Operational policy

Marine Management

Management of declared Fish Habitat Areas

Operational policies provide a framework for consistent application and interpretation of legislation and for the management of non-legislative matters by the Department of Environment and Science. Operational policies are not intended to be applied inflexibly in all circumstances. Individual circumstances may require a modified application of policy.

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1 Policy subject

Declared Fish Habitat Areas (FHAs) are geographically defined areas of critical inshore and estuarine fish habitats which play a key role in sustaining fish stocks for recreational and commercial fisheries and Indigenous fishing both locally and regionally. Declared FHAs protect all fish habitats (e.g. vegetation, sand bars and rocky headlands) within their boundaries against physical disturbance from development, while allowing legal fishing and community use. FHAs are declared by regulation under section 120 of the *Fisheries Act 1994* (Fisheries Act) as part of the ongoing identification, management and protection of critical fish habitats in Queensland.

This policy provides guidance for the management of declared FHAs by:

- interpreting legislation in relation to declared FHA boundary definition
- defining activities that are subject to declared FHA management
- guiding the application of legislation for specific works within declared FHAs
- providing an overview of planning considerations that will protect and maintain declared FHAs.

1.1 Policy principles

The overarching policy principles for declared FHAs are:

- Principle 1: Proper management of declared FHAs through application of the principles of ecologically sustainable development (ESD) is of critical importance to fisheries production and to the fishing industry sectors and the general community.
- Principle 2: Adoption of a risk management approach for declared FHAs through the use of strategic planning instruments at a high level, and the use of accepted development requirements for compliant development works will provide for retention of most fish habitat values and functions while minimising regulatory burden.
- Principle 3: Public awareness of the protection, diversity, role, value of, and free, unrestricted (lawful) access to Queensland's declared FHA network should be the target of an integrated education, extension, research and regulatory approach[1].

2 Purpose

This policy provides guidance for the consistent management of declared FHAs. It is the primary policy reference for the provision of advice on declared FHA management and for the assessment of Resource Allocation Authority (RAA) applications for works within declared FHAs.

> Decision makers and assessment officers are required to give appropriate weight to this policy when assessing applications and/or providing advice. Discretion may be exercised in applying this policy based on the merits of the individual case. Where factors sufficient to justify departure from policy exist, these must be thoroughly documented.

Relevant provisions from this policy are reflected in the State Development Assessment Provisions (SDAP) (DSDMIP 2020) to guide the assessment of development applications for works in a declared FHA under the *Planning Act 2016* (Planning Act). This document replaces and updates the 2015 version of the policy.

[1] This is delivered through the Department of Environment and Science (DES) initiatives such as declared FHA communications strategies.

3 Background

The Department of Environment and Science (DES) is responsible for the declaration and management of FHAs. The declared FHA program plays a key role in anticipating and responding to pressures and impacts on the state's fish habitats and dependant fish stocks, including the challenges of increasing population and climate change. Careful management of development while allowing and promoting community access is key to the management of declared FHAs.

By conserving, managing, restoring and enhancing the declared FHA network the interconnectedness of the mosaic of fish habitats throughout the state is recognised. Maintaining the integrity and connectivity of the declared FHA network, through effective conservation and management, is fundamental to the sustainability of Queensland's fish stocks and fisheries. Unavoidable authorised impacts on declared FHAs may require offsets to maintain network integrity and sustainability.

Proactive fish habitat management supports the sustainable management and use of declared FHAs for fishing, conservation and community access. Declared FHAs are complementary to marine parks, which are also managed by DES, to provide a suite of marine protected areas. While marine parks regulate access and use of marine resources including development, declared FHAs manage development only.

Within a declared FHA, the integrity, structure and fish habitat values of all habitats (vegetated and unvegetated) are given significant protection from physical disturbance. The declared FHA concept focuses on:

- protecting, managing, linking and including the mosaic of fish habitat types within an individual location
- strategic repetition of the protection of these processes at locations along the Queensland coast to create a comprehensive, adequate and representative network of protected fish habitats.

Since their inception during the late 1960s, 72 FHAs have been declared. Previously these were referred to as Fisheries Habitat Reserves, Fish Habitat Reserves (now management A areas) and Wetland Reserves (now management B areas). Collectively, declared FHAs form a protected area network of more than 1.2 million ha of Queensland's coastal and estuarine waterways. The QPWS Operational Policy Fish Habitat Area selection, assessment, declaration and review, (DES 2012) outlines the process, including consideration of a range of assessment criteria, for selection and declaration of an FHA. Strong, clear and consistent declared FHA management, as outlined in this policy, will help to ensure that the network remains in good condition into the future.

4 Legislative framework

4.1 Declared Fish Habitat Area legislation

The Fisheries Act and the Fisheries (General) Regulation 2019 provide for the declaration and management of declared FHAs. However, works in declared FHAs require authorisation under both the Fisheries Act and the state's overarching development assessment legislation, the Planning Act.

The main purpose of the Fisheries Act (and its Regulations) is:

– to provide for the use, conservation and enhancement of the community's fisheries resources and fish habitats in a way that seeks to—

(a) apply and balance the principles of ecologically sustainable development; and
(b) promote ecologically sustainable development.

The Fisheries Act specifies that, in this context, ESD means: using, conserving and enhancing the community's fisheries resources and fish habitats so that— (a) the ecological processes on

which life depends are maintained; and (b) the total quality of life, both now and in the future, can be improved.

The Fisheries Act lists nine principles of ESD[2] that are fundamental to its administration. The appropriate application, balancing and promotion of these principles is required in managing declared FHAs, including in the assessment of development works. In balancing the principles, each principle is to be given the relative emphasis appropriate in the circumstances, having regard to ensuring access to the fisheries resources is allocated in a way that maximises the potential economic, social and cultural benefits to the community.

The provisions of this policy reflect this requirement. In allowing and promoting equal access to declared FHAs, including through provisions that allows for construction of waterway access infrastructure, management supports the recognition of the economic, social and cultural benefits that fisheries resources, and equal access to these, provides to the community. All forms of legal fishing – commercial, recreational and traditional - can occur in declared FHAs. The balancing of the ESD principles also occurs as part of the processes, negotiations and agreements required to declare an area as an FHA. In providing for the continued protection of fish habitats while allowing access for their sustainable use, FHA declaration and management safeguards the economic, social and cultural benefits declared FHAs provide for the community, for generations to come.

Declared FHA decision-makers (for RAAs) must also have regard to the *Coastal Protection and Management Act 1995* (the Coastal Act), the *Environmental Protection Act 1994*, and the *Marine Parks Act 2004* where relevant (see section 4.4.3).

The Planning Act and the Planning Regulation 2017 (Planning Regulation) provide a legislative framework to integrate planning and development assessment in Queensland. As part of achieving streamlined assessment, works in declared FHAs are subject to approval under the Planning Act by the Assessment Manager (i.e. the State Assessment and Referral Agency (SARA), local government or a port), and in accordance with the SDAP.

Declared FHA decision-makers are required to act and make decisions in a way that is compatible with human rights under the *Human Rights Act 2019*. This includes assessment and proper consideration of the distinct cultural rights held by Aboriginal peoples and Torres Strait Islander peoples[3].

4.2 Declaration and management of declared FHAs

The Fisheries Act provides the head of power for FHA declaration and management. Section 120 provides for an area of fish habitat to be declared as an FHA, while section 122 provides that works or related activity[4] may not be unlawfully performed, or caused to be performed, in a declared FHA. Fish habitat is defined in the Act to include land, waters and plants associated with the life cycle of fish, and includes land and waters not presently occupied by fisheries resources.

Declared FHA boundaries are defined through a combination of chapter 3, part 1 of the Fisheries (General) Regulation and (for each area) the relevant FHA plan, and the relevant section of schedule 3 of the Fisheries (General) Regulation. A detailed discussion of declared FHA boundary issues is provided in section 5.2.

FHAs are declared to include a ‘management A area’ and/or a ‘management B area’ as indicated on the relevant FHA plan. Management A areas provide a higher level of protection than management B areas, through the provisions of sections 60 and 61 of the Fisheries (General) Regulation (see section 4.4.2). This distinction in management levels provides management flexibility for the FHA network. Management A areas are declared to protect key fish habitats and impose stricter management measures. Management B areas are declared to protect important fish habitats while allowing for a less stringent management approach, particularly where existing or planned uses would be prohibited in a management A area. Management B areas are also

[2] See Appendix 3 Definitions.
[3] Refer to Section 28, *Human Rights Act 2019*.
[4] For the purposes of this policy, ‘works or related activity’ is used interchangeably with ‘development’

used as a buffer adjoining management A areas, and thereby provide enhanced protection for these key fish habitats.

