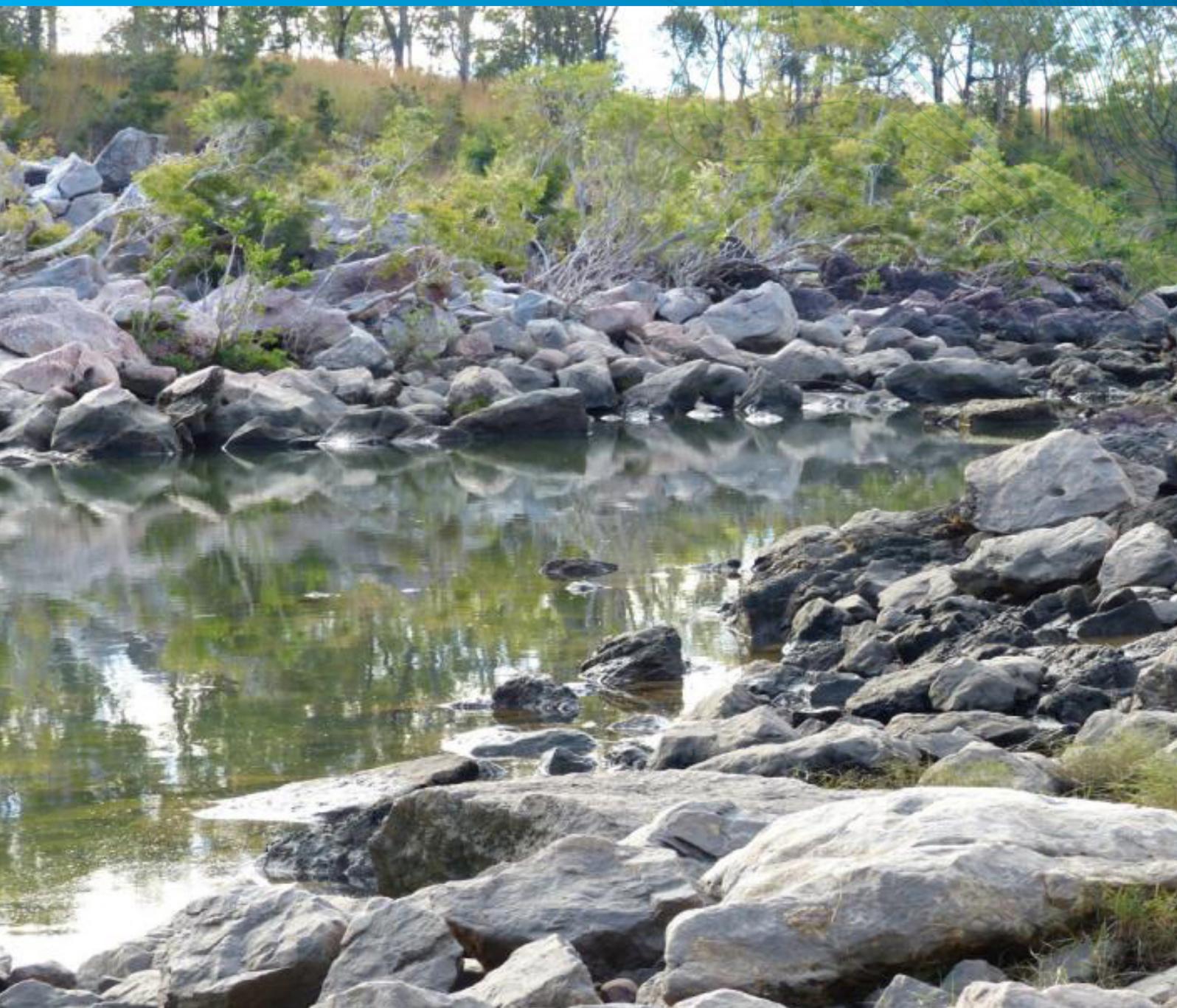


Declared Fish Habitat Area network assessment report

2017



Queensland
Government

Prepared by: Protected Area Innovation, Engagement and Policy, Department of Environment and Science

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Cover image: Calliope River declared Fish Habitat Area © Queensland Government

April 2018

CCI 31585

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‘Queensland’s declared Fish Habitat Area (FHA) network protects key fish habitats from development impacts.’

Overview 2012–17

Extensive network



72 FHAs covering 1.2 million hectares

New declared FHA network strategy



Sets 5-year direction

New governance arrangements



Key opportunity

Expanded FHA network



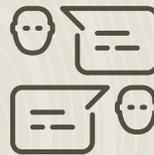
- 2 new FHAs declared
- 49,500 hectares added overall

Effective protection



- Little development in declared FHAs:
- <10 resource allocation authorities annually
 - <20 self-assessable code notifications annually

Better planning integration



Matter of state environmental significance

More partnerships



Improved Traditional Owner engagement

Enhanced compliance



Targeted compliance surveys in priority FHAs

New and improved policies and statutory documents



Clearer, simpler, streamlined

Continued communications



Annual communication strategies

Purpose of this report

The purpose of this report is to assess the status of the declared Fish Habitat Area (FHA) network in 2017 by documenting key changes, knowledge gained and management activities since the last assessment was done in 2012.

Key changes, knowledge gained and management activities since 2012

The [2012 report](#) on the status of the network was a desktop assessment of each declared FHA against criteria such as fish habitat diversity, importance for fishing, management partnerships, research, Traditional Owner involvement,

unlawful activities and integration into planning processes (Department of Agriculture, Fisheries and Forestry 2012).

We gave each declared FHA a 'traffic light' rating (red, yellow or green). There were no 'red' declared FHAs. Most had good fish habitat diversity and fishing activity, which are key qualities that we consider when we select candidate areas for FHA declaration.

We found a need for more communication activities, more partnerships with key stakeholders and better integration into planning processes for many declared FHAs. Based on our findings, we recommended specific management actions for each declared FHA.

While we, the Department of Environment and Science (DES), have taken a more strategic approach for the 2017 assessment report, we assessed two new declared FHAs against the 2012 criteria to compare these with the rest of the network. We also reassessed a significantly expanded declared FHA and another with significant new habitat information ([Appendix 1](#)).

Moreton Banks declared Fish Habitat Area
© Queensland Government

THEN: 1969

The first FHAs were declared in Moreton Bay and the Gold Coast to counter increasing development impacts on fish habitats and their dependent fisheries in South-East Queensland.

NOW: 2017

Forty-eight years later there are a total of **72** declared FHAs covering an area of **1.2 million hectares** along Queensland's coast.

What are declared FHAs?

Declared FHAs are a type of marine protected area that protect key fish habitats from the impacts of coastal development. A network of 72 declared FHAs covers 1.2 million hectares of coastal and estuarine fish habitats in Queensland (Figure 1).

FHAs protect fish habitats from coastal development

FHAs are declared under the Queensland *Fisheries Act 1994* and managed by DES. Declared FHAs are part of the suite of protected areas managed by DES, along with:

- marine parks declared under the *Marine Parks Act 2004*
- national and conservation parks declared under the *Nature Conservation Act 1992*
- state forests and timber reserves declared under the *Forestry Act 1959*
- the Great Barrier Reef Marine Park (in partnership with the Great Barrier Reef Marine Park Authority (GBRMPA)).

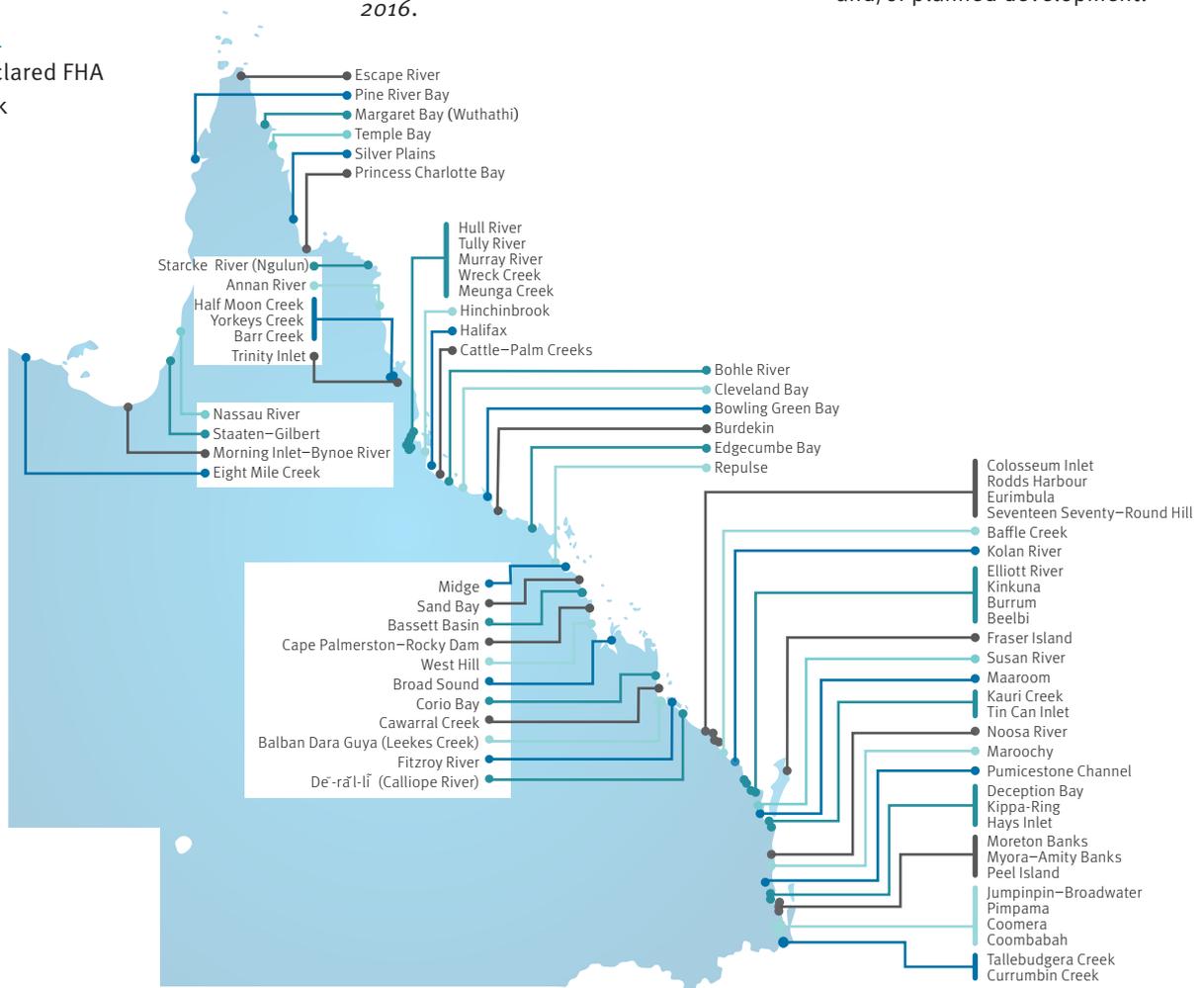
Development activities in declared FHAs are authorised under both the *Fisheries Act* and the *Planning Act 2016*.

