



Australian Government

Great Barrier Reef
Marine Park Authority



Queensland
Government

REEF JOINT FIELD MANAGEMENT PROGRAM

ANNUAL REPORT SUMMARY



EXECUTIVE SUMMARY

Dedicated field officers are essential for protecting the Great Barrier Reef World Heritage Area, which stretches 2300 kilometres along the Queensland coast. With more than 2900 reefs and 1050 islands — home to iconic plants, animals, habitats and rich cultural heritage — there's plenty of vital field work to do in this World Heritage Area.

These field officers are part of the Australian and Queensland governments' Great Barrier Reef Joint Field Management Program, which operates in the Commonwealth Great Barrier Reef Marine Park and Queensland Great Barrier Reef Coast Marine Park, plus on Commonwealth islands and Queensland island national parks.

The joint program provides a constant, in-park presence; delivering conservation actions, checking for change, responding to incidents, welcoming people and upholding compliance across the far reaches of the World Heritage Area.

In essence, our field management actions provide a safety net for the Reef to ensure all Australians and international visitors benefit now and into the future.

Patrolling the waters and islands of the World Heritage Area, the Reef Joint Field Management Program delivers a range of crucial activities. These include monitoring and maintaining internationally-important turtle and seabird breeding islands, eliminating island pests, and developing walking tracks, camping areas and lookouts.

In-water activities include installing reef protection markers and moorings, and surveying reefs to help us understand and manage the impact of cyclones, crown-of-thorns starfish and bleaching on our coral ecosystems.

Field management officers interact regularly with Reef stakeholders and the broader community, providing information to park users and ensuring they abide by the rules that protect this iconic place. Across the World Heritage Area, the Reef Joint Field Management Program works with Aboriginal Traditional Owners and Torres Strait Islander Traditional Owners to manage their land and sea country and encourages communities and industries to protect the Reef and islands.

Field management activities are at the heart of Australia's obligation to protect the Great Barrier Reef World Heritage

Area. For 39 years they have been the essential component of an agreement between the Australian and Queensland governments, which work together for long-term protection of the Reef. There are also longer-term initiatives underway to address external threats, such as climate change and poor water quality from the Reef catchment.

In 2016–17 the *Periodic Review Report* on the Reef Joint Field Management Program was completed. This reviewed the joint program's performance since 2011 and its capacity to deliver future investment priorities to 2021. The report was presented to the Great Barrier Reef Ministerial Forum in July 2017. The Australian and Queensland governments agreed to investigate budget opportunities for the additional funding recommended in the *Periodic Review Report* to achieve key field activities identified in the *Reef 2050 Long-Term Sustainability Plan 2015* and the *Reef 2050 Plan Investment Framework*.

The program was recently the beneficiary of Australian and Queensland government budget announcements to meet the additional funding recommended in the *Periodic Review Report*. The rollout is staged to enable considered and sustained expansion from a joint base funding commitment of over \$17 million to over \$38 million by 2021–22, with a commensurate increase in staff from 115 to 186 people. Funding for four key investment areas identified in the *Periodic Review Report* commenced in 2017–18: maintaining essential field management capabilities; island restoration and supporting reef restoration; enhancing compliance through vessel tracking; and enhancing compliance through increased in-park presence, public contact and education.

This document summarises the Reef Joint Field Management Program's 2017–18 achievements and complements the *Field Management Annual Report 2017–18*.



2017-18 FINANCE SUMMARY

The Australian and Queensland governments allocated combined funds of \$23,702,621 through the Field Management Annual Business Plan in 2017-18 to manage the 348,000 square-kilometre World Heritage Area.

This included an additional \$814,000 in joint indexation funding to prevent further declines in service delivery experienced under static funding. The available funds increased to \$25,874,573 with the help of carryover funds, increased revenue, additional Australian Government funding, and other funding sources.

The Australian Government provided an additional discretionary contribution of \$4,690,000 in 2017-18 towards construction of a new 24-metre vessel to replace *Reef Heron*. The Australian and Queensland governments have agreed to provide additional joint operating funds to maximise the new vessel's time at sea, starting with \$857,644 in 2018-19. The new vessel will enter service in 2019.

The Australian Government provided an additional discretionary contribution of \$1,390,000 to bring forward delivery of key investment areas identified in the *Periodic Review Report*. The Queensland Government has also secured additional funding towards delivery of the *Periodic Review Report's* recommendations, which will commence in 2018-19.

Following release of the *Queensland Sustainable Fishing Strategy 2017-2027*, \$1,200,000 of carryover funds from previous years were provided to the Queensland Department of Agriculture and Fisheries in 2016-17. A further \$1,000,000 was provided in 2017-18 from the additional funding received from the Australian Government. This funding will support the implementation of vessel tracking on all commercial fishing vessels operating in priority fisheries in the World Heritage Area by 1 January 2019.

The Reef Joint Field Management Program also received funding from other sources that contributed to field delivery, including Queensland Government funding for new moorings and reef protection markers as part of the Significant Regional Infrastructure Projects Program; a contribution from the Authority towards additional crown-of-thorns starfish surveys; Queensland and Australian government funding to develop new and improved island visitor facilities in the Whitsundays and assist tourism industry recovery following cyclone Debbie; corporate sponsorship towards the Raine Island Recovery Project; and offset funding for Queensland and Australian government approvals associated with Curtis Island Liquid Natural Gas projects.

At the start of 2017-18, the Great Barrier Reef Marine Park Authority held funds of \$73,359 from the previous year's carryover and the Queensland Parks and Wildlife Service held funds of \$1,274,185.

Expenditure was within one per cent of the budget allocation, excluding the held over commitment to 2018-19 of \$3,667,259 towards the new 24-metre vessel *Reef Resilience* and \$172,291 towards the South Whitehaven Beach lookout and walking track. At the end of 2017-18, Queensland Parks and Wildlife Service held funds of \$4,196,145 and the Great Barrier Reef Marine Park Authority held funds of \$293,660 on behalf of the Reef Joint Field Management Program.

The Reef Joint Field Management Program has five core priorities that aim to maintain the outstanding universal value of the Great Barrier Reef World Heritage Area, and enhance the economic, recreational and traditional uses of the Great Barrier Reef.