DES's management responsibilities for declared FHAs under the Fisheries Act do not extend to undertaking 'on the ground' activities such as provision of infrastructure and facilities, weed control, pest management, etc. FHA declaration creates a management layer. It does not constitute a form of tenure over, and DES is not a 'tenant' of, the subject lands. Activities in declared FHAs such as those described above are undertaken by the responsible agency—usually local government or Biosecurity Queensland—under appropriate authorisation where required. In cases where declared FHAs and protected area tenure overlap, DES may undertake these 'on the ground' activities. Pest control activities that may be conducted in declared FHAs are defined in the FHA code of practice (FHA CoP) The lawful use of physical, pesticide and biological controls in a declared Fish Habitat Area (DES 2017), prepared under section 125A of the Fisheries Act.

4.3 Declared Fish Habitat Areas in planning processes

Declared FHAs are a matter of state environmental significance (MSES) in the State Planning Policy (SPP) (DILGP 2017). Their management is captured in the state interest of Biodiversity:

> *Matters of environmental significance are valued and protected, and the health and resilience of biodiversity is maintained or enhanced to support ecological processes.*

In making or amending a planning scheme and designating land for community infrastructure, a planning scheme is to appropriately integrate the state interest by:

- identifying MSES
- locating development in areas that avoids adverse impacts on MSES
- maintaining or enhancing ecological processes and connectivity.

The SPP also applies in the making or amending of a regional plan. If there is any inconsistency between the

SPP and a local government planning scheme or regional plan, the SPP prevails. This means that declared FHAs are becoming well integrated into planning processes. For specific policy interpretation on planning, refer to SPI 20: Protecting declared FHAs through complementary planning.

Declared FHAs are a strategic, long-term fisheries management arrangement. Over time, environmental conditions and the ecological, social or economic objectives within a region may change, requiring revision of an area (via extension or minor boundary or management level amendment) to reflect this change. Provisions and formalised processes exist to address these requirements through FHA boundary amendment (refer to the QPWS Operational Policy Fish Habitat Area selection, assessment, declaration and review, DES 2012).

4.4 Authorisation for works in declared Fish Habitat Areas

Works in declared FHAs may be authorised as accepted development (see section 4.4.5) or if assessable development, by issue of approvals. The following sections discuss the legislative framework for authorisation of works in declared FHAs.

4.4.1 Declared Fish Habitat Area approvals

Two approvals are required to conduct development works in declared FHAs if the development is not accepted development (see section 4.4.5):

1. Resource allocation authority (RAA) under the Fisheries Act for interference for a prescribed development purpose.
2. Development approval (DA) under the Planning Act for building and/or operational works.

RAAs authorise interference with a declared FHA, as required under section 76C of the Fisheries Act. An RAA is also required for the authorisation of an existing structure.

Development cannot proceed until the proponent holds an RAA. An RAA is issued to the individual, and defines the purpose and location of the works. RAA conditions describe the type of activity and where the activity is to take place. RAAs set the boundaries for development but they do not authorise any works (these are authorised by the DA). The requirement for an RAA recognises that declared FHAs are an important state resource managed for fisheries, community access and biodiversity purposes. Section 61 of the Fisheries Act provides provisions to impose reasonable and relevant conditions on an RAA which can include the requirement for payment of a bond to ensure the RAA holder will comply with the conditions of the authority.

More than one RAA may be issued over a particular area to enable different applicants to undertake different activities. For example, where an RAA has been issued to an applicant for building a jetty in a declared FHA, an RAA could be issued to another applicant to undertake research works within the same location (if it is not authorised under the accepted development requirements).

RAAs are issued for a period of time determined on a case-by-case basis, but typically one to three years, to allow for approved works to be completed. An RAA must be current for the entire period during which development works are undertaken[5].

The Planning Act DA authorises the works to take place, if a RAA is also held, and its conditions define *how* they will take place (e.g. best practice construction methods). Development applications are assessed against the SDAP state code 12 'Development in a declared fish habitat area'. The DA requires consideration of Native Title notification requirements by the assessment manager, as the grant of the approval for works is regarded as a 'future act'[6] under the Commonwealth *Native Title Act 1993*.

Despite the 'two-approvals' process described above, in practice the information required to properly assess an RAA application is often similar to that required for an application for a DA.

Large-scale development proposals that are coordinated by the state government may be designated as a 'coordinated project' under the *State Development and Public Works Organisation Act 1971*. Depending on the process decided by the Coordinator-General, an RAA and DA may or may not be required. Any advice or assistance from DES should be based on the intent of the Fisheries Act and the provisions of this and any other relevant fish habitat management policies and planning instruments.

Priority Development Areas (PDAs) may be declared under the *Economic Development Act 2012* and may be declared over FHAs. Works in PDAs are assessed by the Minister for Economic Development Queensland; however, Planning Act and Fisheries Act approval requirements still apply for declared FHAs.

4.4.2 Restrictions on issue of authorities

There are legislative constraints on the purposes for which approvals for works in declared FHAs may be granted in both management A and B areas. These limitations are stricter for management A areas reflecting their higher level of protection.

Section 61 of the Fisheries (General) Regulation outlines the restrictions on the issue of RAAs and the matters that must be taken into account in deciding an application:

- An RAA **may only be issued** in a declared FHA for a prescribed development purpose.

[5] Other than accepted development where an RAA is not required.
[6] s.29 (2) of the Commonwealth Native Title Act

- Regard must be had to the effect of the development proposal on maintenance of:
    - community use of the area (particularly fishing activities)
    - the natural condition of fish habitats and natural process in a management A area
    - current fish habitat values and functions of a management B area.

The prescribed development purposes for which an RAA in a declared FHA may be issued are specified in section 60 of the Fisheries (General) Regulation as meaning the following in, or directly affecting, the area:

a) restoring the fish habitat or natural processes

b) managing fisheries resources or fish habitat

c) researching, including monitoring, or educating

d) ensuring public health or safety

e) providing public infrastructure to facilitate fishing

f) providing subterranean public infrastructure if the chief executive is satisfied the surface of the area can be restored, after the completion of the relevant works or activity, to its condition before the performance of the works or activity

g) constructing a temporary structure

h) maintaining a structure that was constructed before the area was declared to be an FHA under the Act

i) maintaining a structure, other than a structure mentioned in paragraph (h), that has been lawfully constructed

j) for a part of the area that is a management B area:

    I. constructing a permanent structure in the area; or

    II. depositing material for beach replenishment in the area for the purpose of erosion control.

An RAA may not be issued for purposes other than those listed above.

An RAA is not required for development on freehold land (Fisheries Act, section 76A). Despite this, development applications for works on freehold land within an FHA would be assessed against state code 12, which reflects the prescribed development purposes. This ensures that FHA management is applied consistently across all forms of tenure within the declared FHA network.

4.4.3 Consideration of other legislation

Section 60A of the Fisheries Act requires that in deciding an application for an RAA, the chief executive must 'have regard to' the impact of the development on each of the following:

- coastal management under the Coastal Act. This includes having regard to the state interest "coastal environment" in the State Planning Policy (DILGP 2017)
- the protection of Queensland waters as required under the *Environmental Protection Act 1994* (see the Environmental Protection (Water) Policy 2009 for the way the environmental values of Queensland waters are to be protected)
- the management of marine parks under the *Marine Parks Act 2004*.

'Have regard to' means that the relevant provisions of the specified statutory instruments must be given appropriate weight in deciding an application for an RAA. In some circumstances this may require consultation with the agencies responsible for the relevant legislation.

4.4.4 Pre-existing non-conforming works

There are a small number of non-conforming works that have been approved or allowed in areas before they were declared as an FHA. Such works may constitute a long-established historical use. Continuation of these may be assessed on a case-by-case basis with regard to the risks and impacts of performing the works in the declared FHA.

4.4.5 When approvals are not required

General community use, legal fishing and boating within a declared FHA do not require an RAA or a DA (see section 5.1).

What is legal fishing in a declared FHA?

While declared FHAs do not restrict fishing (other than taking bait with a digging implement, which is an offence in all declared FHAs), other fisheries management provisions may apply to the area. For example, an area declared as an FHA may be closed to fishing under the *Fisheries Act 1994* or may be subject to marine park fishing restrictions under the *Marine Parks Act 2004.*

Fisheries development approvals are not required for works in declared FHAs that meet accepted development requirements. Accepted development is described in section 44of the Planning Act and the documents stating accepted development requirements are listed in section 135 of the Fisheries (General) Regulation. The relevant document for declared FHAs is *Accepted development requirements for operational work that is completely or partly within a declared fish habitat area* (accepted development requirements).

The Planning Act and the Fisheries Act allow for emergency works to be carried out without the need for approvals. See SPI 19: Emergency works for the specific policy interpretation.

Under section 14(1) of the Fisheries Act, Aboriginal peoples and Torres Strait Islanders can take, use or keep fisheries resources, or use fish habitats, for the purpose of satisfying a personal, domestic or non-commercial communal need of Aboriginal or Torres Strait Island people, carried out in accordance with the particular traditional laws and customs of the First Nations peoples of the area being fished. In these circumstances, approvals are not required for traditional activities in a declared FHA (e.g. for collection of mangrove timber to construct a spear for traditional hunting and fishing purposes).