Declared FHAs are matters of state environmental significance (MSES) under the *State Planning Policy (SPP)*, and are therefore valued and protected through the state’s planning framework (Department of Infrastructure, Local Government and Planning 2017).

Declared FHAs have two management levels:

- management A areas significantly restrict development activities (supporting development for public purposes) and make up 83% of the declared FHA network by area
- management B areas allow for more flexible management, including for private purposes, particularly where there is existing and/or planned development.

Figure 1
The declared FHA network



The declared FHA program has a strong strategic focus (Figure 2), with:

- a **strategy** to guide overall direction
- **operational policies** to interpret legislation, and guide decision-making and declaration/ amendment of FHAs
- a **guideline** that explains how to comply with development assessment benchmarks
- streamlined authorisation through a **Code of Practice for pest control** and **accepted development requirements**
- integration into state, regional and local planning
- partnerships with other natural resource managers and key stakeholders
- annual communication strategies
- assessment reporting on the status of the network.

Figure 2
Declared FHA strategic focus



Healthy fish habitats
= Healthy fish communities

Key changes 2012–17

New Declared Fish Habitat Area Network Strategy 2015–20

The *Declared Fish Habitat Area Network strategy* (Department of National Parks, Sport and Racing 2015) sets the direction for the network for five years and underpins the strategic approach for declared FHAs (Figure 2). The current 2015–20 strategy replaced the original 2009–14 strategy. Our vision in the strategy is that ‘the declared FHA network will protect the critical fish habitats that sustain Queensland’s fisheries from development impacts, now and into the future’.

The new strategy sets some new directions for the network, especially better integration with other protected areas managed by DES, and it better aligns with the *Master Plan for Queensland’s Parks and Forests* (Department of National Parks, Recreation, Sport and Racing 2014).

At the same time it retains much of the original strategy such as forming and enhancing partnerships with key stakeholders including Traditional Owners, integration into strategic planning processes and maintaining an effective communication strategy. The strategy also sets a number of targets, including for a new network assessment report (this report).

The commitments, objectives, goals and targets of the strategy are referred to, where relevant, throughout this report.

New direction for the network: Better integration with other protected areas

New governance arrangements

In 2012 responsibility for declared FHAs moved from the Department of Agriculture, Fisheries and Forestry to the Department of National Parks, Recreation, Sport and Racing. In 2017 responsibility moved to DES, under the Minister for Environment and the Great Barrier Reef, Minister for Science and Minister for the Arts. Despite these machinery-of-government changes, the Department of Agriculture and Fisheries (DAF) continues to provide development assessment and compliance services on behalf of DES under a memorandum of understanding.

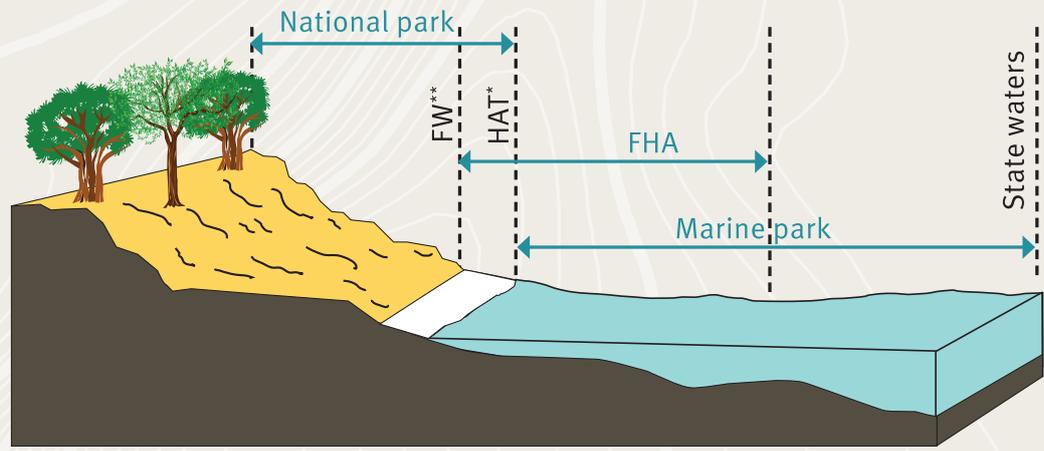
These changes have created opportunities for the declared FHA network, as it is easier to have strong links between the state’s different types of protected areas with one agency (DES) responsible for all of these. About 65 per cent by area of the declared FHA network overlies marine parks, and about 5 per cent overlies national or conservation parks (Figure 3).

We have better integrated declared FHAs with other protected areas managed by DES by:

- aligning the declared *FHA Network Strategy 2015–20* with the *Master Plan for Queensland’s Parks and Forests*
- making sure that adjoining/overlapping declared FHAs are recognised, and any management restrictions identified, in [park management statements](#)
- carrying out compliance inspections in declared FHAs within the [Great Sandy Marine Park](#), to help inform the review of its zoning plan (see [Enhanced compliance](#))
- contributing to ecotourism initiatives, including the Queensland Ecotourism Development Toolkit, to help developers and investors make good decisions about [ecotourism proposals on protected areas](#).

Given the large overlap of marine parks and declared FHAs, there are opportunities for further integration of marine parks and declared FHAs, including in strategies, policies, planning and legislation.

Figure 3
Example of protected areas overlap



* HAT = highest astronomical tide
** FW = fresh water

Elliott River declared FHA
© Queensland Government



Key changes 2012–17

Expanded declared FHA network

Overall the declared FHA network increased in size by 49,500 hectares, taking the total area to about 1.2 million hectares. This increase was mainly due to the declaration of two new FHAs and more than doubling the size of one FHA through the Central Queensland Declared FHA Investigations Program.

There were also reductions in the size of some declared FHAs to clarify boundary locations and address specific management issues, but these were much smaller than the areas added to the network (see [Other amendments](#)). These changes have enhanced a comprehensive, adequate and representative declared FHA network to help sustain the state’s fisheries.

Central Queensland Declared FHA Investigations Program

The Central Queensland Declared Fish Habitat Area Investigations Program explored:

- the declaration of new FHAs at [Leekes Creek](#) on Great Keppel Island and the Calliope River near Gladstone
- expansion of the [Fitzroy River](#) declared FHA near Rockhampton
- reassessment of the [Cawarral Creek](#) declared FHA near Emu Park.

The program was funded by offsets required for the Gladstone Ports Corporation’s (GPC) Western Basin Dredging and Disposal Project. It included:

- fisheries resource assessments of the areas of interest
- fish and habitat surveys in the [Calliope River](#) and [Leekes Creek](#) areas of interest

Central Queensland declared FHA investigations program:

Balban Dara Guya (Leekes Creek)	876 hectares
De-rā-l-ī (Calliope River)	314 hectares
Fitzroy River	↑48,625 hectares

Other additions:

Bohle River	↑3480 hectares
Burdekin	↑273 hectares
Kinkuna	↑850 hectares
Maroochy	↑74 hectares

The declared FHA network now includes

1 million hectares

management A

- a survey of the fish communities in the Fitzroy delta around Balaclava Island
- sub-tidal habitat mapping in Cawarral Creek and a desktop study of the subtidal habitats of Balaclava Island and Calliope River
- two rounds of public consultation.

We received over 500 submissions through the public consultation process, with overwhelming support for the proposed/expanded FHAs. Traditional Owners joined in field surveys, advised on their cultural values and aspirations for the areas, provided Aboriginal language names for the new declared FHAs and helped to develop interpretive signage.

The declared FHA network now includes

200,000 hectares

management B

Overwhelming support for the proposed/expanded FHAs

As a result of the program, two new FHAs were declared and one existing FHA significantly expanded (Figure 4).

The new [Balban Dara Guya \(Leekes Creek\)](#) declared FHA covers 876 hectares on and around Great Keppel Island, north east of Rockhampton. This is the first declared FHA centred on an offshore continental Island.

One hectare of management B area is in place to allow applications for future access structures for the Traditional Owners of the Keppel Islands, the Woppaburra People.

The new [De-rā-l-lī \(Calliope River\)](#) declared FHA is just north of Calliope near Gladstone. It is 314 hectares in size and is a management B area. This will allow people to apply for limited access structures from their properties to the river (e.g. a boat ramp or a pontoon).

The [Fitzroy River](#) declared FHA (management A area) was expanded by 48,625 hectares to over 77,800 hectares. This expansion further protects breeding grounds and critical habitats for barramundi, salmon, mud crabs and other popular fisheries species in the Fitzroy delta. Expansion of the Fitzroy River declared FHA delivered a Queensland Government commitment in the Reef 2050 Long-Term Sustainability Plan (Commonwealth of Australia 2015).

We assessed the two new declared FHAs using the 2012 criteria to compare these with the rest of the network. We reassessed the Cawarral Creek and Fitzroy River declared FHAs due to the extra information gathered on these two declared FHAs and the large increase in size of the Fitzroy River declared FHA. We found (see [Appendix 1](#) for details):

- The [Balban Dara Guya \(Leekes Creek\)](#) declared FHA is a low priority for management action. This is the highest scoring FHA in the network due to its unique mix of estuarine and reef habitats and fauna, and the strong partnerships formed with the Traditional Owners and GBRMPA through the consultation process.
- The [De-rā-l-lī \(Calliope River\)](#) declared FHA is a low priority for management action, with a high diversity of fish habitats

and fisheries resources, involvement of Traditional Owners in assessing the proposed FHA and partnerships with local government to ensure that the new FHA is considered in planning scheme amendments.

- The existing [Cawarral Creek](#) declared FHA moved from a low-ranked, medium priority for management action to a low priority for action. We found a much broader range of fish habitat values for this declared FHA than had previously been documented.
- The expanded [Fitzroy River](#) declared FHA moved from a medium priority to a low priority for management action. This higher ranking was due to its significant expansion and improved integration into planning processes, including the Rockhampton Regional Council planning scheme.

Other amendments

A number of amendments were made to declared FHAs to add adjoining fish habitats, improve/clarify boundaries and to address management issues:

- The tidal parts of the Townsville Town Common were added to the [Bohle River](#) declared FHA and its seaward boundaries were extended, adding 3480 hectares.
- The seaward boundary of the [Kinkuna](#) declared FHA was extended and a land parcel previously left out due to a legislative drafting error was included. Overall the declared FHA increased in size by 850 hectares.
- The seaward boundary of the [Kippa-Ring](#) declared FHA was changed from a depth contour to coordinates to clarify its location and the FHA plan was changed to make clear that the Redcliffe aerodrome is not included.