RANGERS ON PATROL

PROVIDING A REEF SAFETY NET



Reef Ranger vessel spent 249 days at sea travelling 24,386 kilometres, a distance equivalent to half way around the world



DELIVERING PRACTICAL CONSERVATION ACTIONS

SAVING TURTLES
15,000m³

BEACH SAND REPROFILED ON RAINE ISLAND PRODUCES

5x MORE HATCHLINGS

ERADICATING PESTS
GOATS ERADICATED FROM HIGH PEAK ISLAND

IDENTIFYING KEY PARK VALUES
7 ISLAND PARKS
Have key values, condition and trend identified

MAINTAINING HEALTHY ISLANDS
44% OF ISLAND PARKS WITHIN RECOMMENDED BURN PRESCRIPTIONS

PROTECTING CULTURAL HERITAGE
Appointing new caretakers to oversee Low Isles

CHECKING FOR CHANGE

ENSURING EARLY DETECTION

5822 IN-WATER SURVEYS MONITOR

CROWN-OF-THORNS
FIVEFOLD INCREASE IN SURVEYS FROM 2016-17

KEEPING TABS ON SEABIRDS

286 BIRD SURVEYS

AT 155 LOCATIONS
IDENTIFY 113 SPECIES

ISLAND WATCHING
62 SURVEYS OF ISLANDS

No new invasive pests on high biosecurity islands

NEW SPECIES
SURVEYS REVEAL A NEW 'MONSTER' invertebrate on Curtis Island

REEF HEALTH
1980 IN-WATER SURVEYS ACROSS
189 REEFS CHECK REEF HEALTH

WELCOMING PEOPLE

EDUCATING USERS
2806 CONTACTS WITH PARK USERS WHILE ON PATROL

HELPING BOATIES PROTECT CORAL & SEAGRASS
223 PUBLIC MOORINGS AND 201 REEF PROTECTION MARKERS

ENCOURAGING LOCAL STEWARDSHIP
Volunteers respond to 61% of marine turtle strandings

HELPING MANAGE COUNTRY TRADITIONAL OWNERS
SPENT **557** DAYS ON FIELD MANAGEMENT VESSELS

ENABLING SUSTAINABLE USE
DECISIONS MADE ON:
387 joint marine parks
75 state marine park
67 island national park permits

NEW VISITOR OPPORTUNITIES
Lookout at Ship Hill on Curtis Island + **walking track** at Langford Spit in the Whitsundays = open for visitors to enjoy

UPHOLDING COMPLIANCE

PROTECTING REEF SPECIES
888 dedicated compliance vessel days, a **32% increase** from 2016-17

MINIMISING ENVIRONMENTAL HARM
Site supervising **15** permitted activities within the World Heritage Area

INDUSTRY STEWARDSHIP
collaborating with QDAF to implement vessel tracking

IMPOSING CONSEQUENCES FOR ENVIRONMENTAL HARM

1189 possible offences lead to **42** court prosecutions, **130** infringement notices, **87** caution notices, **331** advisory letters, **49** warning notices

RESPONDING TO INCIDENTS

UNDERSTANDING REEF THREATS
PRE-SUMMER WORKSHOP assesses the risk of coral bleaching and cyclones

PROTECTING ENVIRONMENTS
Mitigating risk associated with **101** vessel events, including **48** groundings and **17** sinkings

ASSESSING DAMAGE
in-field response to **20 incidents**

2017–2018 HIGHLIGHTS



MARINE AND ISLAND CONSERVATION MANAGEMENT

REEF SURVEYS

Field management officers conducted 1980 reef health and impact surveys across 189 reefs in 2017–18. They also completed 5822 in-water surveys to detect crown-of-thorns starfish across 109 reefs and approximately 1151 kilometres. When combined with regular localised tourism operator surveys and reactive agency surveys, these field management surveys produce a reef-wide picture of the Great Barrier Reef's condition. This is more than a five-fold increase in the crown-of-thorns starfish survey effort from 2016–17, which is in support of the *Reef Blueprint's* recommendation to ramp up crown-of-thorns starfish control, including improved surveillance and reporting.

Severe active outbreaks of crown-of-thorns starfish continue in the northern and central Reef, as well as in the southern Swains Reef. In response to the southern Swains Reefs outbreak, field management officers culled around 55,000 starfish to protect this precious reef network that had escaped the impacts of the damaging events affecting other reefs in recent years, such as coral bleaching and cyclones.

Funding from the Great Barrier Reef Marine Park Authority's Crown-of-thorns Starfish Control Program enabled the increase in crown-of-thorns starfish survey effort. Subtidal seagrass monitoring was also undertaken at six sites to expand the Marine Monitoring Program's geographic assessment of seagrass condition.

PEST MANAGEMENT

Targeted conservation management actions continued during 2017–18 to protect the natural integrity of priority island locations and reduce disturbance and predation of vulnerable species. The Reef Joint Field Management Program delivered 14 pest plant and animal projects to control pests like pigs, foxes, dogs, ants, cattle, goats, silver gulls, lantana, Siam weed, rubbervine and Guinea grass. Monitoring has confirmed the successful eradication of goats from High Peak Island and goat eradication is close on St Bees and Orpheus islands.

REEF INTERVENTION

The Reef Joint Field Management Program is delivering the *Reef Blueprint's* recommendation for active localised reef restoration. In 2017–18 upscaling of macroalgae removal trials commenced in Florence Bay on Magnetic Island to improve the recovery of fringing coral reef. Experimental and control quadrats were established and macroalgae removal methods were refined to enable the first large-scale removal which took place in July 2018.

The program is also assisting with reef intervention initiatives led by others including coral larvae reseedling by Southern Cross University and the Reef Havens project by the Reef and Rainforest Research Centre.



MARINE AND ISLAND CONSERVATION MANAGEMENT

The Reef Joint Field Management Program delivered a range of activities to help maintain and improve the condition of the Reef and islands. These conservation actions help protect marine habitats, island habitats and vulnerable species, and restore ecosystems to their natural state.