Section 125A of the Fisheries Act provides for codes of practice to be prepared. Acceptable pest control measures that may be conducted in declared FHAs are defined in the FHA CoP (DES 2017). Activities defined in the FHA CoP that do not constitute 'development' under the Planning Act do not require approval[7]. Section 81 of the Fisheries (General) Regulation prohibits unlawful weed removal, pesticide use and biological control of a pest in a declared FHA and outside a declared FHA if doing so is likely to affect a fish habitat in the area. Such activities conducted outside the provisions of FHA CoP are unlawful.

There are a number of development activities for which authorisation under the Fisheries Act and the Planning Act is not required, including:

- where a collection authority to take native biological material from within a declared FHA has been issued under the *Biodiscovery Act 2004*

[7] The FHA CoP does not authorise control of mosquitoes through the construction of runnels.

- works in a declared construction area under the *Major Events Act 2014* as the Planning Act does not apply
- development authorised under the *Mineral Resources Act 1989* (MRA). However, exploration permits for mining are only issued after an environmental authority is granted under the *Environmental Protection Act 1994*. The Environmental Protection Regulation 2008 prohibits mining activities in
- category B environmentally sensitive areas, which includes declared FHAs and conditions can be placed on environmental authorities to prevent impacts on declared FHAs from offsite mining operations[8]
- works authorised under the *Disaster Management Act 2003*. A District Disaster Coordinator can direct works within a declared area in and immediately following disaster situations, including works within a declared FHA
- works authorised under the *Queensland Reconstruction Authority Act 2011*. In providing for rebuilding and recovery after a disaster event, the Queensland Reconstruction Authority may make a development scheme that specifies certain development in the scheme area is not assessable under the Planning Act. The Authority may also undertake works without the need for approval if these are specified in a Regulation.

4.4.6 Fees, appeals and penalties

Application fees for declared FHA DAs are prescribed in the Planning Regulation, while RAA fees are prescribed in the Fisheries (General) Regulation.

Appeals about DAs are dealt with through the Planning and Environment Court. 230 of the Planning Act outlines how an applicant may appeal. Third parties cannot appeal DA decisions (except in cases where public notification is required). The appeal must be initiated within 20 business days after the decision notice or negotiated decision notice is given to the applicant.

RAA decisions can be appealed (under section 188 of the Fisheries Act) by the applicant in the Queensland Civil and Administrative Tribunal (QCAT). Individuals affected by and dissatisfied with an RAA decision may only apply to QCAT for a review of the decision if a decision on an application for internal review of the decision has been made. Application for internal review must be made to the chief executive within 28 days of having received the information notice for the decision.

There are a number of offences that apply in declared FHAs. These are outlined in the Fisheries Act and the Planning Act. Fisheries Infringement Notices (FINs) may apply to some minor offences in declared FHAs[9].

4.5 Works or activities not supported by declared Fish Habitat Area legislation

For works that cannot be authorised within a declared FHA, a proponent may wish to explore the option of management level downgrade or revocation. Details on the process for declared FHA boundary amendment are provided in the Operational Policy Fish Habitat Area selection, assessment, declaration and review *(*DES 2012). Boundary amendment of a declared FHA requires significant justification, support from the community and relevant stakeholders and amendment to the Fisheries (General) Regulation. The procedure for assessing declared FHA management level downgrade or revocation may be lengthy and requires extensive and detailed supporting information from the proponent. To be supported, revocation and lowering of management level must be in the public interest and may require compensation.

[8] Refer to the Environmental Protection Regulation 2008 Schedule 3A for prescribed eligibility criteria for mining activities and Schedule 12 for definition of category B environmentally sensitive area.
[9] Refer to the State Penalties Enforcement Regulation 2014

4.6 Declared Fish Habitat Area offsets

Offsets for any significant residual impacts on declared FHAs that result from approved works may be required as a condition of the approval. Agreed offset measures must **not** include use of best management practices as these are considered to be standard development requirements. Offsets for approved declared FHA disturbance must serve to maintain the integrity and effectiveness of the individual area and the FHA network. Offsets are not required for activities in a declared FHA authorised under accepted development requirements.

Further details on offsets can be found in the *Environmental Offsets Act 2014*, Queensland Environmental Offsets Policy 2020 (Department of Environment and Science 2020) and the Significant Residual Impact Guideline (Department of State Development, Infrastructure, and Planning 2014).

4.7 Consultation

Effective consultation is essential in the development of a declared FHA. These consultation procedures are outlined in the Operational Policy Fish Habitat Area selection, assessment, declaration and review (DES 2012). Consultation may also be appropriate in the management of existing declared FHAs, in particular where a management decision or development proposal will affect the interests of other parties (e.g. fishing industry groups, adjacent landholders, local community groups, First Nations peoples). The extent of consultation required for declared FHA management decisions should be assessed on a case-by-case basis.

5 Scope of declared Fish Habitat Area management

The determination of whether or not works and/or an activity is subject to declared FHA management is guided by section 122 of the Fisheries Act, which states that ‘a person must not unlawfully perform, or cause to be performed, works or related activity in a declared fish habitat area’.

The interpretation of section 122 relies on the definition of:

- what activities are captured by the term ‘works’
- the physical area that is included within a declared FHA, including clarification of the height and depth of the area.

5.1 Definition of ‘works’

There is no definition of ‘works’ in the Fisheries Act or the Planning Act, nor in the *Acts Interpretation Act 1954*. The meaning of ‘work’ in the *Macquarie dictionary* is very broad and would encompass day-to-day recreational activities that are well beyond the intent of declared FHA management (e.g. recreational use of a beach).

For the purposes of this policy, ‘works’ that requires authorisation to ‘interfere’[10] with the fish habitats within a declared FHA is defined as:

- building, placing or maintaining a structure—includes in-situ sampling gear (e.g. for water quality monitoring)
- excavating
- filling or raising land
- beach replenishment
- bank stabilisation or erosion control
- removing or disturbing living or dead vegetation—does not include unintentional disturbance from general community use, boating and legal fishing activities

[10] See section 62 of the Fisheries (General) Regulation.

- planting vegetation
- dumping or depositing of matter
- aquaculture[11] (e.g. cage culture of fish).

Any works that are captured within the above definition are subject to FHA management and require authorisation before these may be carried out within a declared FHA.

The following activities are considered part of the general, legal community and commercial use and enjoyment of the area and are **not** considered as works and do not require authorisation within a declared FHA:

- using a registered vessel, or a vessel exempt from registration requirements by Department of Transport and Main Roads (TMR), including for commercial, recreational, tourism or educational use
- placing or using an anchor, legal fishing apparatus and minor temporary structures used as part of general community use of the area (e.g. fishing chair, beach umbrella)
- using a registered vehicle (e.g. 4WD, amphibious vehicle) or a vehicle exempt from registration requirements by TMR including for commercial, recreational, tourism or educational use
- yabby pumping, anchor damage and other substrate disturbance resulting from legal boating and fishing activities
- minimal temporary excavations as part of general community use of the area. Examples include digging by hand for worms (i.e. not using a digging implement) or a child digging on the beach
- filling or raising land as part of general community use of the area (e.g. a child building a sand castle)
- removing or disturbing vegetation through unintentional disturbance from general community use, boating and legal fishing activities
- maintaining existing structures if there is no disturbance to the fish habitats of the declared FHA (e.g. resurfacing or painting of a bridge)
- attaching a cable or pipeline to an existing structure such as a bridge if the substrate and the fish habitat is not disturbed and the footprint of the existing structure is not enlarged.

Taking bait with a digging implement is not works but is prohibited in a declared FHA as it constitutes an offence under section 80 of the Fisheries (General) Regulation.

5.2 Clarification of declared Fish Habitat Area boundaries

5.2.1 Lateral boundaries

Declared FHA boundaries are defined through a combination of sections 77 to 79 of the Fisheries (General) Regulation, and (for each area) the relevant FHA plan and the relevant section of schedule 3 of the Fisheries (General) Regulation. It is important to consult all of these provisions to determine the boundaries of a declared FHA and in particular note that:

- All lands, whether tidal, freshwater or **terrestrial** (see policy position below on management of terrestrial lands within declared FHAs) shown within the outer boundary may be included in a declared FHA.
- Land that is unallocated state land (USL) or national park **within** the boundaries shown on the FHA plan is included in the area, subject to any specific exclusion of lands (see below). Lands other than

[11] See SPI 18: Tidal aquaculture for detail on a policy exemption under specific circumstances for this activity.

USL or national park may be included in a declared FHA only if specified as such in schedule 3 of the Fisheries (General) Regulation (see also SPI 18: Tenure).