- A 400 square metre area of the [Deception Bay](#) declared FHA was changed to a management B area to allow for a new outfall for an upgraded sewage treatment plant.
- The [Burdekin](#) declared FHA was expanded to make its boundary at Cape Bowling Green clear. Non-tidal lands on four lots with sand extraction operations were removed. Overall the declared FHA increased in size by 273 hectares.
- An area of 2.2 hectares was removed from the [Burrum](#) declared FHA for a new public boat ramp at Burrum Heads. While public boat ramps are normally permitted in declared FHAs, the design (after long-term interagency and community consultation) included reclamation of tidal lands for car parking.
- About one hectare of the [Deception Bay](#) declared FHA was changed to a management B area to allow a bridge to be built across Cundoot Creek. This was necessary to meet road safety requirements and development approval conditions imposed by the Planning and Environment Court.

Boundary amendments— an adaptive management approach:

- improve boundary definition
- allow for public works and public access
- protect cultural sites
- support designated mooring areas
- make sure high-quality fish habitats are included.

Key changes 2012–17

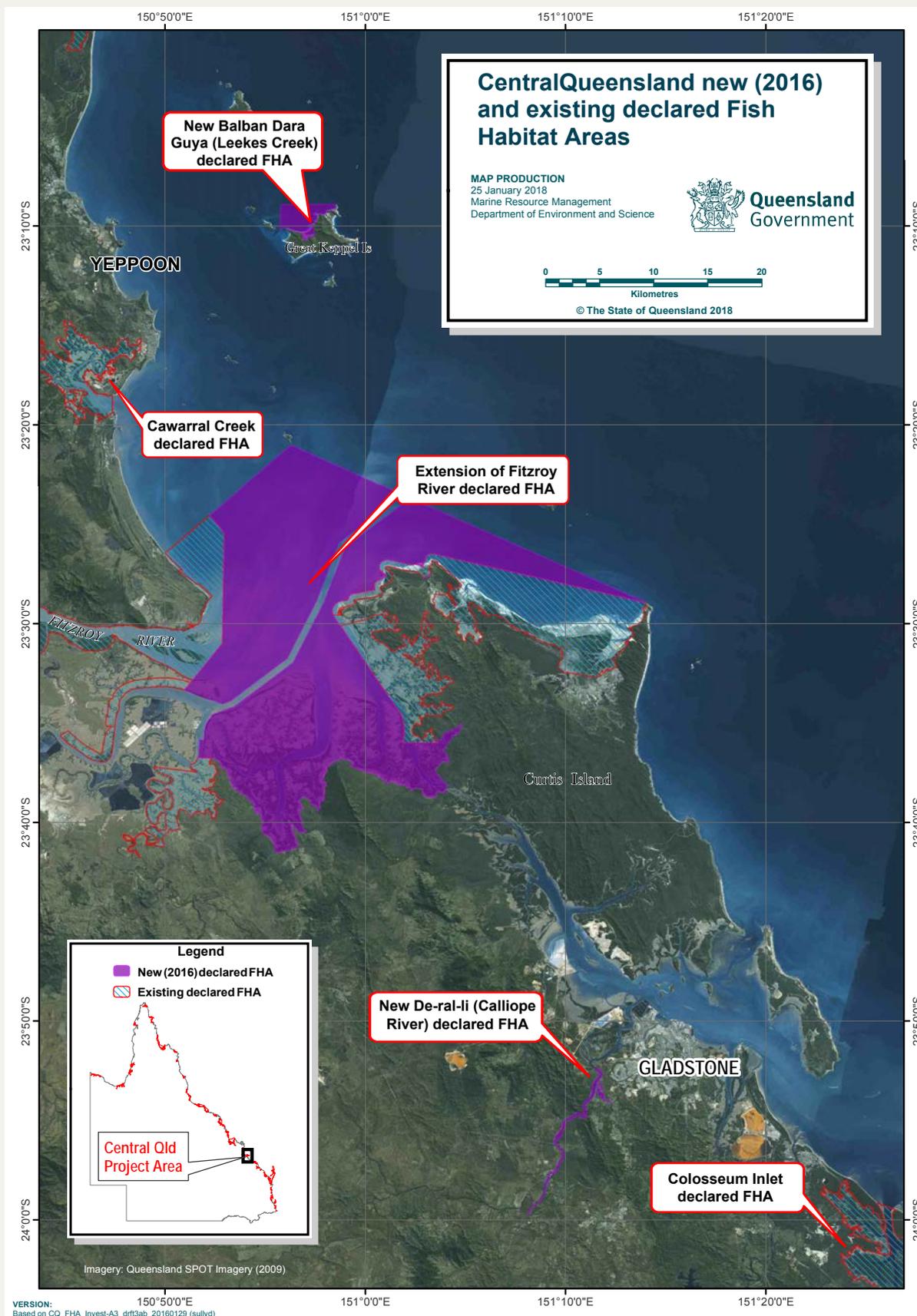


Barramundi caught during fish surveys in Leekes Creek
© Queensland Government

- Seventy-one hectares of the [Jumpinpin–Broadwater](#) declared FHA were changed to management B areas to allow new environmentally-friendly buoy moorings to be installed in designated mooring areas (DMAs). DMAs concentrate moorings in suitable places, and environmentally-friendly moorings minimise impacts on fish habitats. The midstream boundary of the declared FHA near Jacobs Well was converted to geographic coordinates to improve its definition.
- Small exclusions were made along the river banks in the [Maroochy](#) declared FHA for erosion control works to protect four houses and shell middens of cultural importance to descendants of South Sea Islanders. A filled and long-farmed area known as Boggy Creek was removed from the declared FHA due to its lack of fish habitat values. Conservation parks with non-tidal lands in the declared FHA were removed, while tidal conservation park lands were added. Overall the declared FHA increased in size by 74 hectares.

Figure 4

Existing and new FHAs declared through the Central Queensland declared
FHA investigation program



Key changes 2012–17

Better planning integration

Declared FHA management is based on the strategic protection of areas that have high fish habitat value, with proposed development to be mostly located elsewhere. The declared FHA network is a constraint layer for land use and development planning. Integrating declared FHAs into planning processes helps to make sure that these areas are protected into the future.

We have made significant progress with integrating the declared FHA network into planning processes since 2012.

Integration with the state's planning system

Declared FHAs are now better integrated into the state's planning and development system. Declared FHAs became MSES under the SPP biodiversity state interest in 2013 and must be appropriately considered in local planning schemes.

Declared FHAs are a matter of state environmental significance

A new planning system for Queensland began on 3 July 2017 when the *Planning Act 2016* commenced. Declared FHAs were integrated into the new planning system by:

- maintaining declared FHAs as MSES in the revised SPP

- including declared FHA spatial data in the publically available SPP Interactive Mapping System and Development Assessment Mapping System. People can also download this data from the Queensland Spatial Catalogue (QSpatial)
- revising the declared FHA module (State Code 12) of the State Development Assessment Provisions (SDAP), which development applications are assessed against under the Planning Act. The revised assessment provisions are clearer, more streamlined and easier to use
- developing a new declared FHA SDAP [guideline](#), which explains the SDAP performance outcomes and how to comply with these (Department of National Parks, Sport and Racing 2017)
- converting and consolidating four codes for self-assessable development (SACs) into one set of [Accepted development requirements for operational work that is completely or partly within a declared Fish Habitat Area](#) (Department of National Parks, Sport and Racing 2017). Minor works that comply with the accepted development requirements do not require approval, streamlining processes and reducing administrative burden for the community and government.

We provided declared FHA input to *ShapingSEQ South East Queensland Regional Plan* (Department of Infrastructure, Local Government and Planning 2017) and the *Cape York Regional Plan* (Department of Infrastructure, Local Government and Planning 2014) and to reviews of the following planning schemes—Hinchinbrook Shire, Mackay Region, Sunshine Coast (major amendment),

Fraser Coast Regional Council (major amendment), Moreton Bay Regional Council, Burdekin Shire, Cairns Region, Noosa (major amendment) and Cook Shire.

Declared FHAs have also been integrated into development offset legislation. The *Environmental Offsets Act 2014* requires offsets for works in declared FHAs (and for other types of development) that have 'significant residual impacts'. This legislation has replaced the previous offset requirements for declared FHAs set out in departmental policy, sets a consistent approach to offsetting and recognises declared FHAs as MSES. In practice, most development in declared FHAs does not need to be offset as there are usually no significant residual impacts. Most offsets carried out in declared FHAs are from development elsewhere (e.g. near, but outside, a declared FHA).

Integration with other planning processes

We also provided declared FHA input to other planning processes including:

- the Queensland Competition Authority's (QCA) investigation into the regulation of Queensland's aquaculture industry and DAF's implementation of the government's response to QCA recommendations. Declared FHAs are a planning constraint layer for potential aquaculture development areas
- the revision of the *Oyster industry plan for Moreton Bay Marine Park* (Department of Agriculture and Fisheries 2015) which sets a framework for commercial oystering and ensures ecologically sustainable use of the marine park. This plan is integrated with the operational policy [Management of declared FHAs](#) (Department of National Parks, Sport and Racing 2015)



- Gold Coast Waterways Authority (GCWA) planning for vessel moorings management and for dredging and dredge spoil disposal. Declared FHAs within the GCWA area include [Jumpinpin–Broadwater](#), [Pimpama](#) and [Coomera](#)
- Gkuthaarn and Kukatj Land and Saltwater Country planning through the Carpentaria Land Council Aboriginal Corporation. The planning area includes the [Staaten-Gilbert](#) and [Morning Inlet–Bynoe River](#) declared FHAs.

Improved partnerships

Declared FHAs are a management layer over lands that are usually owned by, or entrusted to, entities other than DES (e.g. unallocated state land, council reserves, etc.). This is different to national parks, which are protected areas with a land tenure and are owned by DES. Community and stakeholder support for this management layer is vital for the long-term future of the declared FHA network. We try to foster a sense of ‘ownership’ by developing partnerships with key stakeholders.

We have formed new partnerships, and enhanced existing ones, including with Traditional Owners, state agencies, local governments and Natural Resource Management (NRM) groups.

Traditional Owner engagement

Traditional Owner engagement was a key focus between 2012 and 2017, particularly through the Central Queensland declared FHA Investigations Program and through the management planning process for the [Pine River Bay](#) declared FHA.

