospectus: Reef 2050 Integrated Monitoring and Reporting Program 2021* (RIMReP) identified 11 interrelated monitoring gaps to be prioritised for further investment. Filling these knowledge gaps will enable management actions to be targeted at maximising reef resilience. The Program was selected to lead three work packs to fill knowledge gaps in seabird monitoring, island habitat monitoring and biosecurity monitoring tools. The Program will also collaborate on inshore dolphin monitoring.

In 2021–22, the Program undertook extensive project planning and procurement for the work packs. In 2022–23, the first full year of implementation of the three RIMReP projects was undertaken. Activities brought together technical experts from a range of fields to improve and update the knowledge of fauna and flora in the national park islands and test new methods for monitoring change. Surveys were conducted to improve the vegetation mapping of 70 national park islands and fauna surveys which allowed for updated lists of species on Flinders Island and Koonie (North Keppel Island).

Methods for mapping cays using drones were developed and trialled on islands in the World Heritage Area, providing baseline data for monitoring short and long-term change to the geomorphology of these islands. Hundreds of images of rodents and other similar sized animals were collected using the automated CritterPic units. These images are being used to train artificial intelligence software to differentiate between native and non-native species.

### SEABIRD AND SHOREBIRD MONITORING

The Program undertook 212 bird surveys at 135 locations in 2022–23, the eighth year of monitoring under the *Coastal Bird Monitoring and Information Strategy (Seabirds 2015–2020)* and the fifth year of reporting on shorebird surveys under the *Coastal Bird Monitoring and Information Strategy 2011*. These surveys identified 92 different species, including all 22 shorebirds and 26 seabirds. Internationally significant numbers (greater than 1% of global and or eastern Asian-Australasian flyway) of Australian pied oystercatcher and vulnerable Western Alaskan bar-tailed godwits were recorded.

Throughout 2022–23, the Program provided technical and financial support to partners undertaking bird monitoring activities across the World Heritage Area including:

- the fourth year contracting Yirrganydji rangers to lead monthly surveys at Michaelmas Cay, an essential site for annual monitoring
- volunteers undertaking pied imperial-pigeon surveys at North Island, with two trips including an essential seabird survey and five monthly surveys on Low Isles
- Larc Tours providing little tern nesting data for Bustard Bay.

Assessing the efficacy of acoustic sensors in estimating population size, breeding effort and breeding success of wedge-tailed shearwaters and black noddies on North West Island has continued in 2022–23. The two-year project is being delivered by QPWS, Queensland Herbarium and Gidarjil Land and Sea Rangers and will also assess other methods of seabird monitoring including mark-recapture, remote camera studies and burrow counts. The project will continue and be finalised in 2023–24 (Reef Trust Indirect Offsets funding).

Reef response: A diver surveys a reef post-cyclone, part of our proactive response to incidents and commitment to minimising harm to the World Heritage Area. Our ongoing Reef health assessments, equip us to understand, communicate and respond to impacts accurately and swiftly.  
© Reef Authority



## RESPONDING TO INCIDENTS

**Field management staff respond to incidents to minimise harm to the World Heritage Area's outstanding universal value, including vessel groundings and sinkings, pollution spills, wildfires, pest incursions, stranded marine animals and severe weather events.**

### FUTURE CORAL BLEACHING AND SUMMER REEF HEALTH ASSESSMENT

Throughout 2022–23, regular checks of Reef health condition, forecasts, modelling and Reef health reporting were undertaken. During the higher risk months (November to April), in-depth weekly Reef health updates were provided to the Reef Authority, DESI staff and key partners. A modified high-level message version of the Reef health update was also published on the Reef health page of the Reef Authority website. No lasting thermal heat stress was observed over the prior 12 months, the newly observed El Nino event is likely to increase the chances of warmer sea temperatures in the 2023–24 summer.

In late November 2022, the Program hosted the annual pre-summer workshop as part of the coordinated approach to protecting the Reef over the higher-risk summer period. Over 55 attendees including marine managers, climate experts, Traditional Owners, researchers and industry representatives were provided with updates on current conditions and the latest environmental forecast modelling to understand the likely summer outlook. They also discussed the coordinated approach to monitoring and managing the Reef over the summer months ahead. It was clear from the workshop that the Program hasn't been in a better position to understand what's happening across the Reef, with an extensive observer network reporting near-real time observations. This collective information enables the Program to better respond to impacts and communicate what's happening in an accurate and timely way.

A key focus of the Reef health team is communication, including discussions around a new framework for describing marine heatwave events and the development

of a new explainer video on how we monitor and describe coral bleaching events. This will be complemented with new additions on the Reef Authority's website, providing information on how coral bleaching works and how we assess reef health.

### MARITIME INCIDENTS

In 2022–23, the Program assessed the risks associated with 152 maritime events in the World Heritage Area. This was a noticeable increase in maritime events, up from 117 events in 2021–22, 65 in 2020–21, 94 in 2019–20, 89 in 2018–19 and 101 in 2017–18.

These events had the potential to cause environmental damage and included 81 grounded, sunk or abandoned vessels, 59 of which were removed while 22 remained. Assessment resulted in three official Order to Remove notices and in-field response to 14 incidents. The Program removed three wrecked or sunken vessels from the Cooktown area, Thorpe Island and Palm Island. Two removals included consultations with relevant Traditional Owner groups and the third involved seeking a tender from a Supply Nation listed corporation during the salvage Approach to Market.

The Program participated in training opportunities provided through the *National Plan for Maritime Environmental Emergencies 2020* and Queensland pollution response preparedness, with three Maritime Safety Queensland course completions, four Australian Maritime Safety Authority (AMSA) course completions, 20 maritime incident response course completions, three staff participating in the Kunawarra national maritime pollution exercise and three in the Environment Science and Technical workshop.



Embracing the Munamudanamy experience: A hiker on Hinchinbrook Island takes in the breathtaking scenery on the Thorsborne Trail—Queensland's premier multi-day walk and a key focus of the island's visitor management project, enhancing ecologically sustainable use.  
© Queensland Government



## WELCOMING PEOPLE

The Program welcomes people to appreciate, respect and enjoy the World Heritage Area by improving community understanding of values, threats and responsible behaviours, while also providing visitor facilities to enable ecologically sustainable use. The Program welcomes the involvement of industry and the broader community the protection and recovery of reef, islands and species.