- The Fisheries (General) Regulation may specify in schedule 3 lands that are excluded from a declared FHA even though these are shown within the outer boundary of the plan. Such exclusions may include particular parcels or parts (e.g. the non-tidal parts) of USL, national park or other tenured lands. Lands excluded from declared FHAs may also be described on an FHA plan. It is especially important to check for any excluded lands when considering whether proposed works are subject to declared FHA management.
- Navigation channels marked with navigation aids are excluded from all declared FHAs (section
- 78(2)(b) (iii)). If the location of a marked navigation channel should change, the boundary of the declared FHA changes accordingly (see also SPI 11: Navigation aids). Where a channel marked by navigation aids leads to an obvious public destination (e.g. boat ramp, canal entrance, anchorage) then the excluded area extends to that destination, even if the channel markers stop short of the destination. However, the destination is not considered part of the channel.
- The precise location of declared FHA boundaries 'on the ground' may depend on the nature of the cadastral boundaries to which these are tied. While the intention is to tie declared FHA boundaries to surveyed cadastral boundaries, this may not always be possible (e.g. in cases where doing so would result in lands unsuitable for declared FHA management being incorporated into the FHA). In cases where declared FHA boundaries are attached to unsurveyed or natural (either surveyed or unsurveyed) cadastral boundaries, staff may need to seek policy advice regarding boundary definition.
- Mid-stream boundary lines shown on an FHA plan generally indicate the mid-point between the seaward edge of vegetation on the nearest banks. Where the vegetation is mangroves, the seaward edge is measured from the most seaward trunks. Where there is no vegetation, the mid-point is measured from the top of the bank. However, DES may be required to provide individual boundary interpretation based on historical mapping.
- Where agreement cannot be reached on the location of the declared FHA boundary, a survey may be required to determine the boundary.

5.2.2 Cadastral boundary types

- Cadastral boundary types include:
    - Right line boundary – a boundary that has been surveyed with actual coordinates. These boundaries do not change. Often used for terrestrial boundaries and landward boundaries of esplanades.
    - Surveyed natural boundary – a boundary that has been surveyed using a natural feature, such as the top of creek bank or 'extent of useable land'.
    - Unsurveyed natural boundary – a boundary indicated on the original survey plan using natural features that have not been surveyed.

Natural boundaries are common in declared FHAs, particularly indicating the boundary of a waterway. These boundaries move over time with 'gradual and imperceptible' erosion and accretion. Therefore, the actual location of the boundary on the ground may be different to that shown on the Digital Cadastral Data Base - which is simply a digital representation of the boundary at a given point of time - and the survey plan. The intent of the survey plan is applied to the current situation. For example, for a survey plan with an unsurveyed natural boundary that uses the natural feature of "the top of the creek bank" to identify the boundary, the top of the current creek bank would be the current boundary, even if the creek has moved since the survey plan was

made. However, this interpretation is subject to other considerations such as the absence of rapidly occurring natural processes (e.g. severe storm) and substantial modification of land through human activity (e.g. filling). This interpretation follows Part 7 of the *Survey and Mapping Infrastructure Act 2003*, and advice from the Department of Resources (DoR) may be required for clarification of boundary locations.

5.3 Declared Fish Habitat Area height and depth

The height and depth of declared FHAs are not specified in the legislation. These boundary dimensions require policy clarification, particularly in relation to the location of activities such as placement of powerlines that span an area, and of underground cables placed below the substrate surface using directional drilling techniques.

For the purposes of this policy:

- Declared FHAs have no height limit specified in legislation and most structures in the airspace of the area are subject to declared FHA management. An exception to this is provided by section 79 of the Fisheries (General) Regulation, which excludes from declared FHAs cables that span the air space and that are not in contact with land, water or plants within the area, including the air space that is to be occupied by a proposed cable. This provision recognises that such cables have no impact on the fish habitats within a declared FHA. To clarify this provision, the Fisheries (General) Regulation includes 'an overhead electric line or telecommunication cable' as examples of a cable.
- The depth of a declared FHA for management purposes is two metres, measured vertically beneath the substratum surface of the area[12]. This two metre depth ensures that mangrove root systems and the benthic infaunal community are included within the declared FHA and protected from disturbance. This policy allows for infrastructure to be placed under declared FHAs using directional drilling without authorisation where the works are located at more than two metres below the substrate surface.

5.4 Terrestrial lands in declared FHAs

FHAs are commonly declared to cadastral (property) boundaries. This means that there may be sections of terrestrial land within a declared FHA boundary. Note that certain development on **terrestrial land** within a declared FHA that would not normally be approved on fish habitats within the area may be considered if:

- there is an applicable prescribed development purpose for the proposed development
- there is no reasonable alternative site for the proposed development
- the land has no fish habitat value
- the development will not affect fish habitat values in the area
- there will be appropriate buffers between fish habitats and the development.

Example: A public boat ramp car park on terrestrial land within a declared FHA that meets the above requirements.

6 Application of declared Fish Habitat Area management

Decisions regarding the issue or refusal of a declared FHA RAA must comply with section 61 of the Fisheries (General) Regulation. In addition, proposals for works in a declared FHA are also considered in terms of their compatibility with this policy, other relevant operational policies and guidelines, and previous decisions of the former Fisheries Tribunal, the Queensland Civil and Administrative Tribunal (QCAT) and the Planning and

[12] This limit is based on literature review of the depth of marine plant root systems and biological activity in marine areas, which determined that few roots were present and few aquatic organisms inhabited sediment deeper than 2m.

Environment Court. The development proposal must be in keeping with the principles of DES policies or demonstrate special circumstances to show why policy should be departed from based on the merits of the application.

The following sections of this policy interpret sections 60 and 61 of the Fisheries (General) Regulation to guide the consistent assessment of applications to conduct works in declared FHAs. Each prescribed development purpose for declared FHAs is discussed separately in the following sections.

6.1 Proponent's rights or interests

Land within declared FHAs is a state resource - works in, or placement of structures on state land needs careful consideration. Proponents wishing to conduct works in declared FHAs should have a level of 'rights' (or interests) that supports consideration of an application. Proposed works may impact on the fish habitat and fisheries values of the declared FHA and restrict access of the general community to the area. It is a legislative requirement that the decision maker must consider the effect of the development on the maintenance of the community use of the area, in particular, in relation to fishing activities. Examples of demonstrated rights or related interests to be considered include:

- the proponent owns (or gets permission from the owner) the property directly adjoining the proposed location of a structure
- the works are required to exercise the existing 'as of right' or approved use of the land (e.g. works conducted on a term lease that was included in a declared FHA with the consent of the tenure holder)
- local government is the proponent and the proposed works are to be conducted on behalf of the community (e.g. on a public foreshore)
- the proponent can demonstrate precedents, previous decisions or prior approvals for the proposed works or activities. Note that a proponent who holds an RAA to interfere with a declared FHA by definition has the right to apply for a DA for the works. Previous issue of an RAA that has lapsed may also be a consideration.

6.2 Restoring the fish habitat or natural processes

The Fisheries (General) Regulation clarifies the meaning of this prescribed development purpose through inclusion of the following examples:

- *reinstating tidal profiles for allowing restoration of marine plant communities*
- *restoring tidal flows and inundation patterns*.

6.2.1 Background

Restoration of fish habitat or natural processes within a declared FHA may be required where:

- natural events have caused disturbance (e.g. severe mangrove loss from storm damage); or
- there has been human interference but the person responsible is unable to be identified. Where the person responsible can be identified, section 125 of the Fisheries Act provides for issue of a restoration notice to restore fish habitats. Where the unauthorised disturbance or degradation constitutes development, section 168 of the Planning Act provides for issue of an enforcement notice to refrain from and remedy the effect of a development offence; or
- it is necessary for the long-term and continuing protection of declared FHA values in the face of a serious threat such as the impacts of a changing climate.

Two types of restoration are recognised in declared FHAs: restoration to return a site to an agreed pre-existing natural condition (for example, following disturbance from natural events or human interference) and restoration

to build resilience of declared FHAs in response to the pressures and impacts of serious threats such as the impacts of a changing climate.

1. Restoration to return a site to an agreed pre-existing natural condition.

   From a declared FHA perspective, this means:

   - restoring natural substrate profiles and processes to a level where natural succession will continue the recovery process.

Projects that aim to deal with disturbance from human interference may involve both a specific restoration component and an associated component that prevents or manages the factors that caused the impacts.

Actual 'works' may not necessarily be required to achieve satisfactory restoration of disturbed fish habitats within declared FHAs. Restoration achieved through natural regeneration of habitats significantly reduces the likelihood of impacting upon undisturbed areas (e.g. seed stock areas) during restoration works.

Restoration of habitats and natural processes should be well planned to achieve the desired outcomes, prevent exacerbation of existing habitat degradation and to ensure a net benefit to the declared FHA. Multidisciplinary expertise may be required in development of the proposal. Peer review from relevant experts may also be worth consideration.