RAINE ISLAND RECOVERY PROJECT

The Reef Joint Field Management Program continued species recovery work, with 97 days spent on Raine Island with Wuthathi and Kemerker Meriam Nation (Ugar, Mer, Erub) Traditional Owners. An additional 350 metres of rock ledge and eroded areas were fenced off to stop nesting vulnerable green turtles falling over rocky edges, and to guide them back towards the beach on a safe path. There is now 1500 metres of fencing. They also rescued and returned over 260 stranded female green turtles to the water, allowing them to return and lay more turtle eggs.

Following the first successful beach reprofiling exercise in 2014 to improve turtle nesting and hatching, a second larger reprofiling was undertaken in August and September 2017. Heavy machinery was checked for potential pests and following biosecurity clearance was transported to remote Raine Island. Across eight days 15,000 cubic metres of sand was moved to create viable nesting area. The total reprofiled area is now around 1.8 hectares of the 26 hectare coral cay.

Monitoring has confirmed that more hatchlings are produced in the reprofiled areas with the 2017 area producing five times more hatchlings and the 2014 area seeing more than

three times more hatchlings than other nesting areas on the cay. These achievements would not have been possible without the partnership and additional funding from BHP through the Great Barrier Reef Foundation.

SEABIRD AND SHOREBIRD MONITORING

The Reef Joint Field Management Program completed a total of 286 bird surveys in 155 locations in 2017–18, the third full year of monitoring under the *Coastal Bird Monitoring and Information Strategy (Seabirds 2015–2020)*. These surveys identified 113 different species of seabirds of which 19 species were breeding. This included the second consecutive year of endangered Herald petrels breeding on Raine Island and the largest breeding event of brown boobys on East Fairfax Island. A Phoenix petrel was also spotted on Raine Island, possibly the first sighting of this species in Australia. Surveys showed that Shoalwater and Corio Bays Area Ramsar Site supported significant flyway populations of endangered eastern curlews, vulnerable western Alaskan bar-tailed godwits and special least concern whimbrel; and Bowling Green Bay Ramsar Site supported a significant flyway population of endangered great knots.



INCIDENT RESPONSE

Field management officers respond quickly to environmental incidents such as oil or pollution spills, grounded vessels, stranded marine animals, wildfire, coral bleaching, pest species invasions, and cyclone and flood damage to ecosystems and infrastructure.

In 2017–18, the Reef Joint Field Management Program assessed the risks associated with 101 vessel events in the World Heritage Area; 13 of which involved vessels over 100 metres in length. These events had the potential to cause environmental damage and included eight spills, 48 groundings and 17 sinkings. Assessment resulted in five official Order to Remove notices and field response to 20 incidents, which included seven site assessments of damage. Six field management staff received site assessment of damage training to enable more rapid in-field response and assessment of damage following incidents.

REEF HEALTH AWARENESS

An annual pre-summer workshop was held to assess climate-related risks to the Great Barrier Reef and the potential for coral bleaching in 2017–18, following two consecutive years of mass coral bleaching in 2016 and 2017. Reef conditions were monitored closely, with regular checks of weather conditions, forecasts, modelling, and reef health reports. This improved situational awareness of reef health, particularly during the high risk summer months between November and April, and enabled the program to keep the Authority, Queensland Parks and Wildlife Service and partners informed, identify hot spots and forward plan any response activity.

While the 2017–18 summer was the second warmest on record in terms of mean temperatures in Australia and Queensland, sea surface temperatures generally fluctuated between average and above average, with just some areas experiencing significantly above-average temperature. Numerous flood events affected much of the northern tropics resulting in decreased salinity on inshore and mid-shelf reefs in the far northern, northern and central area of the Reef. One tropical cyclone affected the Reef in April bringing rain and damaging winds to the central and southern Reef. Overall, the Reef experienced only minor levels of coral bleaching, disease and damage.



RECREATION AND TOURISM FACILITIES

The Reef Joint Field Management Program provides visitor facilities that support a vibrant tourism industry and a broad range of recreational users, while minimising visitor impacts. Regular inspections and appropriate maintenance of these facilities is a priority.

The joint program was responsible for installing 83 new public moorings and 40 new reef protection markers in 2017–18 to protect coral and seagrass habitats from anchor damage and provide safe, sustainable visitor use. Marine facilities were serviced to a high standard, with 99 per cent of 223 public moorings and 94 per cent of 214 reef protection markers operational in the World Heritage Area.

Cyclone Debbie crossed the Queensland coast near Airlie Beach on Tuesday 28 March 2017 in the upper limits of a Category 4 system. The cyclone significantly impacted the Whitsundays, one of Queensland's most significant tourism areas. While immediate clean-up activities occurred in 2016–17 the program's recovery activities extended into 2017–18. A second large clean-up was undertaken at Whitehaven Beach with heavy machinery given biosecurity clearance on the mainland before being barged to the island to clear and mulch fallen vegetation. Mulch was then used to protect the exposed roots of remaining vegetation to aid recovery and stabilise the foreshore.

A new short walk was constructed at Langford Spit in the Whitsundays. This is one of many new ecotourism opportunities under construction in the Whitsundays to provide alternative island experiences for tourism operators following cyclone Debbie. Construction also commenced on two further short walks at Border and Haslewood islands, along with an expansion of the iconic Hill Inlet lookouts, all of which will be completed in 2018–19. Planning and design commenced for a new lookout and walking track at South Whitehaven, a new multi-day walking track between Tongue Point and Whitehaven Beach, and an upgrade to the day use area and campground at South Whitehaven — with construction to commence in 2018–19.

Funding from the Reef Joint Field Management Program, Reef Trust offset funding and additional Queensland and Australian government funding made these new marine and island facilities possible.



CURTIS ISLAND OFFSETS FUNDING

Field management activity on Curtis Island included pest management, habitat restoration, fire management, visitor infrastructure and ranger presence.

The recovery of endangered yellow chat birds on Curtis Island has been maintained with a second substantial breeding year of 42 birds, up from 35 in 2015–16. Sustained control of pigs, cattle, foxes and dogs continues to improve the condition of the marine plain where yellow chat birds live and breed. Rising sea levels have the potential to cause significant changes to the low-lying marine plain and the species that depend on it such as yellow chats. Hydrological surveys were undertaken to develop a salinity map and enable ongoing monitoring of inundation levels across the marine plain.