### HINCHINBROOK ISLAND (MUNAMUDANAMY) VISITOR MANAGEMENT PROJECT

The *Hinchinbrook Island National Park Management Plan 2017* and subsequent visitor strategy, outline a range of strategic management directions and management objectives to guide future visitor management within the national park. The Munamudanamy (Hinchinbrook Island) working group has been established with Bandjin and Girramay Traditional Owners to deliver visitor management improvements over three years with \$3 million funding in total. A key focus of the project will be the Thorsborne Trail, Queensland's premier multi-day walk, providing a remote wilderness experience over 32 km of walking track. In 2022–23, the Munamudanamy working group was formally expanded to include Great Barrier Reef Foundation to collaborate on the current Munamudanamy Reef Islands Initiative.

Throughout 2022–23, the Munamudanamy working group undertook a range of site visits to discuss the design process and ongoing management of the Thorsborne Trail, and Munamudanamy as a whole. This included a cultural camp with Bandjin and Girramay Traditional Owners which was completed over one week to discuss the various projects with the wider group and to provide an update on the working group's progress. The camp involved a working group meeting, site visits and cultural activities, and was funded in partnership with Great Barrier Reef Foundation. *Reef Ranger* and *Island Guardian* provided vessel support with assistance from the Giringun vessel *Gunnundali*.

Project planning has progressed in 2022–23 with a focus on the main Thorsborne Trail campgrounds (Little Ramsay, Zoe Bay and Mulligan Falls), as well as other key visitor sites along the trail. This has included the completion of topographic surveys, environmental investigations and concept designs for each of the sites.

### TRANSFORMING PERMISSIONS MANAGEMENT, POLICIES AND LEGISLATION

The streamlining permissions key investment area commenced in 2018–19 to enable a strategic shift in permissions management to review the risk profile and move effort away from lower risk activities towards higher risk activities, delivering efficiencies to the joint permissions system. The first priority to develop 10 routine permissions was completed in 2020–21. The second priority to review over 1,000 permit conditions was completed in 2022–23.

Further to above, there is a need for significant review and development of complementary marine parks and island policies, plans and legislation to enable a reduction in permit conditions to a level that allows for future pay and print functionality and the delivery of true streamlined permits as envisaged for this key investment area. This work will continue to progress in 2023–24 with an additional position allocated to contribute to the state policy, planning and legislation work.

Regulation amendments will also be progressed in 2023–24 to move identified content within the permit conditions to a more appropriate legislative tool. The Program will advance systems-based improvements to enhance existing technology that will enable a fully automated joint permitting system with pay and print capability through the Reef Management System. The systems work will support the third priority, a single Great Barrier Reef marine and island national parks permit, which is currently on-hold pending policy, planning and legislation work. This priority project also contributes to implementation of the Reef Authority's Policy and Planning Strategy Roadmap.

To be ready for the above, in 2022–23 a centralised repository of prospective future legislative amendments has been developed including an internal guideline on how



Connecting with community:  
A ranger aboard one the  
Program's vessels, symbolising  
our commitment to effective  
engagement. With 2,599 public  
contacts in 2022–23, our field staff  
play a vital role in encouraging  
safe, compliant and responsible  
behaviours.  
© Queensland Government

this repository is managed. This work will help line areas to coordinate legislative amendment packages in cases where it may be appropriate to progress multiple legislative amendment proposals more efficiently as a single package. Potential legislative amendments identified through the condition review have been included within this repository.

## COMMUNICATION AND ENGAGEMENT

Field staff play a crucial role as the public face of the Australian and Queensland governments' management of the World Heritage Area. Effective communication and engagement with park users are a vital part of encouraging safe, responsible and compliant behaviours, ultimately contributing to the protection of the Reef.

In the 2022–23, the Program recorded 2,599 public contacts, an increase from the previous year's 2,209. During these interactions, field management staff directly engage with park users while patrolling the World Heritage Area. Conversations include verifying that users are aware of the rules and have access to zoning information. Of the 2,599 users, 91% had maps available—69% used chart plotters, 26% used printed maps and 43% used the Eye on the Reef zoning app (note that some visitors employed multiple methods, resulting in a total exceeding 100%). The use of the app has continued to increase, reaching 20% in 2020–21, 37% in 2021–22 and now 43% in 2022–23.

In-field engagement was complemented by regular communications via various channels and tools. Guided by the Program's five-year communication strategy, these activities aim to inform and educate the public about the Reef's values, threats and responsible behaviours, as well as management actions being undertaken by the Program to protect the Reef. Furthermore, the strategy seeks to

build appreciation, inspire visitation and encourage positive behaviours in relation to the World Heritage Area, while instilling confidence in the Program's work. This in turn fosters advocacy for World Heritage Area, its management and ongoing conservation efforts.

In 2022–23, prioritising digital communications, the Program disseminated 111 social media posts, 22 media releases and numerous e-newsletter stories about various Reef destinations, values, threats, incidents, new or upgraded visitor infrastructure, positive visitor behaviours and significant Program achievements.

Behaviour change research carried out in 2022–23 informed recreational fishing communications and the ongoing 'Know Your Zone' campaign aimed at enhancing voluntary compliance with zoning rules and responsible fishing behaviours in marine parks. The incorporation of credible fishing personalities in various communications proved particularly successful, with 936 Eye on the Reef zoning app installations on the day of a particular fishing show episode.

Continuing its commitment to collaboration, the Program worked closely with Traditional Owners in 2022–23 to enhance communications. It supported the development and publication of Mandubarra Aboriginal Land and Sea Incorporated's Kurrimine Beach reef walking guide and cultural awareness video. These initiatives encourage visitors to understand, respect and care for Country. Additionally, the Program produced Darumbal's cultural awareness video and a separate video celebrating the placement experiences of two Indigenous rangers within the Program.

The Program's communication and engagement efforts in 2022–23 demonstrated a comprehensive and strategic approach, utilising diverse tools and techniques to achieve overarching goals and contribute to the sustainable management and protection of the World Heritage Area.



Reef patrol: A Reef Authority compliance officer and QPWS ranger stand proudly on the new patrol vessel *Barcoo*. In 2022–23, these dedicated professionals contributed to 1,110 days of compliance patrols, upholding marine parks zoning plans and preserving the integrity of the World Heritage Area values.  
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## UPHOLDING COMPLIANCE

Illegal fishing is one of the highest direct risks to the World Heritage Area. During 2022–23, the Program continued its enforcement operations with support from partner agencies, including Maritime Border Command, Australian Federal Police, Queensland Boating and Fisheries Patrol, and the Queensland Police Service.