2. Restoration to build resilience of fish habitats, fisheries productivity and natural ecological processes.

   From a declared FHA perspective this means:

   - Undertaking actions required to maintain or improve fish habitat values, fisheries productivity and natural ecological processes to strengthen the restorative capacity of declared FHAs.

The policy recognises that an 'interventionist' or 'active restoration' approach may be appropriate for the long-term and continuing protection of declared FHAs in the face of a changing climate or other serious threat. This could involve undertaking certain 'works' or other actions to improve the natural recovery process, and achieve benefits to the FHA at a range of scales, now or in the future, under different climate change scenarios.

Detailed project planning would be required, demonstrating that there will be a net benefit to the declared FHA, the anticipated benefits of the restoration outweigh the associated risks, and achievement of benefits will not be at the cost of good existing habitat condition. Monitoring would be required to determine the success of projects. Resourcing and project planning should include remedial measures should the project fail to achieve the desired outcomes, e.g. removal of any structures from the declared FHA. Where appropriate, experimental trials can be used to inform final project design.

Examples of restoration intervention projects that may be considered as management activities within declared FHAs include:

- Placement of an artificial structure (e.g. artificial reef such as a shellfish reef)
- Restoration of seagrass meadows, mangroves or saltmarshes where natural recovery is not occurring.

Restoration projects that satisfy the policy position should be encouraged, and DES should assist with technical input and assistance wherever possible. The benefits of restoration projects often extend beyond the restored habitat values. A project undertaken on a local scale can engender a spirit of community custodianship and interest in the declared FHA, which has long-term benefits to FHA management.

Certain restoration works in declared FHAs are authorised under the accepted development requirements (DES 2020). These works require a restoration project plan to be endorsed prior to commencement of works. Information required in the project plan is outlined in the accepted development requirements. The accepted

development requirements only applies to restoration that consists of 'actions to return a site to an agreed pre-existing condition' (i.e. restoration intervention projects are not accepted development).

6.2.2 Policy position

Proposals for the restoration of fish habitats or natural processes within both management A and B areas must comply with all of the following criteria:

- A restoration project plan must be developed and should include as a minimum:
    - introduction and objective
    - scope of project
    - cost/funding
    - alternative options
    - rationale
    - timing
    - management measures
    - monitoring timeframes
    - how success/completion of the project will be determined
    - drawings/ plans/maps showing locality of project.
- Restoration works must be specifically for the benefit of fish habitats, fisheries productivity and natural ecological processes within the declared FHA, now or in the future.
- The proposal must be feasible, likely to be successful and the benefits of the restoration works must outweigh the impacts or risks of conducting the work.
- A post-works monitoring and maintenance program must be included, as appropriate for the scale of the restoration works.
- Sediment or marine plants required for the restoration project are to be obtained from outside the declared FHA to avoid further disturbance within the area, unless there is no reasonable alternative source[13]. Disposal of excess sediment from restoration within the boundaries of a declared FHA is not supported.
- For restoration proposals to return a site to an agreed pre-existing natural condition:
    - The disturbance area proposed for restoration must be in a degraded condition resulting in reduced fisheries productivity; and
    - Ecological monitoring of the proposed restoration area should identify that the area of disturbance does not show evidence of adequate natural recovery.
- For restoration intervention projects to build resilience of fish habitats, fisheries productivity and natural ecological processes, the following are considered when assessing benefits of the restoration works against the risks of conducting the work:

[13] Vegetation to be used within a restoration project must comply with any relevant provisions of the National policy for the translocation of live aquatic organisms (Australian Bureau of Rural Sciences). See Couchman & Beumer (2007) for specific guidance on marine plant translocation.

- The current and probable range of future conditions of declared FHA values under predicted climate change scenarios and the effect of cumulative impacts
- Whether short and long term risks of the project can be avoided, mitigated or minimised
- The environmental, cultural, social and economic values of the declared FHA and need to minimise impacts on these values
- Whether natural processes are likely to be sufficient without the need for intervention
- The risk of inaction.

For restoration proposals attributed to disturbance or degradation by direct human interference, the restoration project must include effective measures to ensure that the human interference that caused the disturbance will be minimised or overcome.

Any restoration project outside the boundaries of a declared FHA that proposes to source sediment or marine plants from within the area is subject to the following criteria:

- Obtaining sediment from within a declared FHA is not supported.
- Obtaining marine plants for revegetation purposes from within a declared FHA is only supported if:
  - no alternative source of marine plants from outside the declared FHA is feasible; and
  - the removal of marine plants is assessed to have minimal impact on the declared FHA.

6.3 Managing fisheries resources or fish habitat

The Fisheries (General) Regulation clarifies the meaning of this prescribed development purpose through inclusion of the following example:

- constructing a boardwalk for public access within the declared FHA for preventing uncontrolled disturbance of the habitat.

6.3.1 Background

This prescribed development purpose is for managing fisheries resources or fish habitat in a declared FHA for a public, fisheries-related purpose. In particular, this purpose provides a means of managing the impacts of public access to, and use of, the area, and may be used to facilitate activities that result in a net benefit to the declared FHA. The basis for interpretation of this purpose is that:

- The Fisheries (General) Regulation provides a number of specific purposes for which an RAA may be issued. A broad interpretation of 'managing fisheries resources or fish habitat in the area' would negate the need for any other purposes, as these could all be considered components of this single category. Clearly, this intent is not reflected in the legislation.
- The community and stakeholder consultation for all declared FHAs is based on the position that managing fisheries resources or fish habitat in the area is for public fisheries purposes only. The community, stakeholders and government have supported the declaration of all FHAs on this basis.

6.3.2 Policy position

Proposals for disturbance of management A or B areas must comply with the following criteria:

- Proposals for the provision of any private works or private structures are not supported.
- The works must be:

- for a fisheries or fish habitat management purpose
- undertaken by a government agency or natural resource management group for public benefit
- feasible and the benefits must outweigh the impacts
- located, designed, constructed (materials and methods) and timed to minimise all impacts on the declared FHA, including impacts on the community use of the area from a fisheries perspective, and:
  - on the natural condition of its fish habitats and natural processes in a management A area;

    or
  - on the current fish habitat values and functions in a management B area.

Examples of management of fisheries resources or fish habitats by government agencies for public benefit include:

- providing public access (e.g. a boardwalk) to prevent uncontrolled habitat disturbance
- placing bollards or a fence to prevent uncontrolled vehicle access into the declared FHA
- controlling aquatic pests (e.g. *Tilapia*) or weeds[14] if this constitutes development
- removing a naturally formed sand bund across a waterway to prevent fish kills upgrading public stormwater or sewerage treatment plant outlets[15] that result in improved water quality or fish habitat in the declared FHA.

Works for erosion control (e.g. revetments, placement of geotextile bags) are not covered under this prescribed development purpose and are considered under the purpose of 'constructing a permanent structure on tidal land or within the FHA'.

6.4 Researching, including monitoring, or educating

6.4.1 Background

The high habitat diversity and relatively pristine condition of the FHA network make declared FHAs particularly suitable for aquatic research and education activities.

The use of declared FHAs for fisheries, ecology and management/research projects of minor impact may have considerable benefits for management of the area. The results of previous research undertaken within declared FHAs have provided improved understanding of the physical, biological, social and economic processes within these key areas.

Educational activities with minor impact also meet the intention of FHA declaration. Several declared FHAs (e.g. the Currumbin Creek and Tallebudgera Creek declared FHAs) are near schools and educational facilities. These declared FHAs have been used as important educational areas for the delivery of science and marine studies curriculums for many years.

Certain research and education activities undertaken within declared FHAs (e.g. a visual assessment of a mangrove community, counting wader birds, a creel survey, collecting water samples[16] etc.) are considered to

[14] Control of pests that pose a public health risk is dealt with under the section 6.5.
[15] Refer to SPI 8B: Public sewer and water treatment outlets
[16] Water sampling involving placement of in-situ sampling gear is considered as 'works'.

be general community use of the area rather than works (see section 5.1) and therefore do not generally require authorisation for works within a declared FHA.

The accepted development requirements outlines work for educational, research or monitoring purposes that are be authorised without the need for an RAA or development approval. This includes works for existing property boundary definition and for survey and investigation of impacts of development on declared FHAs. It is anticipated that the accepted development requirements will cater for most research and education activities in declared FHAs.

6.4.2 Policy position

Research or education activities that do not require the intentional disturbance of substratum or flora within a declared FHA are considered to be general community use of the area and therefore do not require authorisation. These activities include:

- non-destructive biological, ecological or environmental research
- water quality sampling and monitoring that does not require sampling equipment to be left in-situ

  fauna sampling using apparatus equivalent to that used by the commercial and recreational fishing sectors, and that is approved via a general fisheries permit under the provisions of the Fisheries Act
- non-destructive educational field visits.