Traditional Owner engagement was a key focus

Balban Dara Guya (Leekes Creek) declared FHA

We formed a strong partnership with the Woppaburra People, Traditional Owners of the Keppel Islands, throughout the investigation, consultation and declaration process for the proposed FHA. The Woppaburra People took part in seasonal fish surveys of the proposed FHA, provided an Aboriginal language primary name for the FHA (Balban Dara Guya, meaning ‘mangrove’, ‘creek’, ‘fish’) and helped design the first Aboriginal interpretive signage in a declared FHA. Four small management B areas in the declared FHA will enable the Woppaburra People to construct a jetty or ramp and install moorings to support future development of their adjoining land.

Our successful partnership with the Woppaburra People was supported by our strong working relationship with GBRMPA. The Woppaburra People have a Traditional Use of Marine Resources Agreement (TUMRA) with GBRMPA. We used the TUMRA committee as a forum to engage with the Woppaburra People and GBRMPA also helped with logistics (e.g. travel arrangements for Traditional Owners).

Key changes 2012–17

Over 30 Woppaburra People, state and Commonwealth agency staff, dignitaries and media attended an official launch of the declared FHA. Extracts from speeches made on the day include:

Britanny Lauga MP, Member for Keppel:

‘... the partnerships ... to declare this important site as a Fish Habitat Area, as a significant ecosystem, as a significant cultural site is so important and I’m so proud we’ve been able to all work together to have this declaration made.’

Bob Muir, Woppaburra TUMRA Committee Chair:

‘The fact that here we are with all these different agencies and groups working together is such a great example of reconciliation between different agencies and the community and is something that I think will be hard to beat.’

De-ra-l-i~ (Calliope River) declared FHA

Gidarjil Land and Sea Rangers helped with juvenile fish surveys (below) of the proposed declared FHA. These surveys showed that the Calliope River provides valuable habitats for barramundi (Sawynock et al. 2015). We consulted with the Gidarjil Development Corporation to choose the Aboriginal language name De-ra-l-i~ (meaning ‘Calliope River’) as the primary name of the declared FHA.

Pine River Bay declared FHA

We consulted with the Thanakwith People, Traditional Owners of the Pine River Bay area near Weipa, on a draft plan for cooperative management of the Pine River Bay declared FHA. The plan will help the Thanakwith People to reconnect with Country by holding workshops there to discuss management issues. We expect that the plan will be signed soon, with annual implementation

funds to flow over four years. Plan development and implementation is being funded by development offsets from the Rio Tinto Alcan Weipa Amrun mining project to the south of the declared FHA.

Cooperative management of declared FHAs in the Girringun Region Indigenous Protected Area

There are nine declared FHAs in the Girringun Region Indigenous Protected Area (IPA): [Hull River](#), [Tully River](#), [Halifax](#), [Wreck Creek](#), [Murray River](#), [Dallachy Creek](#), [Meunga Creek](#), [Hinchinbrook](#) and [Cattle-Palm Creeks](#). DES’s role in managing these declared FHAs, and the Girringun People’s interests in these areas, is recognised in the Girringun Region Indigenous Protected Areas (Cooperative Management) Plan of Management. We are working with the Girringun People to formalise cooperative management of declared FHAs in their IPA region.



Gidarjil Land and Sea Rangers being taught juvenile fish recruitment survey techniques
© Queensland Government

Instream structure inventory program

The [instream structure inventory program](#) was the result of a partnership between federal and state agencies, working together with local government and NRM regional groups. The program was funded by the Australian Government through the Queensland Wetlands Program (QWP). We mapped instream structures in five declared FHAs—[Fraser Island](#), [Kauri Creek](#), [Maaroom](#), [Susan River](#) and [Tin Can Inlet](#)—within the Great Sandy Strait Ramsar site. These inventories were also within the [Great Sandy Marine Park](#), [Great Sandy National Park](#) and [Tuan State Forest](#). We held workshops with stakeholders (including the Burnett Mary Regional Group, Oceanwatch, WetlandCare and state and local government) to transfer knowledge and to decide management actions for priority structures (Department of National Parks, Sport and Racing 2016). The Great Sandy Strait Ramsar inventory built on earlier inventories in declared FHAs in the Great Barrier Reef World Heritage Area and the Ramsar sites of Bowling Green Bay, Townsville, and Shoalwater and Corio Bays as part of the QWP.

Other partnerships

A key enhanced partnership was the targeted, joint DES/Queensland Boating and Fisheries Patrol (QBFP) compliance strategy for declared FHAs. This has improved the compliance approach for declared FHAs, led to some immediate compliance outcomes and better communication and understanding (see [Enhanced compliance](#)). In addition to this strategy, DES provided GIS mapping support to QBFP for any compliance investigations involving declared FHAs.

The Department of Transport and Main Roads and DES worked together on agreed compensation for revocation of 2.2 hectares from the [Burrum](#) declared FHA and the [Great Sandy Marine Park](#) to allow for reclamation of tidal lands for car parking as part of the Burrum Heads boat ramp upgrade. The new boat ramp has been well received by the local community and gives access for fishers and boaters to the declared FHA and the marine park. Compensation funds are being used for habitat enhancement and management projects to benefit the marine park and the declared FHA, including targeted structure compliance inspections.

We worked with GPC to protect coastal lands adjoining the [Cawarral Creek](#) declared FHA from development, as part of the Biodiversity Offset Strategy for GPC's Western Basin Dredging and Disposal Project. We helped identify potential sites for protection and GPC purchased one of these freehold lots, then gifted it to the Department of National Parks, Sport and Racing (NPSR) for future conversion to conservation park. The tidal parts of the lot are also suitable to add to the declared FHA in future.

We also worked with GPC to prepare a report on the current deployment, environmental benefits and potential for broader introduction of

environmentally-friendly moorings within the Gladstone region and wider bioregion.

We have improved partnerships for the [Tallebudgera Creek](#) declared FHA, a priority for management action in the [2012 network assessment report](#). We worked with the Tallebudgera Beach Outdoor Education School on a 'Hero's Journey' for students that includes the FHA. We formed partnerships within DES to integrate the FHA into [David Fleay Wildlife Park](#) (DFWP) education modules and make sure that a new canoe landing and boardwalk at DFWP avoided impacts to saltmarsh (an important fish habitat and matter of national environmental significance) and the declared FHA.

The Hays Inlet declared FHA benefited from our ongoing partnership with the adjoining Osprey House Environment Centre (Moreton Bay Regional Council). We worked with Osprey House staff to install fish habitat and marine plant awareness signs to enhance the educational experience of visitors. The signs are part of a boardwalk used for public education and birdwatching in the declared FHA. Osprey House staff also maintained revegetation sites in the nearby Pine Rivers Wetland Reserve and installed five Tangler bins to reduce lost recreational fishing line in the declared FHA.

Good declared FHA outcomes from good partnerships with:

- Traditional Owners
- State agencies
- Local government
- NRM groups
- Ports
- Private developers
- Education/schools

Key changes 2012–17

Enhanced compliance

QBFP within DAF undertakes declared FHA compliance on behalf of DES. Without adequate compliance, there is a risk that unauthorised works in declared FHAs could exceed authorised development and compromise the integrity of the declared FHA network.

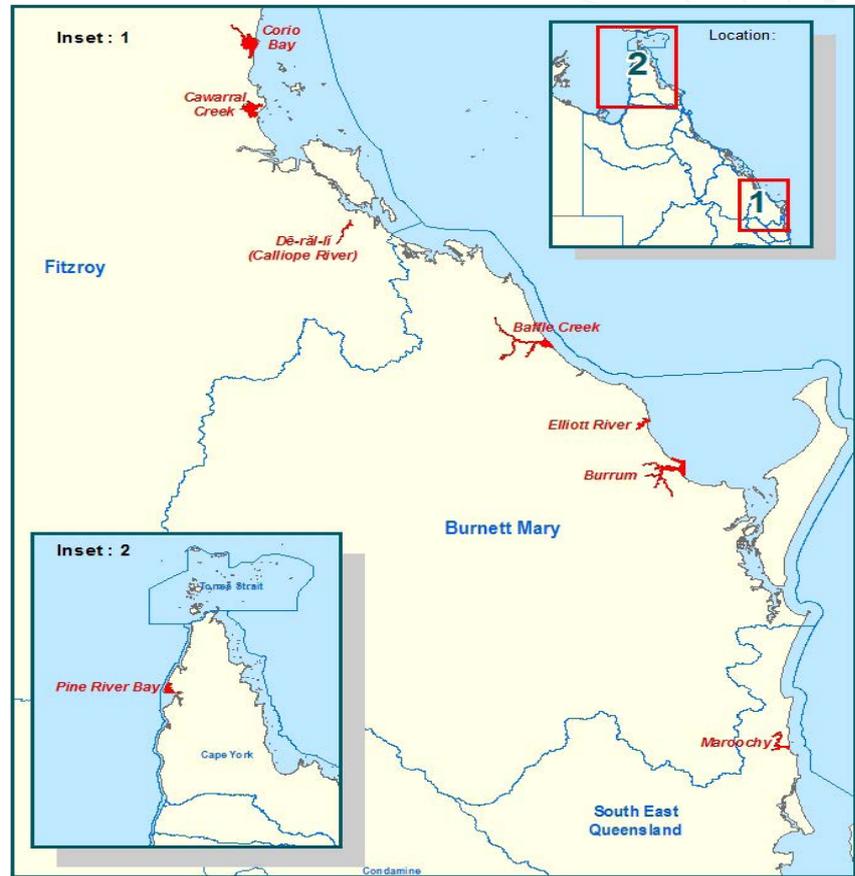
We began a more strategic approach to declared FHA compliance in 2015 in line with the objectives of the [Declared FHA Network Strategy 2015–20](#). Up to three declared FHAs are prioritised for joint QBFP/DES inspections annually, based on criteria such as available resources, known problem areas and shared benefits across the agencies. The agreed joint inspections form part of the QBFP annual state compliance plan.

The purpose of inspections is to identify, or provide updated information on, instream structures such as jetties and revetment walls in declared FHAs. While many structures may pre-date FHA declaration, with others constructed illegally after declaration, the inspections set a point in time baseline that QBFP can use for immediate or future compliance investigations within the statute of limitations set in the Fisheries Regulation.

This strategic approach is better than relying on ad hoc discovery of illegal structures on a case by case basis. There are also mutual benefits of joint inspections, as QBFP gain a better understanding of declared FHAs and DES a better appreciation of compliance issues.

This strategic approach is better

Figure 5
Declared FHAs targeted for compliance inspections by NRM region



We jointly inspected eight declared FHAs (Figure 5). We targeted declared FHAs in the Fitzroy NRM region as part of the Central Queensland declared FHA Investigations Program.

We also focused on the Burnett Mary NRM region as declared FHAs here are also within the [Great Sandy Marine Park](#) and structure information will help inform the review of its zoning plan. We also inspected the [Pine River Bay](#) and [Maroochy](#) declared FHAs.