### COMPLIANCE PATROLS

In 2022–23, there were 1,110 days dedicated to compliance patrols—994 vessel days, 32 land-based days and 84 aerial days—to encourage user compliance and maintain the integrity of the marine parks zoning plan and World Heritage Area values. This is in addition to surveillance flights undertaken by Maritime Border Command, which resulted in 129 incidents recorded, 225 offences and 10 information reports in 2022–23. For the sixth consecutive year, the number of dedicated days remained above 900 days.

Seventy-four percent of the Program's dedicated compliance days were undertaken during high-risk illegal recreational fishing periods, such as weekends, public holidays, school holidays and good weather periods (winds less than 10 knots), when fishers are more likely to be in the World Heritage Area.

### ENHANCING COMPLIANCE THROUGH VESSEL TRACKING

Since 1 January 2020, all commercial fishing vessels operating in the World Heritage Area have been required to operate vessel tracking units. In 2022–23, over 1,000 commercial fishing vessels were monitored to detect non-compliance and gather intelligence to inform surveillance activities. There were 44 offences prosecuted from 26 investigations (some were from detections in 2021–22), which resulted in \$113,400 in fines, in addition to 66 advisory letters.

There is a downward trend in the number of commercial line fishing offences reported since the introduction of vessel tracking, starting with 145 in 2019–20, declining to 137 in 2020–21, 74 in 2021–22 to 54 in 2022–23. This is a significant improvement in compliance and similar to the trend observed following introduction of vessel tracking in the commercial trawl industry. Vessel tracking of the commercial charter fleet is not yet in effect and is likely to commence following completion of the vessel tracking review currently being undertaken by the Queensland Department of Agriculture and Fisheries.



Vigilant watch: A Reef Authority compliance officer and QPWS ranger study photos captured on their high-tech cameras, part of the surveillance toolkit. Their commitment ensures effective enforcement, a crucial component in protecting this natural wonder.  
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## ESTABLISHING A CENTRAL FIELD OPERATIONS TEAM

The Central Field Operations Team was established in 2022–23 and operates across the central region of the World Heritage Area, driving multi-agency compliance operations between Bowen and Broomsound. The team addresses existing gaps in the surveillance program by:

- improving targeting of individuals, activities or areas that pose a high compliance risk
- generally increasing the delivery of dedicated compliance patrols by the Field Operations Team
- enhancing monitoring for compliance of permitted activities and the Whitsunday Plan of Management.

The Central Field Operations Team is now well established and integrated into the Program's Whitsunday Management Unit. This team has a QPWS ranger (compliance) position embedded within and is well advanced with delivering dedicated compliance patrolling. This team has assisted with the overall Program's dedicated compliance outputs and provided robust patrolling in areas between Townsville and Clairview.

## CONSEQUENCES OF ILLEGAL ACTIVITY

There were 1,266 possible offences reported in 2022–23. These reported offences resulted in 49 infringement notices (\$67,561 in fines), 19 caution notices, 540 advisory letters and 71 court prosecutions (\$212,990 in fines) to provide an effective deterrent to further illegal activity. Aircraft surveillance contributed significantly to the number of offences reported, with 84 days resulting in 129 incidents recorded, 225 offences and 10 information reports. Illegal recreational fishing remains the greatest non-compliant activity by total number of offences reported, however the total number of recreational fishing offences detected remains low compared to the significant use of recreational fishing in the World Heritage Area.



Collaboration on Country:  
Field management staff  
and a Wuthathi Traditional  
Owner monitor seabirds on  
Raine Island. The Program's  
committed to working with  
First Nations peoples.  
© Queensland Government



## WORKING WITH FIRST NATIONS PEOPLE

The Program acknowledges the continuing Land and Sea Country management and custodianship of the World Heritage Area by Aboriginal and Torres Strait Islander First Nations peoples. The Program focuses on getting Traditional Owners back on-Country and engaged in Land and Sea Country management. QPWS also jointly manages national parks (Cape York Peninsula Aboriginal Land) with Traditional Owners. The Program's *Traditional Owner Partnership Strategy 2022–2027* will guide and enable future partnerships.

### SUPPORTING INDIGENOUS LAND AND SEA RANGERS

In 2022–23, the Program has continued the implementation of the *Traditional Owner Partnerships Strategy 2022–2027*. This has included splitting the Indigenous Partnerships Working Group into two groups: one group that focuses on networking with members from the Reef Authority (ICT and TUMRA), QPWS and the DESI Land and Sea Ranger Program; and a governance group that provides recommendations and advice to the Program to identify potential funding areas, inform funding partners of opportunities and works being undertaken and to coordinate resources (in a manner consistent with the fee for service and collaborative priority setting objectives and actions of the strategy).

The Program dedicated funding for fee-for-service projects to build the capacity of Traditional Owners to work on and care for Land and Sea Country across the World Heritage Area including with:

- Yirrganydji to conduct seabird surveys at Michaelmas Cay
- Giringun to conduct a range of services through a contract
- Yuwi for joint compliance patrols
- Meriam Nation and Wuthathi for cultural advisors and works on the Raine Island Recovery Project and Raine Island beacon
- Gunggandji for a pest survey at Green Island
- Wulgurukaba for cultural advisors on capital works projects, communication products, inductions, contractors and site inspections
- Manburra for cultural supervision of clearing a new walking track corridor on Orpheus Island
- Bandjin and Girramay for consultation on the Munamudanamy (Hinchinbrook Island) Visitor Management project

- Eastern Kuku Yalanji/Jabalbina for works on Low Isles
- Mandubarra for work on a fish trap project
- Dingaal for pest and planned burns work on Lizard Island
- Gidarjil and Port Curtis Coral Coast pest management work on Curtis and North West islands, seabird surveys at Capricornia Cays and new visitor infrastructure works on Curtis Island (Reef Trust Indirect Offsets funding)
- Koinmerburra for clean-up works on Wild Duck Island and development of a cultural management agreement
- Woppaburra for a planned burn on Konomie (North Keppel Island) and partnership in Yarul Dhingiga (reef rehabilitation project) at the Keppel Bay islands group
- Ngaro for cultural advisors on continued development of the Ngaro Walking Trail including for track alignment, cultural clearances and interpretive materials
- Juru for joint compliance patrols and strandings response

The Program also created opportunities for Traditional Owners through four temporary ranger placement programs developed between QPWS and Mandubarra, Gimuy Walubara Yidinji, Darumbal and Woppaburra Traditional Owner groups, and an additional three embedded Wulgurukaba rangers working with QPWS at Yunbenun (Magnetic Island).