Pest animal control activities also enabled vulnerable flatback turtles to nest safely on Curtis Island with no nests predated on in 2017–18, an improvement from 10 per cent disturbance in 2016–17. Unfortunately, hatchlings from three flatback clutches were targeted by pest animals while they were racing from the safety of their nests to the nearby water.

A new species of 'monster' invertebrate was identified during a detailed fauna survey of Curtis Island's marine plain. While the new species has not yet been named, it has led to the creation of a new order of insects alongside similar 'monster' invertebrates found in Cooloola and Byfield.

Curtis Island residents and visitors will appreciate the new Ship Hill Lookout which provides an excellent visitor opportunity for locals and visitors to appreciate the amazing views across the surrounding marine parks, the adjacent mainland and the Narrows.

Project governance arrangements for delivery of Reef Trust Offsets were established along with the recruitment of staff to support the governance requirements and deliver field activities. Visitor infrastructure planning for North West, Lady Musgrave and Heron islands commenced to inform redevelopment of the visitor sites and reduce disturbance to nesting seabirds. Twenty-three public moorings were installed in the Keppels and Capricorn Bunker Group to protect coral and seagrass habitat and new dedicated camping equipment for use on Wreck Island ensures researchers satisfy biosecurity requirements.

The first agreement with Gidarjil Development Corporation to deliver a range of services in their sea country was established. Together, the Gladstone-based Gidarjil Land and Sea Rangers and program staff implemented a strategic training package to build Land and Sea Ranger capability. This enabled Gidarjil Rangers to commence sea country patrols in April 2018.

Offset funding from the Curtis Island Environmental Management Precinct, Reef Trust and Queensland and Australian government approvals associated with the Liquid Natural Gas plants made the above field management activities possible.



COMMUNICATION, EDUCATION AND STEWARDSHIP

For many users, field management officers are the public face of the Australian and Queensland governments' management of the Great Barrier Reef.

Communication with park users is a vital part of encouraging voluntary compliance and maintaining Reef health. The Reef Joint Field Management Program recorded 2806 public contact moments while on patrol, attended 17 fisher-specific events and a further 12 community events, and visited more than 200 community access points to raise awareness of marine parks zoning and visitor opportunities and encourage responsible behaviour. Field management activities have also been promoted on social media, including Facebook, Twitter, Instagram and LinkedIn, reaching thousands of people.

The Reef Joint Field Management Program has a network of over 500 trained marine animal stranding volunteers including community groups, individuals and Indigenous Land and Sea Rangers. These volunteers responded to 61 per cent of reported marine strandings in 2017–18.

The joint program continued to improve and roll out new communication and education strategies introduced in 2016–17 to combat recreational fishing complacency and negligence. These products target recreational fishers, and incorporate strong compliance messaging, information on offence hotspots, advice about penalty increases, education about zoning benefits, and encourage reporting of illegal activity. Following a successful trial compliance campaign in Cairns late in 2016–17, campaigns were held in Townsville across Christmas 2017 and Gladstone across Easter 2018 with a combined social media reach of 407,030 people and 66 news items reaching 480,900 people.



NON-INDIGENOUS CULTURAL HERITAGE PROTECTION

The Reef Joint Field Management Program manages non-Indigenous cultural heritage on island national parks and Commonwealth islands. This includes developing heritage management plans to protect significant sites and undertaking maintenance and restoration at some locations.

The joint program manages cultural heritage on Dent and Lady Elliot islands in partnership with resort operators who have relevant leases. At Low Isles, the caretakers awarded a two-year contract in 2016–17 moved away and an approach to market was undertaken to appoint new caretakers to oversee protection of the island's heritage. The new caretakers have since been selected and commenced in August 2018.

Scaffolding was installed inside the Raine Island Beacon to enable future conservation works on the oldest stone building in Queensland. An Asset Maintenance and Conservation Plan was prepared by a heritage masonry consultant to provide direction in repairing cracks in the stonework.

The Reef Joint Field Management Program also provides assistance to other government agencies with responsibilities for management of World Heritage Area values, including shipwrecks. Field management staff maintained public moorings at the *Yongala* historic shipwreck and provided vessel and staff assistance for in-water surveys of the historic *Mermaid's* anchor.



INDIGENOUS ENGAGEMENT AND CULTURAL HERITAGE PROTECTION

There are more than 70 Aboriginal Traditional Owner and Torres Strait Islander Traditional Owner groups with connections to land and sea country between Bundaberg and the eastern Torres Strait Islands. The Reef Joint Field Management Program focuses on getting Traditional Owners back on country and engaged in land and sea country management. Aboriginal Traditional Owners, Torres Strait Islander Traditional Owners and the Queensland Parks and Wildlife Service jointly manage a number of National Parks (Cape York Peninsula Aboriginal Land).

In 2017–18, five per cent of Reef Joint Field Management Program positions were Indigenous-identified and held by Aboriginal people or Torres Strait Islander people. Traditional Owners spent 557 person-days on field management vessels undertaking activities including examining cultural sites, compliance, pest control, fire management, seabird monitoring, infrastructure maintenance and management planning.

Wuthathi and Kemerker Meriam Nation (Ugar, Mer, Erub) Traditional Owners were employed as rangers and assisted with recovery activities on all 10 of the Raine Island trips undertaken in 2017–18. The Traditional Owners also developed a Raine Island Indigenous Cultural Heritage Plan to guide future management activities, which was finalised in September 2018.

Girringun Land and Sea Rangers delivered field activities in the Girringun Traditional Use of Marine Resources Agreement Area under a works and services agreement for a forth successful consecutive year. Girringun and field management rangers delivered fire and pest programs, maintained visitor infrastructure, delivered compliance patrols, undertook health checks of Hinchinbrook Island key values, and monitored seabirds and seagrass.

The Reef Joint Field Management Program partnered with Youth Justice to promote 'Rangers as role models' and inspire young Indigenous people through field trips. This resulted in one client being engaged in temporary employment as an Indigenous Identified Ranger.