The number of structures found varied greatly between different declared FHAs, ranging from two to more than 200. We found few new structures in areas that had been previously inspected, and few, minor structures in the initial compliance inspections for the [De-rā-l-lī \(Calliope River\)](#) and [Pine River Bay](#) declared FHAs.

While this information is from only eight declared FHAs, it suggests that the level of unauthorised disturbance, at least in these regions, was reasonably low between 2015 and 2017.

Fitzroy region

We inspected the new [De-rā-l-lī \(Calliope River\)](#) FHA soon after declaration in 2016 to set a compliance baseline. We found relatively few and minor structures, mostly informal (natural surface) boat launches.

We inspected the [Cawarral Creek](#) declared FHA as part of its reassessment under the Central Queensland Declared FHA Investigations Program in 2013 and

found a relatively small number of structures. We followed this with a joint compliance inspection in 2015 and found no new structures.

We inspected the [Corio Bay](#) declared FHA in 2016 and compared the results with 2009/10 inspections for the project [Inventory of instream structures impacting on Ramsar wetlands](#) (Department of Employment, Economic Development and Innovation 2011).

Some structures had been improved since 2010, while others (e.g. informal ramps) had fallen out of use and natural regeneration of vegetation had begun. A concentration of structures (jetties, revetments, rubble, moorings) extending from a public road reserve may need a whole-of-government response. QBFP is maintaining a watching brief on these structures.

Burnett Mary region

We inspected the Baffle Creek and Burrum declared FHAs in 2017 as these systems are known to have many structures. We found more than 200 structures in each of these declared FHAs.

Part of the [Burrum](#) declared FHA was originally declared as a management B area in 1986 due to the many existing private access structures and to allow for planned private structures. This is where we found most structures.

QBFP issued Fisheries Infringement Notices (FINs), with fines, for two structures in the declared FHA. QBFP followed up with another inspection several months later, using the initial inspection as a baseline, and found two new structures in the declared FHA. A Caution Notice was issued for one structure and investigations are ongoing for the other.

Flood flows in the [Baffle Creek](#) declared FHA can be significant. There were many small access structures in the Baffle Creek system before it was declared as an FHA in 2001.

Existing structures can be maintained, with authorisation, in declared FHAs. We found many such informal/home-made structures in 2017, many of which had been damaged by floods. The number of structures found was similar to when the FHA was declared (Scott McKinnon pers. comm.) and the inventory will provide a baseline for QBFP to check for unauthorised maintenance works in future.

QBFP issued a FIN for an unauthorised natural surface boat ramp that had recently been built in the declared FHA.

We found 40 structures in the [Elliott River](#) declared FHA, mostly vessel buoy moorings and small informal boat launches.



A structure found in the 2017 compliance inspection of the Baffle Creek declared FHA
© Queensland Government

Key changes 2012–17

Fraser Island declared FHA
© Queensland Government

Other regions

We timed our inspection of the [Pine River Bay](#) declared FHA to coincide with Traditional Owner consultation for cooperative management planning in 2017. A Traditional Owner joined us on the compliance inspection. This was the first full compliance inspection of the declared FHA and we found only one mooring and a disused informal boat launch (now regenerating naturally) in this remote area.

We targeted the [Maroochy](#) declared FHA for inspection in 2015 due to known compliance issues. We saw relatively few extra structures or disturbances. QBFP is following up to find the new owner of an unapproved gangway that had been reinstated after it had been removed by the previous owner as a result of an earlier QBFP investigation.

Outside of these targeted inspections for illegal works, QBFP conducts patrols for a variety of compliance matters, including fishing rules and boating safety. These patrols may be within declared FHAs and may find unlawful works. Such ad hoc discovery of unlawful works was more likely in South East

Queensland (SEQ) declared FHAs, as this is where the most patrols were carried out between 2012 and 2017. [Jumpinipin–Broadwater](#), [Pumicestone Channel](#) and [Maroochy](#) were the most frequently patrolled declared FHAs.

Complaints from the public or other agencies may also lead to compliance action. For example, QBFP investigated an unauthorised pontoon in the Maroochy declared FHA after complaints were made. The owner removed the pontoon and was given a Caution Notice.

Revised policies and statutory documents

Strong, comprehensive operational policies and statutory documents are an important part of the strategic approach to managing the declared FHA network (see [What are declared FHAs?](#)).

We revised the operational policy [Management of declared Fish Habitat Areas](#) in 2015. This policy interprets declared FHA legislation and guides development assessment. A number of policy issues such as emergency works, the definition of public purposes/works, the extent

of marked navigation channels and shading impacts of structures were added or clarified.

We revised the operational policy [Fish Habitat Area selection, assessment, declaration and review](#) for release in 2018. The amendments to the policy included clarifying the requirements for review of existing declared FHAs.

We revised the [Code of Practice for pest control in declared FHAs](#) (Department of National Parks, Sport and Racing 2017) to bring it up to date since its release in 2005. The Code of Practice must be complied with when undertaking non-development pest control activities (e.g. spraying insecticides) in declared FHAs. We consulted key stakeholders for their input during the review and to make sure that they were aware of the new Code of Practice and how to comply with it.

We reviewed four SACs and converted these to [accepted development requirements](#). This, and the revised SDAP FHA module and its new [guideline](#) have simplified and streamlined development assessment and authorisation in declared FHAs (see [Better planning integration](#)).

Management activities 2012–17

Along with the changes documented above, day-to-day management activities continued across the declared FHA network. The outcomes of this management between 2012 and 2017 is summarised in the following sections.

Implementation of 2012 assessment report priorities

The 2012 network assessment report documented management issues for each declared FHA and identified the highest priorities for action. Our management efforts then focussed on at least two high priority declared FHAs each year. We chose these based on a low score in the 2012 report and practicalities such as available funding and resources, risks and opportunities.

Management outcomes for the priority declared FHAs were mixed, with good results for Cawarral Creek and Tallebudgera Creek, but challenges remaining for Half Moon Creek and Jumpinpin–Broadwater. The outcomes for each priority declared FHA are summarised below.

Cawarral Creek declared FHA

Cawarral Creek (near Emu Park) was one of the five lowest ranked declared FHAs in 2012. Its reassessment as part of the Central Queensland declared FHA Investigations Program has moved this declared FHA from a low-ranked, medium priority for action to a high-ranked, low priority for action. We found:

- a much broader range of fish habitat values than had previously been documented
- improved partnerships with a range of stakeholders including QBFP, regional Queensland Parks and Wildlife Serve (QPWS) staff,

the Fitzroy Basin Association, Sunfish, Infish Australia and adjacent landholders

- the tidal parts of an adjoining lot are suitable to add to the declared FHA in future
- no new or expanded unauthorised works between 2013 and 2015, with a clear baseline set for future compliance inspections
- better communication activities including web promotion of the reassessment of the declared FHA during the Central Queensland declared FHA Investigations Program.

Half Moon Creek declared FHA

The lowest raked declared FHA, with high development pressure from surrounding residential development, Half Moon Creek in Cairns was a management priority in 2012–13.

The key management action was to add adjoining good-quality tidal lands to the declared FHA, should these be returned to the state as part of a lot reconfiguration proposal. However, the land has remained in freehold ownership.

Jumpinpin–Broadwater declared FHA

The Jumpinpin–Broadwater declared FHA (Gold Coast) was a management priority due to a 12.5 hectare area of Casuarina, mangrove and saltmarsh dieback caused by water ponding in the declared FHA at Woongoolba. The lands with dieback are owned by or under DAF trusteeship and also lie within the Moreton Bay Marine Park and Ramsar Area.

We found that the dieback had been caused by changes to local hydrology from development of surrounding lands over a long period. We have not yet found a solution to the water ponding at Woongoolba, however

the declared FHA has been better integrated into planning processes as MSES in the Gold Coast City Plan 2015.

Did you know?

Legal recreational and commercial fishing and boating activities are allowed and encouraged in declared FHAs.



Tallebudgera Creek declared FHA

The Tallebudgera Creek declared FHA on the Gold Coast is bordered by DFWP and the Tallebudgera Creek Conservation Park. The Burleigh Heads QPWS office is adjacent, and the Gold Coast Recreation Centre and the Tallebudgera Beach Outdoor Education School are also nearby, making this a key declared FHA for education activities.

The declared FHA was proposed for management action due to opportunities from the redevelopment of DFWP to enhance public access and enjoyment. Our intent was to better integrate the declared FHA with education initiatives locally. We worked with park rangers to include information about marine habitats and declared FHAs in DFWP education modules.

We are working with the Tallebudgera Beach Outdoor Education School to include the declared FHA as part of its Hero's Journey program for students. The program challenges students to resolve problems outside their normal ways of thinking, using the local natural environment. Discussions about integrating declared FHA information into canoe tours run by the Gold Coast Recreation Centre in Tallebudgera Creek are ongoing.

Management activities 2012–17

Development

Authorisation of development in declared FHAs

Assessment of development proposals is the main day to day management tool for declared FHAs. Development works in declared FHAs require both a resource allocation authority (RAA) under the Fisheries Act and a development permit under the Planning Act, unless the works comply with one of the following SACs (now authorised under *Accepted development requirements for operational work that is completely or partly within a declared Fish Habitat Area*—see [Better planning integration](#)):

- MP02 *Maintenance works on existing lawful structures (other than powerlines and on farm drains) in a declared FHA or involving the removal, destruction or damage of marine plants.*
- MP04 *Maintenance works on powerlines and associated infrastructure in a declared FHA or involving the removal, destruction or damage of marine plants.*
- MP05 *Works for educational, research or monitoring purposes in a declared FHA or involving removal, destruction or damage of marine plants.*
- MP06 *Minor impact works in a declared FHA or involving the removal, destruction or damage of marine plants.*

An RAA can only be issued in a declared FHA for one or more of the prescribed development purposes listed in the Fisheries Regulation 2008:

- restoring the fish habitat or natural processes
- managing fisheries resources or fish habitat
- researching, including monitoring, or educating

- ensuring public health or safety
- providing public infrastructure to facilitate fishing
- providing subterranean public infrastructure if the chief executive is satisfied the surface of the area can be restored, after the completion of the works or activity, to its condition before the performance of the works or activity
- constructing a temporary structure
- maintaining a structure that was constructed before the area was declared to be an FHA under the Act
- maintaining a structure, other than a structure mentioned above, that has been lawfully constructed
- for a part of the area that is a management B area:
 - constructing a permanent structure on tidal land or within the area, or
 - depositing material for beach replenishment in the area.

This prescriptive legislation is the key to ensuring that development in declared FHAs is appropriate, with limited or no discernible impacts. RAA applications are assessed and decided by DAF.