The Program supported 28 Indigenous Land and Sea Rangers from 14 Traditional Owner groups to complete open water, advanced open water and rescue diver training, plus three commencing the divemaster/coxswain internship. The training was delivered by Experience Co. in Cairns, in Gunggandji and Yirrganydji Sea Country, and included Indigenous dive instructors. The training supports increasing partnerships with Traditional Owners and provides a pathway for Indigenous rangers to deliver in-water activities, such reef monitoring and rehabilitation. Further mentoring is planned with the rangers through participation in marine parks patrols to further strengthen their skills and confidence in protecting the Reef and conducting dive activities.



*Island Guardian in action: The Program's new 20 m high-speed landing barge, stationed in Townsville, supports island and marine parks management activities across the World Heritage Area. © Queensland Government*

## PROGRAM INPUTS

**Delivery of field management activities relies on a skilled workforce, operational and appropriately located management infrastructure, a fit-for-purpose and well-maintained vessel fleet, technological advances, good systems and strong governance.**

### VESSEL FLEET

The Program needs a safe and efficient vessel fleet to operate across the World Heritage Area. With the introduction of two new vessels in 2022–23, the Program now operates 21 vessels to enable field delivery.

#### *Island Guardian*

*Island Guardian* is the final large vessel to join the Program's fleet. The vessel is a 20 m high-speed landing barge which has been delivered to its home port in Townsville. From here it will provide support for island and marine parks management activities across the World Heritage Area, with a primary focus on islands throughout the North Tropical Coast section, including Hinchinbrook Island. The vessel has overnight accommodation for seven people, allowing rangers to spend more time working towards goals on the islands and less time travelling. Recent feedback from the vessel's first major infrastructure project, which saw the installation of mooring tackle for 27 new moorings within the Whitsundays area, proved the vessel to be a very capable platform for marine and island management activities. The vessel will certainly open new avenues to provide support across the World Heritage Area for the Program.

#### *Barcoo*

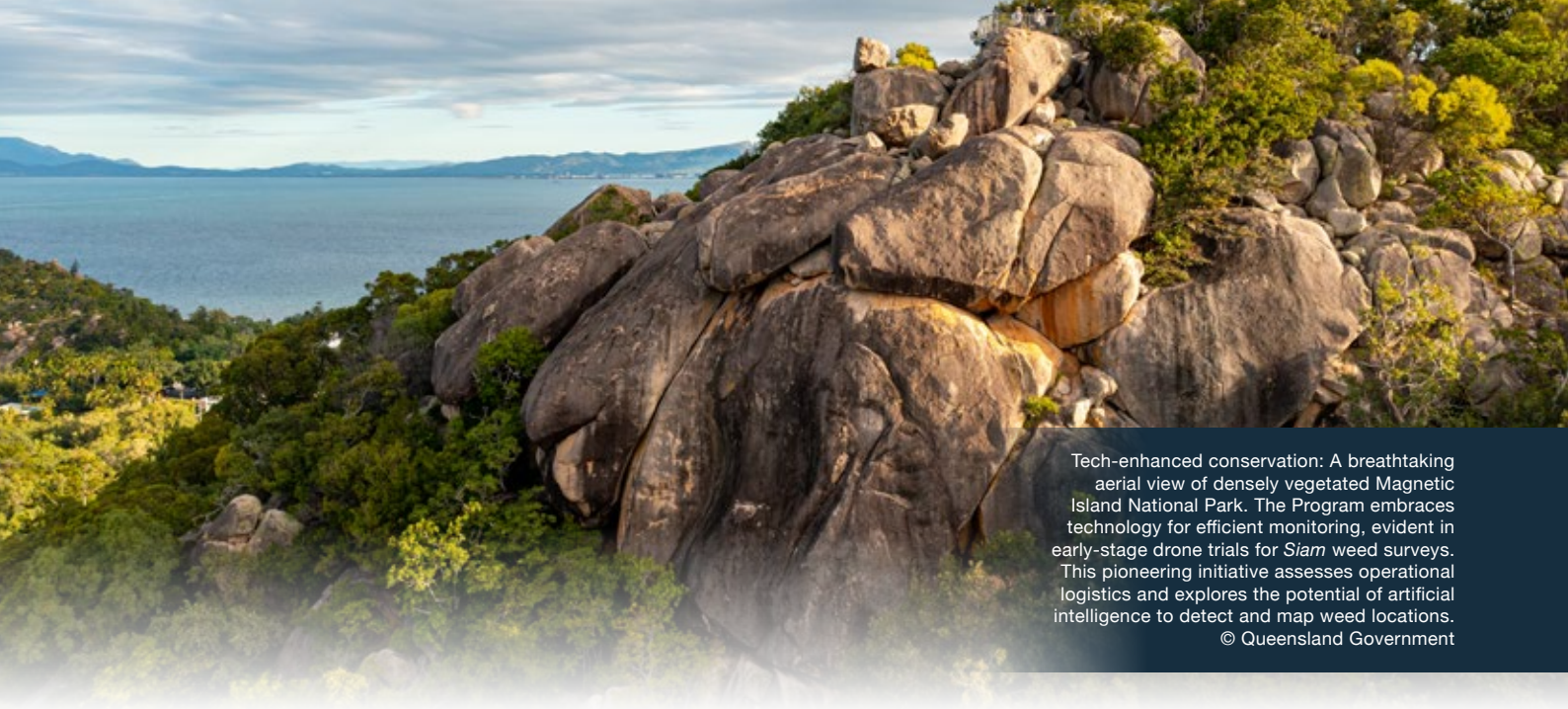
*Barcoo* is a recent addition to the Program's fleet and is not intended to replace any existing vessels. Based in Rosslyn Bay, the patrol vessel is tasked with servicing the surrounding areas. The vessel has been purposefully designed and constructed to address the need for patrolling the regions between Rosslyn Bay and Mackay, identified as a gap in on-water compliance efforts. This vessel is uniquely equipped, enabling a compliance team of two to undertake

multi-day operations—a capability previously unavailable within the Program. Notably, *Barcoo* is constructed from fiberglass, a deliberate choice made by the Program to significantly reduce carbon emissions during the construction phase compared to traditional aluminium methods. The conscious use of construction materials containing recycled products further contributes to a greener environmental footprint for the vessel. It is anticipated that composite construction will provide double the useful life (20 years), surpassing the current aluminium vessels in service. Early feedback from end-users indicates that *Barcoo* is very capable of successfully completing tasks required by the Program.