The Authority entered into a Memorandum of Understanding with the Department of Prime Minister and Cabinet in February 2018 to train at least 40 Indigenous rangers in Certificate IV in Government Investigations by June 2020 with funding provided through the Australian Government's Capacity Building for Indigenous Rangers Strategy. Training has commenced with 25 Indigenous rangers attending the first training session in May 2018. This funding follows the successful appointment of 17 Indigenous rangers as marine park inspectors with 'name and address' powers who received training between 2015 and 2017 under the pilot Indigenous Ranger Compliance Enhancement Program. These trained rangers will become part of the joint program's network, contributing to compliance management of sea country.



PLANNING AND ASSESSMENTS

The Reef Joint Field Management Program contributes to complementary planning and permitting across marine parks and national park jurisdictions to enable sustainable use of the World Heritage Area. The established marine parks joint assessment and permit framework is continuously improving to deliver more efficient, effective and timely decision making and client service. The values-based management framework for protected areas will increasingly guide management of islands and monitor the condition and trend of key values.

ASSESSMENTS AND PERMITS

The joint program helped to improve the established assessment and permit framework with the delivery of two projects in 2017–18 — the enhancing permissions system project and permits online project — both led by the Great Barrier Reef Marine Park Authority. These improvements will deliver a more efficient, effective and timely joint permit system. Eighty-nine per cent of applications have since been received online and the average processing timeframes for very low risk and low risk permits have been reduced from 16 weeks to four and eight weeks respectively.

In 2017–18 the joint program assessed and made decisions on 387 Commonwealth and Queensland marine parks permits, 75 Queensland marine park permits, 67 national park permits and four commercial activity agreements to enable sustainable use of the World Heritage Area. The total number of marine parks permits in effect at the end of 2017–18 was 1371 permits comprising 6362 permissions, with the majority (64 per cent) lower risk routine/tailored permits, such as tourist programs and charter vessel and aircraft permits.

Permit compliance is also an important part of the joint permitting framework and ensures permitted use is sustainable. Checking that activities are taking place as permitted minimises environmental harm and impacts on other park users. Field management officers undertook 37 field inspections of proposed or permitted activities during 2017–18. Of these, 15 were directed at the supervision of permitted works and events to minimise potential environmental harm, including Green Island jetty upgrades, dredging at Dicksons Inlet and private mooring installations in the Whitsundays and Cairns.

The Reef Joint Field Management Program has established an innovative collaboration with marine parks permittee Townsville City Council and James Cook University to develop and implement a research and monitoring program to enhance our collective understanding of the current and potential impacts from the discharge of sewage effluent from Cleveland Bay treatment plant into the marine parks.

PLANNING

Implementation of the values-based management framework for protected areas progressed with key value and levels of service assessment workshops undertaken for Whitsunday Islands, Gloucester Island, Molle Islands, Lindeman Islands, Repulse Islands, Frankland Group and Barnard Island Group national parks and the surrounding intertidal area of the Great Barrier Reef Coast Marine Park. The workshops also identified the condition, trend and threats to the key values. Further work to complete and finalise the associated assessment reports will be undertaken in 2018–19.

Designed to provide more detail around on-ground delivery, fire thematic strategies were developed and recorded in the Queensland Parks and Wildlife Service's new electronic FLAME system for Curtis, Fitzroy, Hinchinbrook, Lizard, Magnetic, Orpheus and Wild Cattle island national parks. Pest thematic strategies were also drafted for Curtis, Hinchinbrook, Magnetic, Whitsunday, Fitzroy, Gloucester, Lindeman and Molle island national parks and Swains Reef national park and recorded in the new FLAME system. These will be finalised in 2018–19.

Health checks were introduced in 2016–17 to monitor the condition and trend of key values identified through the value-based management framework. The second year of health checks were partly completed for Hinchinbrook Island National Park in 2017–18 and health checks commenced for Magnetic and Raine island national parks.

The Reef Joint Field Management Program contributed to the review of the Commonwealth Whitsundays Plan of Management as amended on 1 January 2018, including policy development, stakeholder consultation and public information sessions. The joint program also initiated a process to accredit the Commonwealth Whitsundays Plan of Management for the Queensland Great Barrier Reef Coast Marine Park, with completion anticipated in 2018–19.



COMPLIANCE

Illegal fishing is one of the highest direct risks to the World Heritage Area and illegal recreational fishing continues to be a significant non-compliance problem. During 2017-18 the Reef Joint Field Management Program continued to step up its enforcement operations against illegal fishing with support from partner agencies, including Maritime Border Command, Australian Federal Police, Queensland Boating and Fisheries Patrol and Queensland Police.

There were 888 days dedicated to compliance patrols on vessels, nine land-based days and 66 days of chartered flights to encourage user compliance and maintain the integrity of the zoning plan and World Heritage Area values.

There were 1189 possible offences reported in 2017-18. Illegal recreational fishing comprised 55 per cent of these offences, similar to 56 per cent in 2016-17 and elevated above 43 per cent in 2015-16. These reported offences resulted in 130 infringement notices (\$249,528 in fines), 87 caution notices, 331 advisory letters, 49 warning notices and 42 court prosecutions (\$104,700 in fines) to provide an effective deterrent to further illegal activity.

The number of vessel days dedicated to compliance has increased by 32 per cent from 2016-17, with a corresponding 31 per cent increase in the number of possible offences and a tripling in the number with infringement notices issued, consistent with the *Reef Blueprint's* direction to dramatically enhance compliance.

Analysis of intelligence has resulted in targeting of hotspots such as shoals and wrecks during high risk periods and altering traditional vessel patrol patterns from broad areas to increase patrol time in targeted high risk no-take Marine

National Park (green) Zones. In targeting patrols during high risk periods for non-compliant recreational fishing, 30 per cent of the vessel patrols were undertaken on days with winds 10 knots or under, during weekends, on public holidays or during the Christmas school holidays.

Under the *Queensland Sustainable Fishing Strategy 2017-2027*, vessel tracking of all priority commercial fisheries in the World Heritage Area by 1 January 2019 will significantly enhance compliance capability and support Reef resilience. The joint program is supporting the Queensland Department of Agriculture and Fisheries with this initiative, including the provision of a further \$1,000,000 in funding (\$1,200,000 provided in 2016-17) towards the industry rebate scheme to assist fishers with the purchase and installation of vessel tracking units.