While an RAA authorises interference with a declared FHA for a prescribed development purpose, a development permit is also needed before works can go ahead. The development permit sets any conditions that must be met. Development applications are assessed against the SDAP and are decided by the Department of State Development, Manufacturing Infrastructure and Planning as the State Assessment and Referral Agency.

Development in declared FHAs 2012–17

Very little development was authorised in declared FHAs between 2012 and 2017. On average only eight RAAs were approved annually (Figure 6) and only 19 SAC notifications for minor works were received each year (Figure 9). Most development was authorised in the SEQ NRM region, reflecting the large population and associated development pressure there. In contrast, no development was authorised in the Southern Gulf, Northern Gulf and Cape York NRM regions, reflecting the low population and limited development pressure there. There are also fewer declared FHAs in these more remote regions.

While little development was authorised, we are not sure how much unauthorised disturbance there was across the entire declared FHA network. However, recent compliance inspections found few extra structures in declared FHAs that had been inspected previously (see [Enhanced compliance](#)). Although this compliance data is from a small number of declared FHAs, it suggests that the level of unauthorised disturbance may be relatively low.

Very little development was authorised in declared FHAs

Resource allocation authorities

The number of RAAs issued each year ranged between five in 2012–13 and twelve in 2013–14 (Figure 6).

Most RAAs were issued to state agencies or local governments. About three quarters of all development was in management B areas even though these only make up 17% of the declared FHA network. This is because management B areas are usually declared where there is existing and/or planned development, or to form a buffer between management A areas and development, and management B areas allow for more types of development, including for private purposes.

The most common prescribed development purpose was for permanent structures such as private jetties, revetments and stormwater outlets (in management B areas), followed by public infrastructure to facilitate fishing for public boat ramps and jetties (Figure 7).

No RAAs were issued under the prescribed development purpose for research or education, as these activities were authorised under a SAC (see [Research](#)). No RAAs were issued for subterranean public infrastructure.

RAAs were most commonly issued in the SEQ NRM region (Figure 8). No RAAs were issued in the Cape York, Northern Gulf and Southern Gulf NRM regions, where development pressure is lowest.

Figure 6

Number of RAAs issued each year

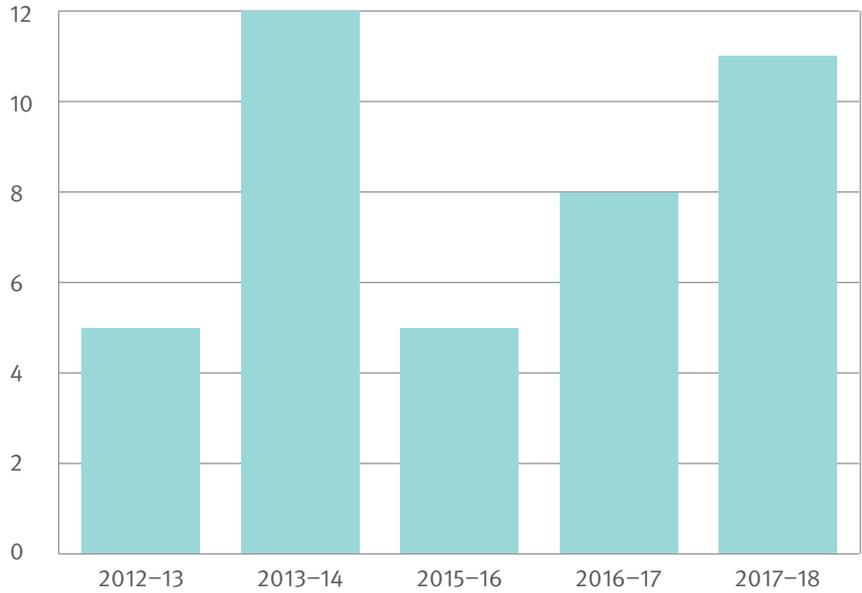


Figure 7

Number of RAAs issued each year

- Permanent structure
- Public infrastructure for fishing
- Restoration
- Maintenance
- Temporary structure
- Beach replenishment
- Managing the area
- Public/health safety

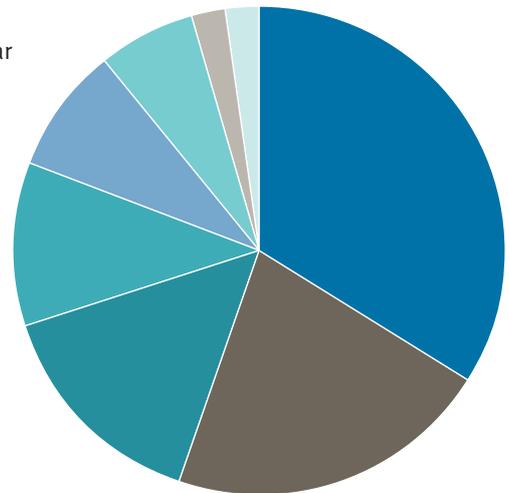
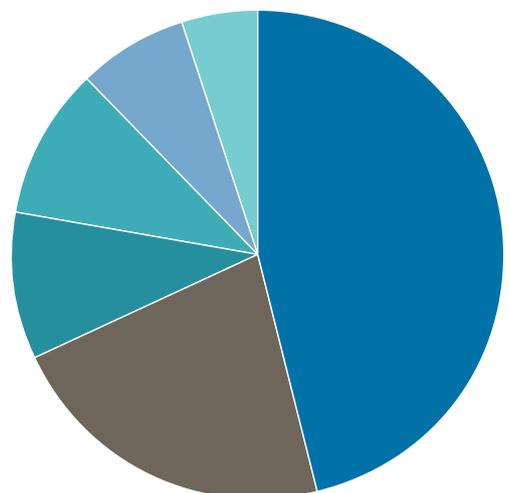


Figure 8

RAAs by NRM region

- SEQ
- Wet tropics
- Burnett/Mary
- Burdekin
- Mackay/Whitsundays
- Fitzroy



Management activities 2012–17

SAC notifications

The number of SAC notifications each year ranged between twelve in 2013–14 and twenty-five in 2015–16 (Figure 9). While there were more SAC notifications made than RAAs issued, SACs authorise only minor, low impact works.

Most SAC notifications were made under MP02 for maintenance of existing structures (e.g. clearing stormwater outlets) and MP05 for research (Figure 10). Local governments and research organisations were the main notifiers.

Two thirds of all SAC notifications came from the SEQ NRM region (Figure 11). No SAC notifications were made in the Cape York, Northern Gulf and Southern Gulf NRM regions.

Figure 9
Number of SAC notifications each year

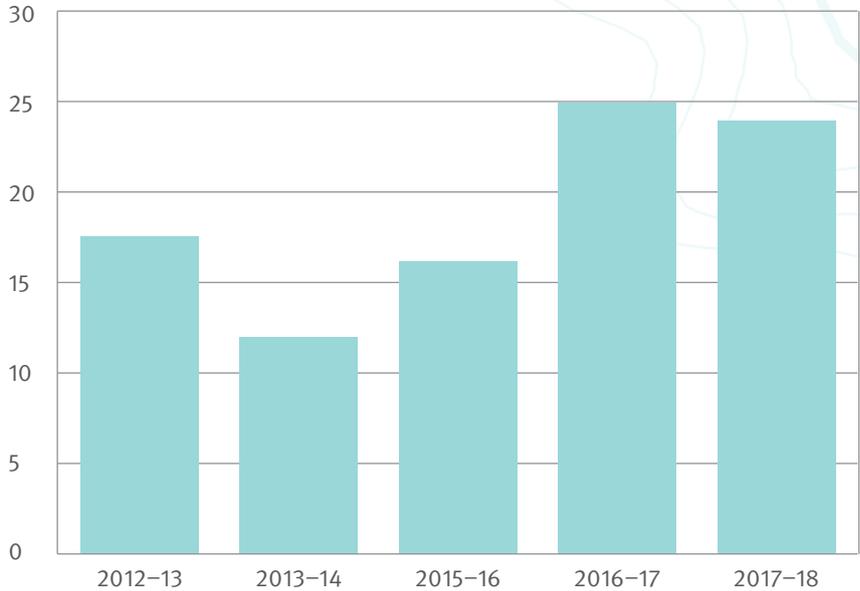


Figure 10
Type of SAC notifications

- MP02
- MP05
- MP06
- MP04

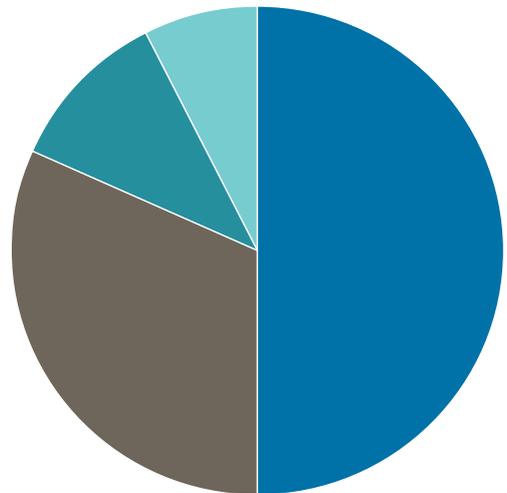
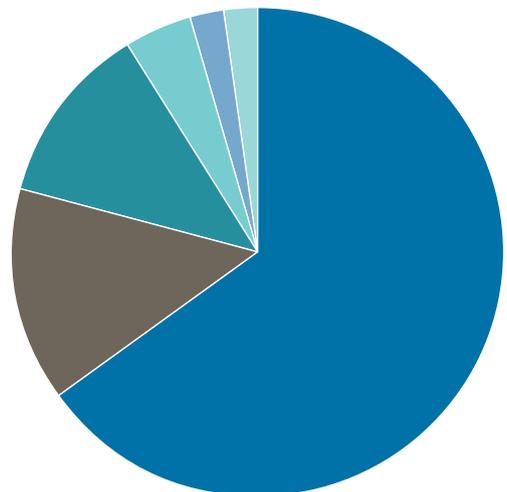


Figure 11
SACs by NRM region

- SEQ
- Wet tropics
- Burnett/Mary
- Fitzroy
- Mackay/Whitsundays
- Burdekin



Research

The relatively undisturbed habitats of declared FHAs can be useful locations for research and education, particularly where located close to schools or research facilities. For example, the University of Queensland’s Moreton Bay Research Station is close to the [Myora–Amity Banks](#) declared FHA, which protects a range of fish habitats including mangroves, seagrass, intertidal shoals, coral and part of a freshwater stream. Research can add to our understanding of declared FHA values and management issues, and research into fish and fish habitats is encouraged.