### WORKFORCE

The Program started the year with 164 permanent Program funded staff and plans to increase to full expansion with 194 Program positions filled. However, despite ongoing recruitment throughout the year, staff turnover led to the Program finishing the year with 166 Program positions filled permanently. Recruitment will continue in 2023–24 to attain the full staffing and capability envisaged. The Program also funded nine temporary staff who contributed to delivery of the Program's *Annual Business Plan 2022–23*.

Well-trained staff are essential to the delivery of an effective, efficient and safe Program. In 2022–23, over 261 staff received training across more than 19 different courses. This included the highly successful Reef Joint Field Management Foundation Program course delivered two courses in March and April. Across eight years, 16 courses have been delivered with 140 staff attending the course, increasing their understanding of the Program.



Tech-enhanced conservation: A breathtaking aerial view of densely vegetated Magnetic Island National Park. The Program embraces technology for efficient monitoring, evident in early-stage drone trials for *Siam* weed surveys. This pioneering initiative assesses operational logistics and explores the potential of artificial intelligence to detect and map weed locations.  
© Queensland Government

The Program places paramount importance on the health and safety of its staff and is dedicated to enhancing safety through an elevated focus on direction and improved systems, processes and education. These initiatives are strategically designed to cultivate a positive workplace culture, influence behaviours and instill a sense of personal responsibility among all staff members. The goal is to foster a healthy, safe, secure and contemporary work environment that values diversity and upholds principles of mutual respect in every aspect of our professional interactions.

QPWS has implemented a new incident reporting database (Shine) which has provided a structured tool for reporting, evaluating and responding to incidents. The Reef Authority is in the process of implementing a comparable reporting database that will allow both agencies to consolidate the data.

## TECHNOLOGY TRANSFORMATION

In 2021–22, the Program finalised its *Five-Year Technology Transformation Program Strategy*, which guides direction and investment in technology to deliver immediate and significant benefits. The Program remains committed to exploring and implementing technology enhancements to facilitate more efficient and effective monitoring and reporting.

The Program entered the third year of a three-year collaborative agreement with the Australian Institute of Marine Science (AIMS) to pursue benthic survey technologies. The development of the ReefScan package is well advanced, aiming to meet or exceed the commitments for its completion in April 2024. A transom-mounted ReefScan system is ready for operational deployment in benthic monitoring programs including crown-of-thorns surveys. The technology produces high-resolution imagery and data for both manta tow equivalent and area-bounded benthic surveys to depths of up to 10 m. The workflow for data management from ReefScan

to the ReefCloud data storage, processing and autonomous data analysis and reporting system is prepared for operational trials and refinement. The automated ReefCloud analysis and reporting is based around the benthic classifications in the AIMS long-term monitoring program.

Additional advancements include:

- A Standard Operating Procedure for drone operations in relation to Reef-wide island monitoring, wallaby surveys at St Bees Island, as well as seabird monitoring and population estimates of breeding adult female turtles at Raine Island.
- An artificial intelligence program and app for in-field use to analyse drone counts for Raine Island breeding turtle estimates.
- Ongoing Standard Operating Procedure development for fire programs through trials in operational situations.
- Early-stage trials for drone application to weed monitoring and surveys for *Siam* weed at Magnetic Island to assess operational logistics and capacity to use artificial intelligence from drone imagery to detect and map weed locations.
- Successful storage, processing of data and tracking of drone use and task delivery through the DroneDeploy platform.
- Upgrading the mooring and reef protection markers maintenance system tracking and planning through the development of digital reporting and an app-based management system, currently in the procurement phase.
- Reviewing technology solutions to enhance vessel tracking and data management systems.
- Progress in the acquisition process of a new integrated compliance management system, initiated in 2022–23, aimed at improving administration and investigation management.



# RESULTS AGAINST PERFORMANCE INDICATORS

Performance indicators highlight the Program’s achievements against the *Annual Business Plan 2022–23*, which the Reef Authority Chief Executive Officer and DESI Director-General jointly approved.

In 2022–23, the Program had 36 challenging performance indicator targets of which 26 (72%) were achieved, 8 (22%) were not achieved but demonstrated significant progress, and 2 (6%) were not achieved or had no significant progress. Of the 10 indicators not achieved, four of those were within 10% of meeting the indicator. While the Program’s 2022–23 performance increased from 2021–22, the Program continued to be challenged with high staff turnover in 2022–23, starting the year with 164 permanent Program funded staff and finishing the year with 166 Program positions filled permanently.

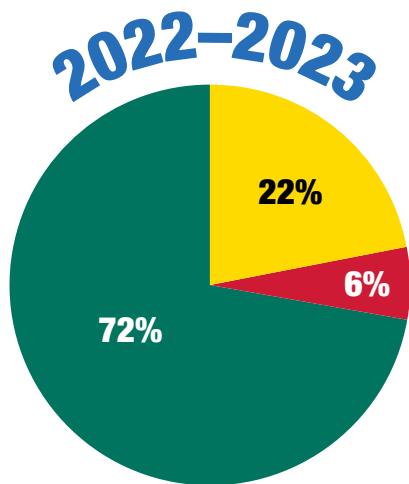


Figure 1: Percentage of the Program’s performance against 2022–23 indicator targets.