PROGRAM SUPPORT

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, and good systems.

Field management vessels spent 1598 days at sea during 2017–18 — an eight per cent increase from 2016–17. The 24-metre vessel *Reef Ranger* spent 70 per cent of the year at sea in its fourth year of operation with rangers, other reef managers and researchers undertaking a range of field activities across the 249 days. The quick transit times and multi-tasking capacity of *Reef Ranger* enabled rangers to work on a broad scope of activities such as Raine Island recovery, crown-of-thorns starfish response, reef and seabird monitoring, fire and pest management, visitor facility management and educating park users.

The Reef Joint Field Management Program took delivery of two new vessels in 2017–18. *Reef Sentinel* is an 11-metre rigid hulled inflatable boat based in Townsville that can work in mid-shelf waters offshore and has the technology to undertake night-time compliance surveillance. *Pantala* is a six metre rigid hulled inflatable boat based in Gladstone that will also operate as a compliance vessel aboard the new 24-metre vessel *Reef Resilience* when it enters service in 2019.

Well-trained staff members are also essential to the delivery of an effective, efficient and safe Reef Joint Field Management Program. Field management staff received training across 32 different training courses in 2017–18, including the highly successful Field Management

Foundation course. The foundation course was specifically designed to unify staff awareness and understanding of the challenges facing Reef management and of the importance of the Reef to coastal communities and industries. It has now been delivered to 125 participants through eight courses held since 2014, with around 85 per cent of field management funded staff having completed the training.

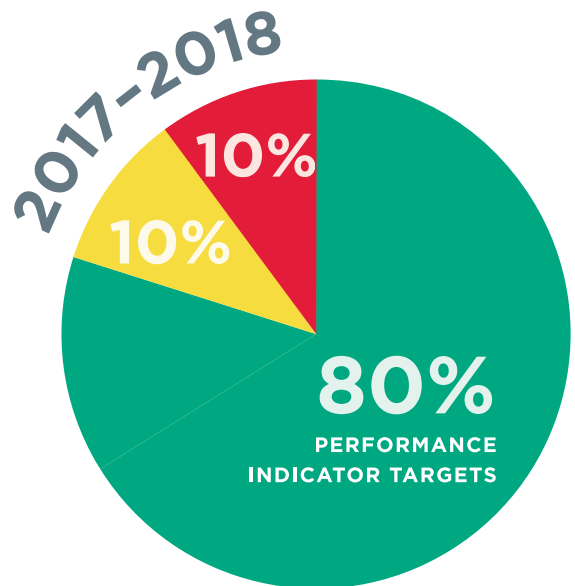
The joint program continues to explore and deliver technology improvements to enable more efficient and effective monitoring and reporting. The Field Reporting System is used by all field staff to record details of field management program 'trips' such as aerial, land-based or vessel; 'activities' such as responding to ship groundings, conducting compliance patrols, or reef protection marker maintenance; and any 'events' that occur such as compliance incidents, sightings, public contacts or permit checks. During 2017–18 there were 1093 trips, 2668 activities and 4222 events recorded. New forms were incorporated into the system, further reducing 'paper' reporting and the reporting functionality, usability, accuracy and editing capability was improved. Unmanned aerial vehicles (drones) are being used to improve compliance surveillance where traditional methods have been limited or ineffective and to improve monitoring of species such as seabirds and turtles.



RESULTS AGAINST PERFORMANCE INDICATORS

Performance indicators highlight Reef Joint Field Management Program achievements against nine high-level strategies derived from the Field Management Annual Business Plan 2017-18, which the Director-General of the Department of Environment and Science and the Chairperson of the Great Barrier Reef Marine Park Authority jointly approved.

In 2017-18, 33 performance indicator targets (80 per cent) were achieved, four performance indicator targets (10 per cent) were not achieved, but demonstrated significant progress; and four performance indicator targets (10 per cent) were not achieved or had no significant progress. This is an improvement in meeting performance indicators from recent years.












KEY






- TARGET ACHIEVED
- SIGNIFICANT PROGRESS TOWARDS TARGET
- TARGET NOT ACHIEVED + NO SIGNIFICANT PROGRESS

	PERFORMANCE INDICATOR	RESULTS 2017-18	
MARINE AND ISLAND CONSERVATION MANAGEMENT	620 REEF HEALTH AND IMPACT SURVEYS COMPLETED	1980 reef health and impact surveys completed, significantly higher than the target due to 1238 crown-of-thorns related surveys	
	40% OF FIELD MANAGEMENT OFFICERS DELIVERED REEF HEALTH AND IMPACT SURVEYS	46% of officers delivered reef health and impact surveys	
	90% OF CONSERVATION PRIORITY PEST PROJECTS ACHIEVED PROJECT OUTCOMES	92% of conservation priority pest projects achieved project outcomes Goats have been successfully eradicated from High Peak Island and eradication is anticipated for St Bees Island in 2018-19 Rat baiting in the Frankland and Barnard Island groups held over from 2016-17 was undertaken with results to be determined following monitoring in 2018-19	
	40 GREAT BARRIER REEF ISLAND WATCH SURVEYS COMPLETED	62 surveys completed	
	90% OF SCHEDULED SEABIRD MONITORING OCCURRED AT PRIORITY SITES	98% of essential sites were fully surveyed, comprising 144 surveys at 54 sites A total of 286 seabird surveys were undertaken at 155 sites across the World Heritage Area On target to deliver 100% of significant sites surveyed by 2020, with 83% surveyed since 2015	
	80% OF PLANNED CONSERVATION BURNS ACHIEVED FOR BIODIVERSITY	70% of planned burns successfully completed from the 2017 fire year While delivery is slightly less than the target of 80%, the program delivered a significant increase in the number of planned burns (21 planned burns, up from 10 burns in the 2016 year) and the per cent of islands within burn prescription (44% up from 33% in 2016)	
	90% OF PROTECTION AND WILDFIRE MITIGATION BURNS ACHIEVED TO PROTECT LIFE AND PROPERTY	50% of protection and wildfire mitigation burns completed As unfavourable weather hindered the remaining planned burns, the areas were made safe by mechanical removal of fuel. The burns will be completed in the 2018 fire year	
	100% OF HIGH AND MEDIUM-PRIORITY ISLAND PROTECTED AREAS HAVE CONTEMPORARY FIRE STRATEGIES IN THE QUEENSLAND PARKS AND WILDLIFE SERVICE 'FLAME' SYSTEM	77% of fire strategies for high and medium priority islands are complete and loaded in FLAME 100% of all fire history, planned burns and wildfires is hosted in FLAME	
	NO NEW PEST INFESTATIONS OF ECOSYSTEM CHANGING INVASIVE PESTS ESTABLISHED ON ISLANDS WITH HIGHER RANKED BIOSECURITY LEVELS OF SERVICE (LEVELS 3-5)	No new infestations were detected on any islands with higher ranked biosecurity levels of service Siam weed was previously thought to have been eradicated from Magnetic Island, however further surveys have identified the pest is still present in the infestation area	