Research can be approved in declared FHAs under the prescribed development purpose ‘researching, including monitoring, or education’ and is allowed without approval if it complies with [accepted development requirements](#) (previously, SACs). No authorisation is needed for research that is not ‘works’, including water quality sampling where the equipment is not left in place and non-destructive field visits.

We compiled approvals data, SAC notifications and the results of literature searches to find out what research was done in declared FHAs between 2012 and 2017.

Most research was conducted in the SEQ NRM region (Figure 12) and was spread evenly across management A and management B areas. NRM bodies and research organisations did more than three quarters of the research projects that we identified.

Water quality was the main research activity, although taken together, research into fish habitats, fish passage, fish populations and general fisheries values was more common (Figure 13).

Figure 12
Research by NRM region

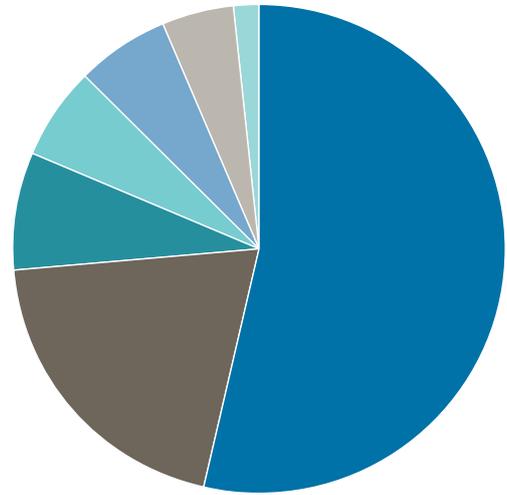
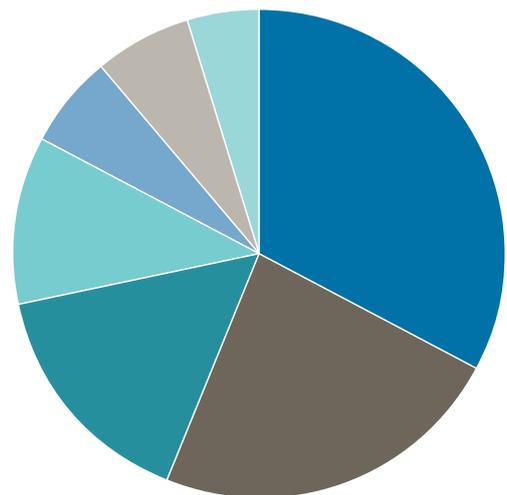


Figure 13
Research by activity



Management activities 2012–17

Rehabilitation

While declared FHAs mostly protect intact, high-quality fish habitats, there can be places that need to be rehabilitated, whether due to human impacts or natural events such as storms. Rehabilitation can be approved in declared FHAs under the prescribed development purpose ‘restoring the fish habitat or natural processes’ and is allowed without approval if it complies with [accepted development requirements](#) (previously SACs).

We compiled approvals data, SAC notifications and information from stakeholders such as state agencies and NRM bodies to find out what rehabilitation was done in or near declared FHAs between 2012 and 2017.

Rehabilitation projects were spread evenly across management A and management B areas, with most rehabilitation in the SEQ NRM region (Figure 14). We found no rehabilitation activities in the Mackay Whitsunday, Burdekin, Cape York, Northern Gulf and Southern Gulf NRM regions. Rehabilitation was most frequently carried out by NRM bodies.

The most common rehabilitation activity was marine debris clean up, with control measures (e.g. boardwalks, fencing, etc.) to prevent access impacts and revegetation also common (Figure 15).

A number of rehabilitation activities that began in the 2017–18 financial year are not included in the above analysis. These activities include revegetation, weed control and vehicle access control in and adjoining the [Rodds Harbour](#), [Seventeen Seventy-Round Hill](#), [De-rā-l-lī \(Calliope River\)](#), [Yorkey’s Creek](#) and [Trinity Inlet](#) declared FHAs.

Figure 14
Rehabilitation by NRM region

- SEQ
- Burnett Mary
- Fitzroy
- Wet tropics

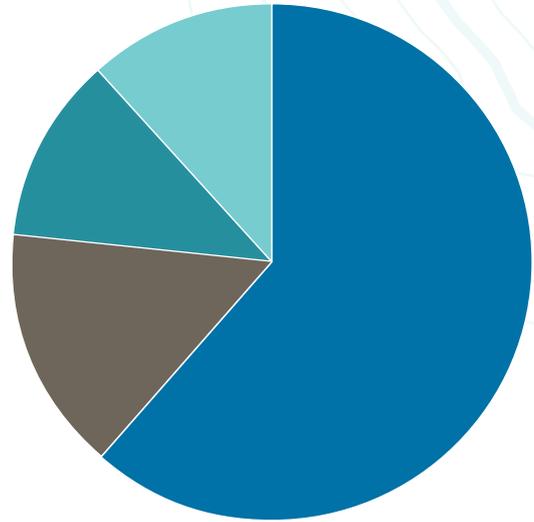
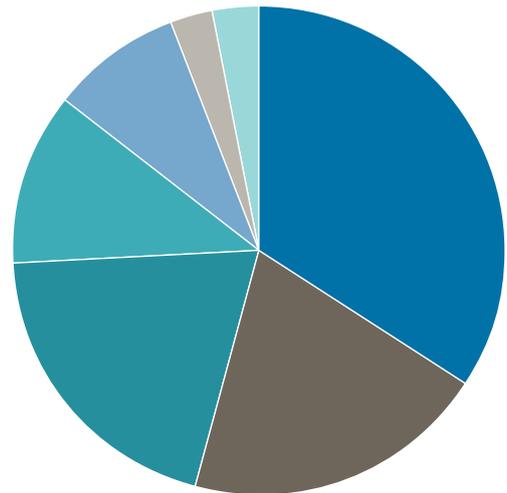


Figure 15
Rehabilitation by activity

- Debris cleanup
- Access control
- Revegetation
- Other
- Structure removal
- Fish passage
- Water quality



Rehabilitation case study—Cardwell Range Realignment Project

The realignment and upgrade of the Bruce Highway at the Cardwell Range required disturbance of marine plants. Rehabilitation of an informal access track to Seymour Creek in the nearby Hinchinbrook declared FHA was a condition of approval for the marine plant disturbance. Rehabilitation works included rubbish removal, erosion control and installation of rock barriers and bunds to prevent vehicle access. Natural regeneration of marine plants began almost immediately after the rehabilitation works.

Communication

An effective communication strategy helps to raise awareness, understanding and support for the declared FHA network amongst the community and stakeholders.

We prepared a declared FHA communication strategy each year between 2012 and 2017. The main communication focus was the extensive consultation process for the [Central Queensland declared FHA Investigations Program](#).

This consultation process won the 2016 NPSR Excellence Award for customer focus.

We also:

- designed and produced a promotional banner and information brochure for use at events, meetings, environment centres and QPWS offices
- kept an ongoing web presence with updated and new declared FHA plans and information sheets, policies and statutory documents
- posted on the QPWS Facebook page
- contributed information on Moreton Bay declared FHAs to Brisbane City Council's Moreton Bay Ramsar 20th anniversary event
- integrated [Tallebudgera Creek](#) declared FHA information into DFWP educational material.



What's next?

We have improved how the declared FHA network protects the State's key fish habitats from development impacts, with little development authorised and new, improved and updated strategy, policies, statutory documents, planning integration, partnerships and compliance between 2012 and 2017. Based on the findings of this assessment we will:

- develop and implement ongoing declared FHA network strategies to guide overall direction
- better integrate declared FHAs with other protected areas managed by DES, especially marine parks
- ensure that declared FHAs are integrated into state, regional and local planning processes
- develop more partnerships, particularly with Traditional Owners, to enhance declared FHA stewardship with stakeholders and the community
- continue our targeted compliance strategy with QBFP
- develop and implement annual communication strategies.

The date of next declared FHA network assessment report will be set in the next declared FHA network strategy.

Acronyms

DAF	Department of Agriculture and Fisheries	NRM	Natural resource management
DMA	Designated mooring area	QBFP	Queensland Boating and Fisheries Patrol
DES	Department of Environment and Science	QCA	Queensland Competition Authority
DFWP	David Fleay Wildlife Park	QPWS	Queensland Parks and Wildlife Service
FHA	Fish Habitat Area	RAA	Resource allocation authority
FIN	Fisheries Infringement Notice	SAC	self-assessable code for development
GBRMPA	Great Barrier Reef Marine Park Authority	SPP	State Planning Policy
GCWA	Gold Coast Waterways Authority	SDAP	State Development Assessment Provisions
GIS	Geographic Information System	SEQ	South East Queensland
GPC	Gladstone Ports Corporation	TUMRA	Traditional Use of Marine Resources Agreement
MSES	Matter of state environmental significance		
NPSR	the former Department of National Parks, Sport and Racing		

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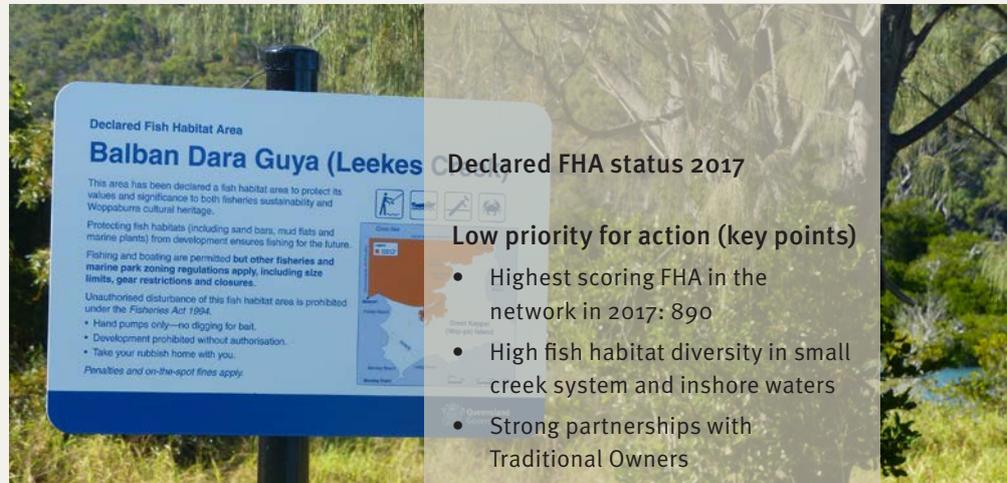
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Appendix 1

Assessment of new, expanded and reviewed declared FHAs

Balban Dara Guya (Leekes Creek) FHA-076



Declared on 30 September 2016, this 876 ha primarily management A FHA (1 hectare management B) includes the estuarine system of Leekes Creek and inshore waters of the offshore continental Great Barrier Reef island of Great Keppel Island. Part of the FHA is within the Great Barrier Reef Coast Marine Park.