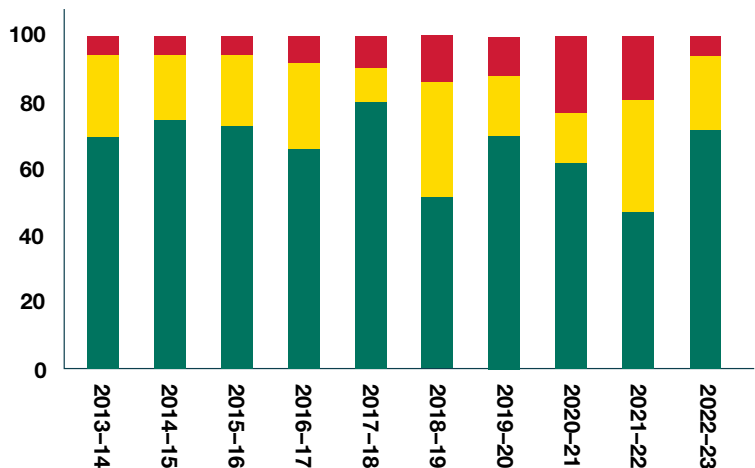
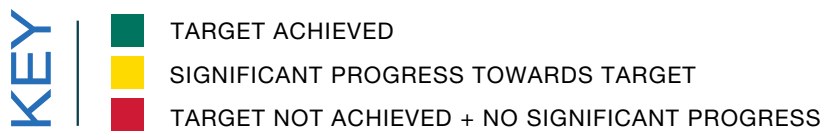


























Figure 2: The Program’s performance over the last 10 years.














	PERFORMANCE INDICATOR	RESULTS 2022–23	TARGET
DELIVERING CONSERVATION ACTIONS	<b>90% OF REGIONAL PRIORITY BURN PROGRAM ACTIVITIES DELIVERED AND REPORTED IN FLAME</b>	<p>100% of the regional priority burns were completed with their desired objectives achieved. Five burns were completed at:</p> <ul style="list-style-type: none"> <li>• Konomie (North Keppel) Island – mosaic</li> <li>• Hinchinbrook Island – Goddard Range</li> <li>• Curtis Island – landscape hazard reduction</li> <li>• Orpheus Island Research Station – mitigation</li> <li>• Lizard Island – Pig Hill resort protection burn</li> </ul> <p>The St Bees Island eucalyptus communities burn was removed from the regional priority burn program due to heavy wallaby grazing. Two working groups have now been formed to recommend solutions to address the wallaby and lantana related impacts on the eucalyptus communities.</p>	 Achieved
	<b>90% OF REGIONAL PRIORITY PEST PROGRAM ACTIONS DELIVERED AND DOCUMENTED IN FLAME</b>	<p>80% of strategic pest project actions were delivered and documented in FLAME and achieved values based measurable objectives.</p> <p>Unplanned vessel maintenance required the cancellation of several planned trips and pest management activities.</p>	 Significant progress towards target
	<b>90% OF MOORINGS AND REEF PROTECTION MARKERS ARE INSPECTED AND REGULARLY MAINTAINED – MOORINGS AT FOUR MONTHLY INTERVALS AND REEF PROTECTION MARKERS ANNUALLY</b>	<p>91% of moorings (321 of 352) and 100% of reef protection markers (293) installed and operational were inspected at required intervals. This included 13 new moorings and four new reef protection markers around Orpheus Island National Park and reefs off Townsville, as well as 30 new moorings in the Whitsundays to protect reef and seagrass habitats.</p> <p>The contract to maintain moorings in the Southern Great Barrier Reef was cancelled in January due to unsatisfactory performance, impacting the ability to inspect and maintain all moorings.</p>	 Achieved
	<b>FINALISE THE REPORT IDENTIFYING THE GAPS IN THE PROTECTION AND MANAGEMENT OF KEY SEABIRD BREEDING SITES IN THE WORLD HERITAGE AREA</b>	<p>The report 'Assessment of the protection and conservation management of important seabird nesting and roosting sites within the Great Barrier Reef World Heritage Area' was completed.</p>	 Achieved
	<b>INSPECTIONS AND REQUIRED MAINTENANCE UNDERTAKEN FOR HISTORIC HERITAGE ON COMMONWEALTH ISLANDS (DENT AND LADY ELLIOT ISLANDS AND LOW ISLES) AND ISLAND NATIONAL PARKS (RAINE, MAGNETIC, PERCY AND CURTIS ISLANDS)</b>	<p>Inspections and any required maintenance of historic heritage were completed on Dent, Lady Elliot, Raine, Magnetic and Curtis islands and Low Isles.</p> <p>Restoration of the Raine Island beacon was completed. No inspections or maintenance was conducted on Middle Percy Island as maintenance of infrastructure is the responsibility of the leaseholder.</p> <p><i>Note: this performance indicator has been changed for 2023–24 to focus on the maintenance of infrastructure to a 'good' or 'good with some concern' VBMF standard and in at least 'reasonable condition' as per S3 inspections.</i></p>	 Achieved