Research and education activities or facilities that require the intentional disturbance of substratum, water (by in-situ sampling/monitoring equipment) or flora within a declared FHA, and that are not authorised under the accepted development requirements, require approval. This includes survey or investigation works within declared FHAs (e.g. for monitoring the impacts of development proposals and/or to define property and/or declared FHA boundaries).

Education

Disturbance within both management A and B areas for education must be directly related to education about:

- fish or fisheries
- fish habitat
- general biological/ecosystem values or processes within the area
- protected area management
- cultural values.

With the exception of permanent educational structures discussed separately below, the disturbance of a declared FHA for education will only be supported if assessed as:

- limited in nature, frequency and extent
- necessary to achieve the desired educational outcome
- temporary
- able to quickly recover through natural processes without any requirement for restoration works.

For permanent educational structures (e.g. educational signs or boardwalks) within a declared FHA, support will only be offered if the:

- structure is publicly owned and for public benefit
- educational benefits justify the impacts

- structure is strategically located to achieve a high level of community use/benefit
- structure's location, design, construction materials, construction methods and timing of works minimise all impacts on the declared FHA, including impacts on the community use of the area from a fisheries perspective, and:
    - on the natural condition of its fish habitats and natural processes in a management A area, or
    - on the current fish habitat values and functions in a management B area.

Research

Disturbance of management A or B areas for research activities must be directly related to research about:

- fish or fisheries
- fish habitat
- the general biological/ecosystem values or processes within the declared FHA
- protected area management
- survey works for existing property boundary definition and investigation of impacts of development on the declared FHA.
- cultural values
- experimental trials for a restoration project

The disturbance of a declared FHA for the research purposes outlined above will only be supported if the disturbance is assessed as:

- limited in nature, frequency and extent
- necessary to achieve the research outcome
- likely to cause only minimal impacts on the declared FHA, including impacts on the community use of the area from a fisheries perspective, and:
    - on the natural condition of its fish habitats and natural processes in a management A area, or
    - on the current fish habitat values and functions in a management B area.
- able to be restored, if relevant, at the completion of the research project.

6.5 Ensuring public health or safety

6.5.1 Background

Public health is, 'the organised response by society to protect and promote health, and to prevent illness, injury and disability. It aims to control the determinants of disease and reduce public exposure to risks encountered as part of lifestyle or in the environment' (Healthy Horizons 1999).

Management of public health issues may require works within declared FHAs. Historically, the most significant, ongoing public health issue that has required declared FHA management has been control of disease-carrying mosquitoes. This has required limited, strategically planned physical and chemical management of mosquito breeding habitats in declared FHAs. An approval is not required for public health activities that are authorised under the FHA CoP (DES 2015).

Another potential public health issue is the prevalence of obesity, cardiovascular disease etc. Research indicates that the promotion of active lifestyles and accessing natural areas can improve wellbeing and mental health, reduce stress and improve immunity (Maller et al. 2008). An example where this issue may be subject to declared FHA management is the construction of a public access facility, under a government initiative to promote public health.

Issues associated with public safety are more common within declared FHAs than public health issues. Public safety issues may be identified by local government, other state government agencies, other management agencies, and members of the general public. Typical public safety issues within declared FHAs include the:

- removal of fallen vegetation that is causing a navigation safety hazard
- placement of navigation warning signs (e.g. 'no anchoring' sign to identify the location of a submerged cable or rock bar)
- removal of hazardous materials (e.g. the toxic cyanobacteria *Lyngbya majuscula*) washed up on beaches.

6.5.2 Policy position

Public health

Works for the management of public health may be considered for approval within both management A and B areas. However, to be considered as a public health issue the proposed works must be formally identified as such by Queensland Health or the relevant government authority through a letter of endorsement of any application for works[17].

The public health purpose is not considered to include provision for repair of infrastructure such as sewerage and water treatment facilities (e.g. the maintenance of a broken sewer main that is not due to an emergency and not authorised by the accepted development requirements should be assessed as necessary maintenance of an existing lawful structure rather than as a public health issue).

Works for the management of a public health issue will only be supported within declared FHAs if:

- all alternative options that do not require works in a declared FHA have been considered and are not viable or not achievable in the available timeframes for an adequate response to the public health issue
- the proposed works are designed to minimise all impacts to the declared FHA and: o on the natural condition of its fish habitats and natural processes in a management A area, or o on the current fish habitat values and functions in a management B area.

In addition, the construction of structures to facilitate public use of the declared FHA for public health benefits must also demonstrate:

- that the structure will be publicly owned and managed
- the proposed location has been identified as the most suitable through a strategic planning approach (which includes consideration of upgrading existing facilities)
- there is an existing and projected community requirement for the structure
- there is adequate car parking capacity outside of the declared FHA

[17] This requirement does not apply to applications for mosquito control, which has a long history in Queensland and is widely accepted as an important public health issue.

- the structure does not require additional dredging within the area for access[18]
- the design, construction materials, construction methods and timing of works minimise all impacts on the declared FHA, including impacts on the community use of the area from a fisheries perspective.

For public health issues that require a long-term response with ongoing impacts on a declared FHA, an agreed program must be developed to identify and implement measures to reduce the impacts of the response over time on the area.

Additional, specific policies apply to mosquito control. Refer to SPI: 16: Mosquito control for further details.

Public safety

Works for the management of public safety (i.e. works to ensure the public is safe—free from injury or danger) may be considered for approval in both management A and B areas. However, only the following works are considered to be for a public safety purpose:

- signage to warn the public of a safety hazard (e.g. within a waterway to warn of submerged rocks, crocodiles, marine stingers)
- works to prevent an impending public safety issue (e.g. beach cleaning to remove dangerous items such as syringes)
- removal of a hazard to public safety that has resulted from a specific unforseen event (e.g. a fallen tree that is a danger to safe navigation; sediment deposited by a flood that is a danger to safe access to a public boat ramp; clean-up of an oil spill). Legitimate emergency works are dealt with under SPI 19: Emergency works
- placement of a public marine stinger net/bathing reserve net (e.g. to restrict vessel traffic and to exclude sharks) to enable safe community use of the declared FHA
- placement of a cyclone mooring identified under a Cyclone Contingency Plan by the harbour master or controlling port authority/corporation and located in accordance with a cyclone mooring plan.

Works for the management of the above public safety issues will only be supported within declared FHAs if:

- all alternative options that do not require works in the declared FHA have been considered and are not viable or achievable in the available timeframes for an adequate response to the public safety issue
- the proposed works are designed to minimise all impacts on the fish habitats and natural processes (management A area)/existing fish habitat functions and values (management B area) within the declared FHA and on the community use of the area.

The following works or activities within declared FHAs are not considered to be public safety issues:

- management of ‘nuisance’ issues (e.g. biting midge control, or the management of odours from decaying vegetation)
- foreshore erosion, unless its control is required as a short-term emergency response to a catastrophic event that presents an immediate threat to public safety through undermining of dwellings or infrastructure. In such cases, the emergency provisions of the Fisheries Act and Planning Act may apply (see SPI 19: Emergency works). Where possible, erosion management measures should be developed prior to public safety becoming an issue. See SPI 12: Revetments, groynes and gabions for further discussion of erosion control in declared FHAs.

[18] The dredging of a new access channel that is not marked by aids to navigation within a declared FHA would require the area of the channel to be revoked.

- capital dredging for navigation (note that navigation channels marked by official aids to navigation are excluded from all declared FHAs).

6.6 Providing public infrastructure to facilitate fishing

The Fisheries (General) Regulation clarifies the meaning of this prescribed development purpose through inclusion of the following example:

- *a boat ramp or jetty for public use*.

6.6.1 Background

Appropriately located and designed public jetties, pontoons, boat ramps and fishing platforms provide key access points for the community to enter, use and fish within a declared FHA. While these structures, for public use, provide enhanced community access to declared FHAs, they may be large and impacts of construction may be significant. Need, proposed location, construction works and, future maintenance and upgrade requirements are all important considerations to ensure that the public benefits of the facility justify the disturbance to the declared FHA. A strategic approach to locating facilities is likely to provide enhanced community use and minimise impacts on fish habitats within declared FHAs.

Proposals for public infrastructure to facilitate fishing often require associated infrastructure, such as car and trailer parking and rest rooms. The availability of land adjacent to the declared FHA for these related facilities is a key consideration in any proposal to ensure that only those components of a structure that have a physical requirement to be within the declared FHA will be located in the area.