	PERFORMANCE INDICATOR	RESULTS 2017-18	
INCIDENT RESPONSE	100% OF SPILLS NOTIFIED TO THE REEF JOINT FIELD MANAGEMENT PROGRAM RISK ASSESSED	100% of reported spills risk assessed (eight spills)	
	100% OF VESSEL GROUNDINGS OR SINKINGS NOTIFIED TO THE REEF JOINT FIELD MANAGEMENT PROGRAM RISK ASSESSED	100% of reported vessel groundings or sinkings risk assessed (48 groundings and 17 sinkings)	
	100% REEF JOINT FIELD MANAGEMENT PROGRAM RESPONSE TO VESSEL INCIDENTS WHERE THE INCIDENT CONTROL AGENCY REQUIRES SUPPORT	100% response to requests The Reef Joint Field Management Program was incident controller for 48 groundings and 17 sinkings and undertook field response to 20 incidents where seven site assessments of damage were undertaken	
	REMOVAL OF VESSELS OCCURS AT NO COST TO THE AGENCIES	100% of removal orders effected at no cost to remove the vessel (five issued)	
RECREATION AND TOURISM FACILITIES	100% OF CRITICAL AND STATUTORY INSPECTIONS ON VISITOR INFRASTRUCTURE OCCURRED WITHIN SCHEDULED TIMEFRAMES	100% of infrastructure inspections completed (210 statutory, 63 critical infrastructure)	
	90% OF FUNDED CRITICAL INFRASTRUCTURE MAINTENANCE TASKS DELIVERED	100% of infrastructure maintenance tasks delivered (97 tasks)	
	90% OF PUBLIC MOORINGS AND REEF PROTECTION MARKERS IN OPERATION AT ALL TIMES	99% of 223 public moorings operational 94% of 201 reef protection markers operational	
PLANNING AND ASSESSMENT	OVER 300 APPLICATIONS FOR JOINT MARINE PARKS PERMITS ASSESSED AND DECIDED JOINTLY	387 joint marine parks permits assessed and decided	
	OVER 100 APPLICATIONS FOR STATE-ONLY MARINE PARKS, ISLAND PROTECTED AREAS AND GREEN ISLAND RECREATION AREAS (FOR RELEVANT AUTHORITIES) DECIDED WITHIN STATUTORY OR AGREED TIMEFRAMES	146 applications were received and decided (75 Queensland only Great Barrier Reef Coast Marine Park permits, 67 island national park permits and four commercial activity agreements)	
	KEY VALUES AND LEVELS OF SERVICE ASSESSMENTS COMPLETED FOR AT LEAST FOUR NATIONAL PARKS	Workshops were undertaken to identify the key values, current levels of service, and the condition, trend and threats to key values for seven parks – Whitsunday Islands, Gloucester Island, Molle Islands, Lindeman Islands, Repulse Island, Frankland Group and Barnard Island Group national parks and the intertidal area of the surrounding Great Barrier Reef Coast Marine Park – further work to complete and have the key value and levels of service assessments approved will be undertaken in 2018-19	
	HEALTH CHECKS ARE UNDERTAKEN FOR ISLAND KEY VALUES	Annual health checks were completed on Raine Island and partly completed on Hinchinbrook and Magnetic islands	

	PERFORMANCE INDICATOR	RESULTS 2017-18	
INDIGENOUS ENGAGEMENT AND CULTURAL HERITAGE PROTECTION	NUMBER OF DAYS TRADITIONAL OWNERS SPENT ON FIELD MANAGEMENT VESSEL TRIPS AND LAND-BASED PATROLS MAINTAINED OR INCREASED	Traditional Owners spent 557 person days on field management vessels in the World Heritage Area This is a significant increase from 384 days in 2016-17, 348 days in 2014-15 and 143 days in 2013-14, and is approaching the highest number of 574 days achieved in 2015-16	
	GREATER THAN 5% OF THE REEF JOINT FIELD MANAGEMENT PROGRAM WORKFORCE IDENTIFY AS INDIGENOUS PEOPLE	5.2% of positions are Indigenous-identified and held by Aboriginal people or Torres Strait Islander people (six of 115 positions)	
	80% OF REQUIRED MEETINGS WITH LAND TRUSTS FOR JOINTLY MANAGED NATIONAL PARKS (CAPE YORK PENINSULA ABORIGINAL LAND) ATTENDED	100% of required meetings attended, comprising four quarterly meetings with each group — Lama Lama Land Trust; Cape Melville, Flinders and Howick Group Aboriginal Corporation; Wuthathi Land Trust; and Kuuku Ya'u Land Trust	
	INDIGENOUS RANGER GROUPS RESPOND TO OR REPORT AN INCREASING PERCENTAGE OF MARINE ANIMAL STRANDINGS	Yuku Baja Muliku and Mandubarra Indigenous Ranger groups responded to 4% (8 of 218) of strandings requiring response, which is a decrease from 9% of strandings in 2016-17 Indigenous Ranger Groups continue to be active with strandings response. Yuku Baja Muliku and Mandubarra Ranger Groups are the contacts for their areas with the RSPCA hotline. Gidarjil Rangers have completed online and face-to-face training.	
	INCREASED NUMBER OF FORMAL ARRANGEMENTS IN PLACE FOR TRADITIONAL OWNER INVOLVEMENT IN CULTURAL SITE PROTECTION	Cultural site protection measures progressed within existing joint management parks, Indigenous Protected Areas and Traditional Use of Marine Resources Agreement areas New agreements and collaborative work programs developed or well progressed with Indigenous groups, including finalisation of the Mandubarra Traditional Use of Marine Resources Agreement and the Indigenous Land Use Agreement with Port Curtis Coral Coast native title claimant group	
NON-INDIGENOUS CULTURAL HERITAGE PROTECTION	100% OF LEASES WITH CULTURAL HERITAGE SIGNIFICANCE HAVE ANNUAL INSPECTIONS TO ENSURE TENANTS MEET OBLIGATIONS TO PROTECT CULTURAL HERITAGE VALUES	100% of annual inspections completed for the three Commonwealth islands with Commonwealth heritage listed buildings and leases (Lady Elliot Island, Dent Island, Low Isles) and the three national parks with significant cultural heritage (Magnetic Island, Raine Island and Cape Capricorn on Curtis Island — none have leases)	