	PERFORMANCE INDICATOR	RESULTS 2022-23	TARGET
CHECKING FOR CHANGE	<b>620 REEF HEALTH AND IMPACT SURVEYS DELIVERED</b>	1,122 Reef Health and Impact Surveys completed across 169 reefs to assess the health of the Reef, including 492 crown-of-thorns starfish related surveys (over 92 reefs).	 Achieved
	<b>60 DAYS CROWN-OF-THORNS STARFISH SURVEILLANCE DELIVERED</b>	60 days of crown-of-thorns starfish surveillance were delivered.	 Achieved
	<b>PRIORITY ISLAND NATIONAL PARKS (HINCHINBROOK, WHITSUNDAYS, GREEN, MAGNETIC, CAPRICORNIA CAYS AND RAINE) AND LIZARD AND CURTIS ISLAND NATIONAL PARKS HAVE REQUIRED HEALTH CHECKS UNDERTAKEN</b>	Health Checks were undertaken on Whitsundays, Lizard, Raine and Capricornia Cays. Health checks were undertaken on Curtis Island with only the visitor health checks not completed. Health checks on Magnetic, Green and Hinchinbrook were not completed. A new Health Check coordinator has since been recruited.	 Not achieved
	<b>90% OF THE ESSENTIAL SEABIRD AND SHOREBIRD MONITORING PROGRAM DELIVERED</b>	87% of essential (annual) seabird surveys (99 of 114 surveys) were completed and 50% of essential (annual) shorebird surveys (6 of 12 surveys) were completed.  This is an improvement on 68% of seabird surveys and 25% of shorebird surveys completed 2021-22.	 Significant progress towards target
	<b>90% OF THE SIGNIFICANT SEABIRD SITES ARE SURVEYED WITHIN THE PREVIOUS FIVE YEARS</b>	100% of the significant (periodic) seabird sites (53 of 53 sites) have been surveyed within the previous five years.	 Achieved
	<b>AT LEAST 70% OF ALL NATIONAL PARK AND COMMONWEALTH ISLANDS SURVEYED WITHIN A FIVE-YEAR PERIOD, WITH AT LEAST 120 ISLAND WATCH SURVEYS COMPLETED AND ANY NEW INCURSIONS REPORTED WITHIN TWO WEEKS TO SENIOR RANGERS AND THE REGIONAL PEST MANAGEMENT COORDINATOR</b>	67% of national park and Commonwealth islands have been surveyed in the last five years.  159 Island Watch surveys were completed, including surveys on 45 islands that haven't been surveyed previously and 114 repeat surveys.	 Significant progress towards target
	<b>90% OF PRIORITY MARINE TURTLE NESTING AND FORAGING INDEX SITE MONITORING WITHIN THE WORLD HERITAGE AREA IS DELIVERED OR SUPPORTED BY THE PROGRAM</b>	The Program supported or delivered monitoring at 90% of priority marine turtle nesting and foraging index sites within the World Heritage Area. This included seven nesting index sites (Raine, Wild Duck, Milman, Heron, Lady Musgrave, Curtis and Peak islands) and two foraging sites (Port Curtis and Howick Reefs).  Monitoring at Wreck Island did not occur due to unavailability of a suitable team.  <i>Note: does not include Wreck Rock (led by Wreck Rock Turtle Care or Avoid Island (led by Queensland Trust for Nature) which are nesting index sites where Program delivery or support is not required.</i>	 Achieved
	<b>90% OF ISLAND, MARINE AND MEGAFUNA REFERRAL GROUP FUNDED PROJECTS ARE COMPLETED WITHIN PROJECT TIMEFRAMES</b>	4 out of 6 projects completed within project timelines: 1. Year 2 of a 3-year project to investigate the prevalence, movement and behaviour of sharks at North West Island. 2. Year 1 of a 3-year project to develop a framework for management of marine turtle volunteers. 3. 1 year project to integrate Coralclips® into the Program. 4. Reef protection and rehabilitation trials at Green Island, Bait Reef and Keppel Bay.  The inshore dolphin survey project was unable to be progressed due to staff vacancy in the Threatened Species Operations team. The migration and residency patterns of tropical baleen whales project was cancelled.	 Significant progress towards target




	PERFORMANCE INDICATOR	RESULTS 2022–23	TARGET
RESPONDING TO INCIDENTS	<b>100% OF MARITIME AND ENVIRONMENTAL INCIDENTS REPORTED TO THE PROGRAM ARE RISK ASSESSED AND RESPONDED TO ACCORDINGLY</b>	100% of 152 maritime incidents reported to the Program were assessed and responded to accordingly, an increase from 117 incidents in 2021–22, 65 in 2020–21 and 94 in 2019–20. No environmental incidents were reported.	 Achieved
	<b>80% OF MARITIME INCIDENTS REQUIRING A SITE ASSESSMENT OF DAMAGE ARE UNDERTAKEN WHERE IT IS SAFE TO DO SO</b>	100% of incidents (7 of 7) requiring a site assessment of damage had assessments undertaken where it was safe to do so.	 Achieved
WELCOMING PEOPLE	<b>95% OF ROUTINE AND 80% OF TAILORED ASSESSMENT DECISION NOTICES ARE GIVEN IN ACCORDANCE WITH THE PERMISSION SERVICE CHARTER</b>	91% of routine assessment decision notices and 65% of tailored assessment decision notices were given in accordance with the Permission Service Charter (25 days for routine and 50 days for tailored). This is an increase from 85% routine assessment and 33% tailored assessment decision notices in 2021–22.	 Significant progress towards target
	<b>60% OF MARINE STRANDINGS REQUIRING RESPONSE ARE ATTENDED TO BY TRAINED COMMUNITY VOLUNTEERS OR INDIGENOUS LAND AND SEA RANGERS</b>	74% of strandings reported (236 of 319) were attended by trained community volunteers or Indigenous Land and Sea Rangers.	 Achieved
	<b>2,700 PUBLIC CONTACT EVENTS WHERE PROGRAM STAFF ARE TALKING DIRECTLY WITH WORLD HERITAGE AREA USERS DURING VESSEL OR LAND-BASED ACTIVITIES</b>	3,045 events recorded on the Field Reporting System (FRS) —comprising 2,599 public contacts, 138 permit checks, 295 incidents and 13 caution notice events—where field staff were talking directly with World Heritage Area users. This is an increase from 2,209 events in 2021–22, 2,835 in 2020–21 and 2,901 in 2019–20.	 Achieved
	<b>95% OF PLANNED CAPITAL PROGRAM DELIVERED</b>	96% of visitor capital project milestones were completed as planned. 7 of 13 visitor capital projects were completed with 6 multi-year projects on track to be progressed in 2023–24.	 Achieved

	PERFORMANCE INDICATOR	RESULTS 2022-23	TARGET
UPHOLDING COMPLIANCE	<b>1,000 DEDICATED COMPLIANCE DAYS</b>	1,110 dedicated compliance days delivered across all partner agencies (994 vessel, 32 land-based and 84 aerial) to deter and identify illegal activity.  This is an improvement from 981 days in 2021-22, 1,059 days in 2020-21 and 1,052 days in 2019-20.	 Achieved
	<b>60% OF DEDICATED COMPLIANCE DAYS UNDERTAKEN DURING HIGH-RISK ILLEGAL RECREATIONAL FISHING PERIODS (NIGHT-TIME, WEEKENDS, PUBLIC HOLIDAYS, SCHOOL HOLIDAYS OR GOOD WEATHER PERIODS (WINDS &lt; 10 KNOTS))</b>	74% of dedicated compliance days (815 of 1,110 days) undertaken during high-risk illegal recreational fishing periods.  <i>Note: this does not include QBFP or QPS patrols that were undertaken during good weather periods where winds were &lt; 10 knots as this information has not been recorded in FRS, so percentage achieved would actually be higher.</i>	 Achieved
	<b>AT LEAST 20% OF ALL CURRENT JOINT MARINE PARKS PERMITS HAVE BEEN CHECKED FOR PERMISSION COMPLIANCE OVER THE FINANCIAL YEAR</b>	20% of current joint marine parks permits were reviewed for compliance with 321 of 1,585 permits reviewed.	 Achieved
	<b>90% OF ON-WATER VISITORS REACHED DURING PATROLS HAVE ZONING MAPS AVAILABLE, PRINT OR ELECTRONIC (INCLUDING MOBILE APPS)</b>	For 91% of 2,599 public contact events recorded in FRS, visitors had access to one or more sources of zoning information – 69% chart plotters, 26% printed maps, 43% Eye on the Reef app.*  Visitor use of the Eye on the Reef app continues to increase from 7% in 2019-20, 20% in 2020-21, 37% in 2021-22 and now 43% in 2022-23.  <i>*Some visitors had access to more than one method so total of individual methods is greater than 100%.</i>	 Achieved
	<b>10% OF DEDICATED COMPLIANCE PATROLS BY STATE AND COMMONWEALTH ARE CONDUCTED WITH INDIGENOUS COMPLIANCE RANGERS THAT ARE EXTERNAL TO THE PROGRAM</b>	7.7% of dedicated compliance patrols were conducted with Indigenous Compliance Rangers that are external to the Program (86 of 1,110 days).  <i>Note: this captures dedicated compliance days led by Program staff, it does not include QBFP-led patrols.</i>	 Significant progress towards target