6.6.2 Policy position

Public infrastructure (publicly owned and for a public benefit) to facilitate fishing may be considered for approval within both management A and B areas. However, to be categorised as public infrastructure to facilitate fishing the structure must have a direct link to the activity of fishing and must have an overriding requirement to be within the declared FHA. The infrastructure types that will be considered for support under this prescribed development purpose are public:

- jetties
- pontoons
- boat ramps
- floating walkways
- fishing platforms
- artificial reefs (note this does not include reefs for the purpose of diving)
- fish aggregating devices (FADs)

Jetties, pontoons, boat ramps, floating walkways and fishing platforms

The construction of the above structures will only be supported within a declared FHA if:

- the proposed location has been identified as the most suitable through a strategic planning approach (which includes consideration of upgrading existing facilities)
- there is an existing and projected community requirement for the structure
- there is adequate car and boat trailer parking capacity outside of the declared FHA

- the structure does not require additional dredging within the area for access[19]
- the design, construction materials, construction methods and timing of works minimise all impacts on the declared FHA, including impacts on the community use of the area from a fisheries perspective, and:
    - on the natural condition of its fish habitats and natural processes in a management A area, or
    - on the current fish habitat values and functions in a management B area.

A vessel staging area adjacent to a public boat ramp is supported within a declared FHA, providing the size of the proposed staging area is appropriate for the size of the boat ramp. If floating walkways are provided, smaller vessel staging areas may be appropriate.

Associated infrastructure that does not have a physical requirement to be within a declared FHA is not supported (e.g. boat trailer parks, car parks, rest rooms).

6.7 Providing subterranean public infrastructure

6.7.1 Background

Subterranean infrastructure includes underground cables and pipelines to transport electricity,

telecommunications, liquids and gas. Where these are proposed in a declared FHA, section 61 of the Fisheries (General) Regulation requires that the chief executive must be "satisfied the surface of the area can be restored, after the completion of the relevant works or activity, to its condition before the performance of the works or activity".

Directional drilling techniques may be used to place subterranean infrastructure at depths greater than two metres below the substrate surface of a declared FHA. In such cases, no declared FHA authorisation is required as such works would be outside the area (see section 5.3).

Where possible it is preferable to attach a cable or pipeline to an existing structure, such as a bridge, and this is not considered works within a declared FHA if the substrate and fish habitat is not disturbed and the footprint of the existing structure is not enlarged. This technique is preferred to other techniques that result in impacts to the declared FHA.

'Open cut' construction methods are the alternative technique for installing subterranean infrastructure. The level of impact from 'open cut' construction methods will vary considerably between sites and will be influenced by factors such as:

- depth below the substrate surface that the cable or pipe is to be installed
- sediment type and extent of excavation required (including width and batters)
- whether the works can be undertaken 'in the dry' (i.e. the area is exposed at low tide or within a bunded area)
- sensitivity of surrounding fish habitats
- amount of time the excavation/trench will be 'open'
- bank stability at the abutment of the excavation/trench and the bank of the waterway • temporary spoil storage methods and locations
- tidal regime and water velocity.

[19] The dredging of a new access channel that is not marked by aids to navigation within a declared FHA would require the area of the channel to be revoked.

These, and other factors, will affect the feasibility of restoring the substrate surface to its pre-works condition and maintaining the fish habitats, natural processes, values and functions of the declared FHA, as is required under section 61 of the Fisheries (General) Regulation.

6.7.2 Policy position

Works for the construction of subterranean public infrastructure may be considered for approval within both management A and B areas.

Works for the construction of subterranean public infrastructure will not be supported if there is a viable alternative (e.g. attaching a pipeline to an existing bridge) or directional drilling below two metres, which is below the declared FHA) that does not require works within a declared FHA.

If no viable alternative to works in the area exists, the construction of subterranean public infrastructure will only be supported within a declared FHA if:

- the substrate surface of the area can be satisfactorily restored, which requires:
    - restoration of the pre-works surface profile and surface sediment type (i.e. surface sediment type should match the surrounding sediment to aid recolonisation by flora and fauna)
    - an agreed post-works monitoring and maintenance program (if required and as appropriate to the scale of disturbance).
- any disturbance to waterway banks is suitably protected from erosion, if necessary
- infrastructure is placed below the existing substrate surface level
- the substrate surface total disturbance corridor width (trench and any adjacent temporary spoil stockpile) is minimised
- for a management A area, the:
    - proposal location is assessed to be the most suitable available and the design, construction materials, construction methods and timing of works minimise all impacts on the declared FHA, the natural condition of fish habitats and natural processes and on the community use of the area.
- for a management B area, the:
    - proposal location is assessed to be the most suitable available and the design, construction materials, construction methods and timing of works minimise all impacts on current values and functions within the declared FHA and on the community use of the area.

6.8 Constructing a temporary structure

6.8.1 Background

This prescribed development purpose relates only to proposals for temporary structures where the temporary structure is the **only** disturbance to the declared FHA, and any habitat disturbance is temporary. For example:

- placement of a temporary dredge pipeline across a declared FHA to link a dredge working outside the area with a land based spoil disposal site also outside the area.

Temporary structures may also be proposed as a component of other works that are specifically catered for under another prescribed declared fish habitat area development purpose. For example, placement of a temporary:

- bund required as part of the maintenance of an existing structure (‘maintenance of an existing structure’)

- in-situ water monitoring device ('education, research and monitoring').

6.8.2 Policy position

The construction of a temporary structure may be considered for approval within both management A and B areas.

To be considered for approval under this prescribed development purpose, the structure must be a proposal for works in a declared FHA in its own right and not a component of a larger proposed disturbance of the area and/or for a purpose that should be assessed under a different prescribed development purpose.

An application for the construction of a temporary structure within a declared FHA will only be supported if:

- the works location is in part of the declared FHA for which the proponent can demonstrate a level of 'rights' or interests
- the proposal will have lesser impact on the declared FHA than all other reasonable options, the impacts will be temporary and the fish habitats will be restored
- the structure will be in place for the shortest possible time, normally up to a period of six weeks, but in most cases no longer than six months. Structures with lesser impact (e.g. a temporary pipeline placed on the substrate surface of a declared FHA where there is no outflow from the pipe into the area) may
- be left in place for longer than those with greater impact. Note that a temporary waterway barrier that prevents tidal flow may not be left in place for longer than 21 days without tidal flushing[20] After 21 days, tidal flushing must be restored for a minimum of 48 hours before reinstating the temporary waterway barrier.
- the structure is appropriately designed such that all of its components are retained within the approved area and can be completely removed from the declared FHA
- the structure is located, designed and erected so that it minimises all impacts to the declared FHA, its current fish habitat values and functions, and the community use of the declared FHA, including:
    - the structure will not significantly interfere with community use of the declared FHA or must be for a public benefit project
    - the placement of the structure is timed to avoid or minimise conflict with known fish migration periods, if relevant to the structure type and design
    - the location, design, construction materials, construction methods and timing of works minimise all impacts on the declared FHA, including impacts on the community use of the area from a fisheries perspective, and:
        – on the natural condition of its fish habitats and natural processes in a management A area,

        or

        – on the current fish habitat values and functions in a management B area.
    - The substrate surface of the declared FHA can be satisfactorily restored following removal of the structure, if relevant. This requires:

[20] Refer to the State Development Assessment Provisions: Constructing or raising waterway barrier works in fish habitats state code for more details.

– restoration of the pre-works surface profile and surface sediment type (i.e. surface sediment type should match the surrounding sediment to aid recolonisation by flora and fauna)

– an agreed post-works monitoring and maintenance program (if appropriate to the scale of disturbance).

6.9 Maintenance of structures

There are two prescribed development purposes in the Fisheries (General) Regulation that provide for maintenance of structures[21]:

- 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.

6.9.1 Background

If maintenance work does not comply with the accepted development requirements, application for a resource allocation authority under the *Fisheries Act 1994* and a development approval under the *Planning Act 2016* is required.

- Any proposed maintenance works that are not authorised by the accepted development requirements require an RAA and a DA.

The prescribed development purposes above allow for maintenance of any structure constructed prior to FHA declaration, but only of **lawful** structures constructed after FHA declaration. The maintenance of an existing structure is an activity that may be considered for approval within both management A and B areas.

A 'lawful structure' is an existing structure constructed in compliance with all the requirements under any Act relevant to a structure of that type at the time of construction. An existing lawful structure may be owned by a public authority or private entity. Note that some lawful structures may not have any approvals, or may not have all the approvals currently required for such a structure, if such approvals were not required at the time of construction.

Structures present within a declared FHA have been categorised in the following manner for management purposes:

- Lawful structures - a structure constructed before or after FHA declaration that is approved under any Act relevant to the structure of that type at the time of construction.
- Unlawful structures – a structure constructed before or after FHA declaration that is not approved under any Act relevant to the structure of that type at the time of construction.

6.9.2 Policy position

Proposals for maintenance of an existing structure within management A and management B areas must comply with the following criteria:

Lawful structures

- All lawful structures, whether constructed before or after FHA declaration, may be maintained within a declared FHA, including under the accepted development requirements where applicable.

[21] See the Appendix 3 Definitions for a definition of what constitutes a 'structure'.