	PERFORMANCE INDICATOR	RESULTS 2017-18	
COMMUNICATION, EDUCATION AND STEWARDSHIP	TREND IN PUBLIC CONTACTS TO BE RECORDED USING THE FIELD REPORTING SYSTEM	2806 public contact moments recorded while on patrol	
	MAINTAINED OR INCREASING TREND IN COMMUNITY OR VOLUNTEER GROUPS RESPONDING TO MARINE TURTLE STRANDINGS	Volunteers including community groups and Indigenous Ranger Groups responded to 61% of strandings requiring response, consistent with a maintained or increasing trend — 58% in 2016-17, 57% in 2015-16, 59% in 2014-15, 46% in 2013-14, 18% in 2012-13	
	80% ATTENDANCE BY THE QUEENSLAND PARKS AND WILDLIFE SERVICE AT LOCAL MARINE ADVISORY COMMITTEE MEETINGS	57% attendance at Local Marine Advisory Committee meetings (33 of 58 meetings) This is a further decline and reflects the difficulty in attending the range of various meetings that Queensland Parks and Wildlife Service staff endeavor to attend across the state	
COMPLIANCE	700 DEDICATED COMPLIANCE VESSEL PATROL DAYS FUNDED OR PARTIALLY FUNDED BY THE REEF JOINT FIELD MANAGEMENT PROGRAM UNDERTAKEN	888 dedicated compliance patrol vessel days were completed, a 32% increase from 674 days in 2016-17	
	MULTI-AGENCY PARTICIPATION IN 70% OF TARGETED SPECIAL OPERATIONS IN THE WORLD HERITAGE AREA	Multi-agency participation in 39% of targeted special operations This is a decline from 60% in 2016-17 and reflects the program's focus on offshore and night-time operations which require a high level of expertise, such that there is less opportunity for cross-decking with partner agencies	
	100 DEDICATED PATROL DAYS UNDERTAKEN DURING PERIODS OF KNOWN HIGHEST RISK FOR NON-COMPLIANT RECREATIONAL FISHING	269 dedicated patrol days were undertaken during periods of known highest risk for non-compliant recreational fishing, being days with weather conditions of 10 knots or under, weekends, public holidays and during the Christmas school holidays	
	INCREASING TREND IN THE NUMBER OF COMPLIANCE INCIDENT REPORTS SUBMITTED BY THE PUBLIC	61 compliance incident reports were received, an increase from 50 reports in 2016-17	
	60 DEDICATED COMPLIANCE AIRCRAFT PATROL DAYS FUNDED BY THE REEF JOINT FIELD MANAGEMENT PROGRAM UNDERTAKEN	66 dedicated compliance aircraft patrol days were completed	
	INCREASING TREND IN PERCENTAGE OF INDIGENOUS RANGER GROUPS RESPONDING TO OR MAKING COMPLIANCE INCIDENT REPORTS	Indigenous ranger groups made 15 reports in 2017-18, an increase from two reports in 2016-17	
	100% OF BRIEFS OF EVIDENCE SUBMITTED TO THE COMMONWEALTH DIRECTOR OF PUBLIC PROSECUTIONS ARE ACCEPTED	100% of 42 Briefs of Evidence submitted and accepted	

	PERFORMANCE INDICATOR	RESULTS 2017-18	
PROGRAM SUPPORT	DOWNTIME OF THE REEF JOINT FIELD MANAGEMENT PROGRAM'S TWO OFFSHORE VESSELS (EXCLUDING SCHEDULED MAINTENANCE) LESS THAN 10% OF DAYS AT SEA	Total combined downtime for the two offshore vessels was 7.7% (29 days out of 374 days) <i>Reef Ranger</i> recorded 17 unscheduled outage days <i>Reef Heron</i> recorded 12 unscheduled outage days	
	THE REEF JOINT FIELD MANAGEMENT PROGRAM DELIVERS MORE THAN 1400 DAYS AT SEA	A total of 1598 vessel days at sea were delivered, an increase from 1481 in 2016-17 and 1406 days in 2015-16	
	EXPENDITURE WITHIN 1% OF BUDGET AND IN ACCORDANCE WITH LABOUR, OPERATING AND CAPITAL ALLOCATIONS	Expenditure (\$20,384,768) was within 1% of budget allocation (\$24,093,093), excluding the held over commitment to 2018-19 towards construction of the new 24-metre vessel <i>Reef Resilience</i> (\$3,667,259) and the Southern Whitehaven lookout and walking track (\$172,291)	
	100% OF PATROL EFFORT RECORDED USING THE FIELD REPORTING SYSTEM	Anecdotally, recording of patrol effort on the Field Reporting System is high Recording of all patrol effort will be an ongoing priority	
	DECREASED TREND IN LOST-TIME INJURIES YEAR-ON-YEAR	The total number of lost-time injuries was four with a total of 41 days lost time This is a decreasing trend from five in 2016-17, four in 2015-16 and 2013-14, and 11 in 2012-13, and is approaching the lowest number of three in 2014-15 Promoting a safe work culture will continue to be a priority	

Further information about the Reef Joint Field Management Program

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