	PERFORMANCE INDICATOR	RESULTS 2022–23	TARGET
WORKING WITH FIRST NATIONS PEOPLE	<b>100% OF NATIONAL PARK (CAPE YORK PENINSULA ABORIGINAL LAND) NEGOTIATION AND JOINT MANAGEMENT IMPLEMENTATION MEETINGS ATTENDED</b>	100% of meetings held were attended (18 meetings including four with Wuthathi, four with Kuuku Ya'u, four with Lama Lama, four with Jabalbina and two with Ipimiya Ikaya peoples).	 Achieved
	<b>90% OF TUMRA MEETINGS ATTENDED</b>	100% of meetings that the Program was invited to were attended. <i>Note: the Program is not invited to all TUMRA meetings.</i>	 Achieved
	<b>10% OF PROGRAM VESSEL DAYS INCLUDE FIRST NATIONS PEOPLES FROM WITHIN OR OUTSIDE THE PROGRAM</b>	52% (948 of 1,819) of Program vessel days included First Nations peoples from within or outside the Program: <ul style="list-style-type: none"> <li>24% (431 of 1,819 days) included First Nations peoples from outside the Program from 20 different Indigenous ranger groups.*</li> <li>29% (527 of 1,819 days) included First Nations peoples from within the Program.**</li> </ul> This is an increase from 42% (707 of 1,682 Program vessel days) in 2021–22. <i>*137 of the 431 days were completed by Traditional Owner rangers that are embedded in QPWS but funded by their Traditional Owner corporation.</i> <i>**Many of these days also included First Nations people from outside the Program.</i>	 Achieved
	<b>FEE-FOR-SERVICE ARRANGEMENTS ARE IN PLACE WITH A MINIMUM OF SIX DIFFERENT INDIGENOUS RANGER GROUPS</b>	While only two formal fee-for-service arrangements were in place with Indigenous ranger groups at the end of 2022–23 (Girringun for delivery of a range of services through a works contract and also with Yirrganydji), a draft arrangement with Jabalbina to undertake services at Low Isles is near finalisation and an arrangement with Yuwi is to commence in July 2023 for compliance and other services. Recognising that formal fee-for-service arrangements won't suit all Traditional Owner groups, the Program also engaged (and paid) Indigenous rangers, cultural advisors and groups throughout the World Heritage Area for services such as fauna surveys, general ranger activities, cultural advice, inductions, site inspections, capital works consultation, cultural supervision and works, planned burning, compliance, pest management, reef rehabilitation and strandings response. These arrangements are considered to contribute to achieving this performance indicator. <i>Note: The Program also has Indigenous rangers that are embedded at QPWS work bases and work placements where Land and Sea Rangers work at QPWS work bases for six months.</i>	 Achieved

	PERFORMANCE INDICATOR	RESULTS 2022–23	TARGET
PROGRAM INPUTS	<b>ANNUAL TRAINING PROGRAM DEVELOPED AND DELIVERED</b>	The annual training program was developed and the majority of identified training was delivered, including all safety critical training and two Reef Joint Field Management Foundation Program courses.	 Significant progress towards target
	<b>PROGRAM MAINTAINS A MINIMUM 100% COMPLIANCE WITH STATUTORY SAFETY OBLIGATIONS</b>	The Program maintained 100% compliance with statutory safety obligations, for both the Reef Authority and QPWS.	 Achieved
	<b>100% OF ALL INCIDENT REPORTS ARE INVESTIGATED AND ACTIONED WITHIN STATUTORY OR PROGRAM IDENTIFIED TIMEFRAMES</b>	100% of incident reports were investigated and actioned within statutory or Program identified timeframes.	 Achieved
	<b>100% OF ALL HAZARD REPORTS ARE INVESTIGATED AND ACTIONED WITHIN PROGRAM IDENTIFIED TIMEFRAMES</b>	100% of hazard reports were investigated and actioned within Program identified timeframes.	 Achieved
	<b>1,700 TOTAL DAYS AT SEA DELIVERED ABOARD PROGRAM VESSELS, OR ABOARD VESSELS CHARTERED BY THE PROGRAM</b>	1,819 total days at sea delivered. 1,803 days were aboard Program vessels (99.2%) and 16 days aboard chartered vessels. This is an increase from 1,682 total days in 2021–22, 1,745 days in 2020–21 and 1,716 days in 2019–20. <i>Note: a further 94 days were delivered aboard helicopter, and 257 days at sea with partners aboard partner vessels.</i>	 Achieved
	<b>FINALISE AND IMPLEMENT 90% OF ANNUAL TECHNOLOGY DELIVERY PLAN</b>	90% of the elements of the 2022–23 technology delivery plan are either on track or in progress.	 Achieved
	<b>EXPENDITURE IS WITHIN 1% OF PROGRAM BUDGET ALLOCATION</b>	Expenditure was within 6.4% of the budget allocation, with delayed delivery of the new compliance management system, high staff turnover and recruitment demands.	 Not achieved

**Further information  
about the Reef Joint  
Field Management Program**

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*Cover: Aerial view of the 'Yarul Dhingiga' reef rehabilitation  
project at Shelving Beach on Great Keppel Island,  
part of the Keppel Bay islands. © Queensland Government*