Balban Dara Guya (Leekes Creek) declared FHA has a diverse array of essential fish habitats: rocky structure; intertidal flats; coral; mangrove communities and saltmarsh. Leekes Creek is likely to be an important spawning area in summer and an important migratory pathway for fish using offshore reefs.

Commercial, recreational and Aboriginal fishing occurs within the declared FHA with a large number of highly sought after species including barramundi, bream, estuary cod, flathead, garfish, mangrove jack, sea mullet, golden trevally, mores perch, spotted javelinfinch, whiting, penaeid prawns, mud and blue swimmer crabs.

The Traditional Owners of Great Keppel Island, the Woppaburra, regained ownership and control of 170ha of land on the island in 2007, much of which adjoins Leekes Creek.

A TUMRA was implemented in 2007 and describes the Woppaburra's natural resource take and their involvement in preserving the local fisheries and marine resources. No subsistence or traditional fishing activities are currently being undertaken by Aboriginal people within the Keppel Islands. Fishing by the Woppaburra People is recreational and they target similar species to recreational fishers.

The assessment and declaration of the Balban Dara Guya (Leekes Creek) declared FHA was done with the ongoing consultation and participation of the Woppaburra People. For many of the Woppaburra People involved, it was the first time they had been on country to Great Keppel Island. Signage for the declared FHA that incorporates traditional use and values was developed and installed in consultation with the Woppaburra people.

We also formed a strong partnership with the GBRMPA.

Management actions

Continue partnerships with the Woppaburra People.

Integrate the declared FHA into the Livingstone Shire Council planning scheme at the next major review.

Further resources

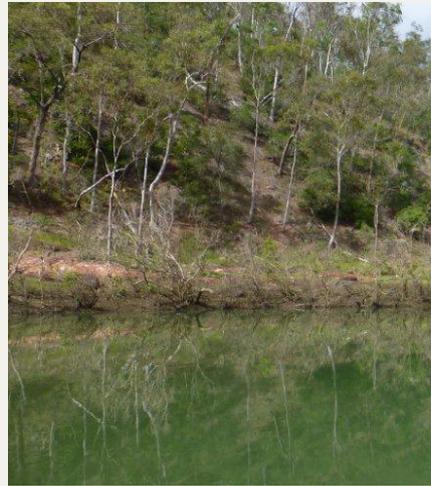
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De-rā-l-i (Calliope River) FHA-075



Declared FHA status 2017

Low priority for action (key points)

- High fish habitat diversity and fisheries values
- 2017 score: 715
- Consultation with adjoining landholders led to a management B area being declared to allow for limited private access structures to the river

Declared on 30 September 2016, this 314 hectare management B declared FHA includes parts of the Calliope River, upstream of the North Coast Railway Line, near Gladstone. There was an extensive communications campaign and two rounds of consultation as part of the declaration of the FHA.

The De-rā-l-i (Calliope River) FHA has a high diversity of habitats, including mangrove lined estuarine waterways, saltpan and saltmarsh and rocky outcrops, all of which are essential for the provision of shelter, feeding, breeding and nursery areas.

Commercial, recreational and Aboriginal fisheries resources; barramundi; threadfin salmon; penaeid prawns; mangrove jack; mud crab and sea mullet.

We did a compliance inspection soon after declaration to set a baseline for future compliance inspections.

We worked with Gladstone Regional Council to make sure that the new FHA will be incorporated into major amendments to the planning scheme.

Ecosure began a project to restore habitats and address threats in/near the Calliope River in 2017.

Management actions

Install signage (design complete).

Follow up on baseline compliance inspection to detect any unlawful structures.

Further resources

Department of National Parks, Recreation, Sport and Racing 2014, Fisheries resources of Calliope River, Fitzroy River: Central Queensland <http://www.npsr.qld.gov.au/managing/pdf/calliope-river-fisheries-resource-assessment.pdf>.

Department of National Parks, Sport and Racing 2016, Declared Fish Habitat Area summary—De-rā-l-i (Calliope River) Fish Habitat Area <http://www.npsr.qld.gov.au/managing/area-summaries/calliope.html>.

Richardson, D & Jones, C 2015, Assessment of sub-tidal habitats at Cawarral Creek, Calliope River and Balaclava Island—Final Report <http://www.npsr.qld.gov.au/managing/pdf/sub-tidal-cawarral-calliope-balaclava.pdf>, BMT WBM Pty Ltd (Executive Summary—full report can be obtained by emailing marine.policy@des.qld.gov.au).

Sawynock, B, Parsons, W & Sawynok, S 2015, Calliope River fish recruitment, Infish, report prepared for Department of National Parks, Sport and Racing <http://www.npsr.qld.gov.au/managing/pdf/calliope-river-fish-survey.pdf>.

Appendix 1

Assessment of new, expanded and reviewed declared FHAs

Cawarral Creek FHA-050 (revision 1)



Declared FHA status 2017

Low priority for action (key points)

- Medium priority for action in 2012 and one of the lowest ranked FHAs, now low priority and one of the highest ranked declared FHAs
- 2017 score: 785

Originally declared in 1993, this 3130 hectare management A declared FHA includes Cawarral and Coorooman Creeks, east of Rockhampton.

The fish habitats of Cawarral Creek declared FHA include mangroves, saltmarsh and intertidal flats. Surveys in 2013 and 2015 revealed additional habitats including freshwater swamps and subtidal rocky bars.

Aboriginal fishing occurs within the declared FHA and it is a major destination for recreational fishers on the Capricorn Coast.

The Cawarral Creek declared FHA was proposed for management action following the 2012 report due its relatively low scoring at that time. The Central Queensland FHA Investigations Program provided a means to address the proposed management actions.

The program included a review of the Cawarral Creek declared FHA to:

- ensure regional fish habitats are well represented
- increase communication activities
- form partnerships to deal with identified management issues
- explore the potential to increase the size of the declared FHA.

We reassessed the fish habitats of Cawarral Creek (Jupp 2013 and Richardson & Jones 2015) and found a much higher fish habitat diversity than previously documented.

We undertook a compliance audit of structures in the Cawarral declared Creek FHA in 2015. This audit provided a baseline for future investigations.

As part of an environmental offset project, we worked with Gladstone Ports Corporation (GPC) to acquire Lot 3 LN1662 (near Keppel Sands). This lot was purchased by GPC in June 2016 and gifted to the (then) Department of National Parks, Sport and Recreation. Actions are underway to fence and control weeds on the lot before it is converted to conservation park. Once converted to conservation park, we will consider including the tidal parts of the lot in the Cawarral Creek declared FHA.

Management actions

Input to next major amendment of the Livingstone Shire Council planning scheme.

Consider adding tidal parts of Lot 3 LN1662 to the declared FHA following conversion to conservation park.

Further resources

Department of National Parks, Sport and Racing 2016, Declared Fish Habitat Area summary—Cawarral Creek, <http://www.npsr.qld.gov.au/managing/area-summaries/cawarral.html>.

Jupp RY, 2013, Cawarral Creek Declared Fish Habitat Area: Assessment report, Department of National Parks, Sport and Racing.

Richardson, D & Jones, C 2015, Assessment of sub-tidal habitats at Cawarral Creek, Calliope River and Balaclava Island—Final Report, BMT WBM Pty Ltd.

Fitzroy River FHA-072



Declared FHA status 2017

Low priority for action (key points)

- More than doubled in size in 2016
- 2017 score: 800

Originally declared in 2008, the 29,253 hectare management A declared FHA included parts of the Fitzroy River estuary, Raglan Creek and the wetland systems surrounding North Curtis Island, near Rockhampton. The FHA was extended in 2016 to include Balaclava Island and the most of the Fitzroy River delta and now covers 77,878 hectares. We conducted an extensive communications campaign including two rounds of public consultation as part of the expansion of the declared FHA. The expansion of the declared FHA delivered a Queensland Government commitment in the Reef 2050 Long-Term Sustainability Plan.

The Fitzroy River declared FHA has a high diversity of fish habitats. Characteristic habitats include extensive salt pans and saline grasslands fed by mangrove-lined creeks, mud and sand flats, rocky headlands and brackish lagoons. Sandy beaches and rocky reefs are also present within the newly declared area.

Commercial, recreational and Aboriginal fishing occurs within the declared FHA with many of highly sought after species targeted such as mud crab, barramundi, banana prawns and king salmon. Surveys around Balaclava Island in 2014 found that the area is an excellent example

of critical fish habitats for fish communities of the lower Fitzroy River (Sheaves et al. 2014).

We worked with Rockhampton Regional Council to make sure that the expanded FHA will be incorporated into major amendments of the planning scheme. The Fitzroy River declared FHA has had good integration into planning processes such as the Reef 2050 Long-Term Sustainability Plan (Australian Government 2015) and the Rockhampton Recreational Fishing Development Strategy (Rockhampton Regional Council 2016).

Management actions

Install declared FHA signage (design complete).

Further resources

Bruinsma, C 2000, Queensland coastal wetland resources: Sand Bay to Keppel Bay, Information Series Q100100, Queensland Department of Primary Industries.

Commonwealth of Australia 2015, Reef 2050 Long-Term Sustainability Plan, <https://www.environment.gov.au/marine/gbr/publications/reef-2050-long-term-sustainability-plan>.

Department of National Parks, Recreation, Sport and Racing 2014,

Fisheries resources of Balaclava Island, Fitzroy River: Central Queensland <http://www.npsr.qld.gov.au/managing/pdf/balaclava-is-fisheries-resource-assessment.pdf>.

Department of National Parks, Sport and Racing 2016, Declared Fish Habitat Area summary—Fitzroy River, <http://www.npsr.qld.gov.au/managing/area-summaries/fitzroy.html>.

Long, P & McKinnon, S 2002, Habitats and fisheries resources of the Fitzroy River estuary (Central Queensland), Queensland Department of Primary Industries.

Richardson, D & Jones, C 2015, Assessment of sub-tidal habitats at Cawarral Creek, Calliope River and Balaclava Island—Final Report, <http://www.npsr.qld.gov.au/managing/pdf/sub-tidal-cawarral-calliope-balaclava.pdf>), BMT WBM Pty Ltd (Executive Summary—full report can be obtained by emailing marine.policy@des.qld.gov.au).

Rockhampton Regional Council 2016, Rockhampton recreational fishing development strategy, <http://www.rockhamptonregion.qld.gov.au/CommunityEvents/Regional-Voice/Current-Engagements/Rockhampton-Recreational-Fishing-Development-Strategy>.

Sheaves, M, Johnston, R & Mattone, C 2014, Balaclava Island 2014 fish survey <http://www.npsr.qld.gov.au/managing/pdf/balaclava-island-fish-survey.pdf>, School of marine and tropical biology, James Cook University.