Unlawful structures

- An unlawful structure that was constructed prior to the date of first declaration of the FHA may be maintained without enlargement of its existing permanent footprint or change to its existing purpose (e.g. a vessel access facility must remain as a vessel access facility). The maintenance cannot be undertaken under the accepted development requirements, an approval is required as it is an accepted development requirements requirement that structures be lawful. If enlargement of the permanent footprint of the facility is required, the proposed works would be considered as new works.
- An unlawful structure erected after the date of first declaration of the FHA should be investigated by the Queensland Boating and Fisheries Patrol, in relation to unauthorised works within a declared FHA, and restoration under the provisions of the Fisheries Act should be considered. Note that maintenance of such a structure cannot be approved as there is no applicable prescribed development purpose. Where the structure complies with current declared FHA management requirements, approval of the structure (from the date of the decision, not the date of construction) may be considered. The granting of an approval (RAA) does not expunge the original unlawful action of placing a structure in a declared FHA without authorisation.

Maintenance activities

- Maintenance of a structure does not extend to associated **new works** that are required to maintain the purpose of that facility (e.g. maintenance of a jetty that extended into a previously undredged waterway would be limited to the jetty structure only; dredging of the waterway to provide all-tide access to the jetty would be considered as new works). The only exception to this requirement is an allowance for the trimming of marine plants immediately adjacent to the facility that are impinging on the safe use of that facility. This is likely to be catered for under most circumstances by the accepted development requirements. An approval would only be required if the proposed maintenance did not comply with the accepted development requirements.
- Maintenance of existing structures such as resurfacing, painting etc. does not require authorisation, if there is no disturbance to the fish habitats of the declared FHA as this is not considered to be works in the declared FHA.
- Maintenance may include the temporary disturbance of the declared FHA for access to maintain the structure (e.g. an access track), provided the disturbance is assessed as necessary, minimised and the disturbance area will be satisfactorily restored at the conclusion of maintenance works.
- Maintenance works are assessed to minimise all impacts on the declared FHA, including impacts on the community use of the area from a fisheries perspective, and:
    - on the natural condition of its fish habitats and natural processes in a management A area, or
    - on the current fish habitat values and functions in a management B area.
- ‘Maintenance’ in a declared FHA can include the relocation or exchange of the structure if it is determined there is a clear net benefit to the area (further details are provided under Additional considerations below).

6.9.3 Additional considerations

Maintenance works on existing structures within a declared FHA generally involve repair of the structure within its existing footprint to maintain its existing function and use. From a declared FHA management perspective, a broader view of the term ‘maintain’ may be applied under certain circumstances to include maintaining the

purpose of a structure through either relocation or exchange for another structure[22]. For relocation or exchange of an existing structure to be considered as maintenance, the activity must result in a clear net benefit to the declared FHA. A demonstrated benefit to the area is particularly important if the structure was present prior to declaration and it would not have been approved if FHA management had applied at the time.

In some instances it may be more appropriate that a proposal for relocation or exchange be instead considered as removal of the existing structure, restoration of the site and as an application to construct a new structure within the declared FHA. This will depend on the specific circumstances of the application.

Relocation

This section applies to moving an existing structure from one location within a declared FHA to an alternate location in the same FHA. An RAA issued for maintenance in this circumstance must identify the new location of the structure, and a new DA will be required.

Relocation of structures is often proposed when, from the proponent's perspective, the structure is inappropriately located or the waterway has changed making the structure unsuitable for its intended purpose.

A net benefit to the declared FHA could be achieved if:

- the site of the existing structure is appropriately restored. This may also include developing an appropriate monitoring program and commitment to undertake any required remedial actions considered necessary by DES
- the footprint of the structure at its relocation site is less than or equal to the existing footprint
- overall benefits to the declared FHA from relocating the structure are greater than the structure remaining in its current location.

Note that 'moving' includes removing the original structure and rebuilding it in another location, providing the above provisions are met and the structure serves the same purpose as the original. Proponents should be encouraged to incorporate new technologies and fish-friendly designs into relocated structures where possible to enhance benefits for the declared FHA.

Note that coastal processes in highly dynamic systems may change the capacity of tidal aquaculture operations to function effectively. It may be appropriate to allow for minor changes to the location of existing licensed aquaculture areas within declared FHAs to accommodate coastal processes, particularly where there is a net benefit to the fish habitats and natural processes in the area.

The provision for relocation is not intended to make the location of approvals within declared FHAs a tradable commodity.

Example of a situation where relocation of a structure confers a net benefit to the declared FHA:

- A pontoon was present within a waterway prior to declaration as a management A area. This once-deep channel had shallowed significantly from natural processes and became vegetated with dense seagrass. During spring tide events, the pontoon and attached vessel were contacting the bottom, damaging the vessel and impacting on the seagrass below.
- An alternate location exists on the property, adjacent to another deep channel. The channel is not vegetated with seagrass and there is a natural break in the adjacent fringing mangrove community through which the existing pontoon could be placed and anchored to the bank.

[22] Note that other approvals may be required for a relocated/exchanged structure (e.g. prescribed tidal works).

- If assessment of the application indicated that all other factors were equal, and the current site could be appropriately restored, then a net benefit to the declared FHA could be demonstrated from the relocation of this structure.

Exchange

This section applies to completely removing an existing structure and replacing it with another structure in the same location to meet the original purpose, requiring the same or a reduced footprint. A new DA will be required, in addition to an RAA issued for maintenance, which describes the replacement structure including its footprint.

Exchange of a structure is often proposed when new technology has led to the development of a different design that more efficiently or effectively achieves the same purpose as that of the original structure.

A net benefit to the declared FHA could be achieved if:

- the exchange structure requires the same, or a reduced, footprint as the existing structure (although the shape of the footprint may change)
- any area within the footprint of the existing structure that is not required for the exchange structure is appropriately restored
- assessment of the proposal determines that the overall benefits to the declared FHA from exchanging the structures are greater than if the structure remains unchanged
- the exchange structure is designed and constructed to meet only the original purpose of the existing structure. Examples of such 'similar purpose' structures include:
    - jetty, pontoon and boat ramp
    - mooring block and mooring pile
    - spilled rock revetment and a concrete block revetment.

Example of a situation where exchange of a structure confers a net benefit to the declared FHA:

- An existing approved private concrete boat ramp is present within a management A area. The owners of the property wish to remove the boat ramp and replace it with a pontoon, which has a smaller footprint than that of the boat ramp.
- If the boat ramp is completely removed and the substrate levels and tidal profiles are appropriately restored, a net benefit to the declared FHA could be demonstrated from the exchange of this structure. The benefit would include making the area that was previously under the boat ramp available as fish habitat.

6.10 Constructing a permanent structure on tidal land or within the area

6.10.1 Background

Section 60 of the Fisheries (General) Regulation specifies that this prescribed development purpose is only for management B areas. It applies to works for the construction of permanent structures, for either a public or private purpose, other than those that may be approved under another prescribed development purpose.

Proposals for the construction of permanent structures have historically generated the majority of applications for works within the declared FHA network. The legislative restriction on the construction of permanent structures within management A areas is the most significant difference between the two FHA management levels.

Management B areas are declared in locations where high fish habitat values and functions must be maintained, but where the community and government have agreed that there may be certain limited impact development activities. The impacts of permanent structures can be minimised through careful planning, including use of best practice design and construction techniques.

The legislative restriction on the construction of permanent structures (other than those that may be approved under the prescribed development purposes in section 60 of the Fisheries (General) Regulation) within a management A area is based on the following:

- A management A area is declared by government—following extensive community and stakeholder consultation—over core fish habitat conservation areas for the purpose of maintaining the natural condition of fish habitats and natural processes in the area. The construction of any permanent structure alters the natural condition of these fish habitats and natural processes, and would therefore be in conflict with the intent of the declaration. While the impact of an individual structure may be small and site specific, the cumulative effect of structures may substantially alter the natural condition of fish habitats and natural processes in the declared FHA.

The only exceptions to this restriction are structures that fit within the other prescribed development purposes and that are specifically assessed as compatible with declared FHA management:

- structures for restoring the fish habitat and natural processes in the declared FHA (supported because these are for the purpose of improving the fish habitats and natural processes)
- structures for managing the fisheries resources or fish habitat in the declared FHA (supported to maintain or improve the fish habitats and/or fisheries resources in the area)
- structures for researching, including monitoring, or educating (supported for the purpose of educating the community about the values of the declared FHA and for the purpose of learning more about the values and processes within the area)
- structures for ensuring public health or safety (supported because protection of public health and safety is a fundamental principle of Queensland legislation)
- public structures to facilitate fishing (supported specifically for the purpose of enabling the community to access the declared FHA for fishing—maintaining community use of the declared FHA is a primary objective of FHA declaration and management)
- subterranean public infrastructure with full restoration (supported because the fish habitat and natural processes in the declared FHA are fully restored after the temporary disturbance and the disturbance is to provide public benefit)
- temporary structures (supported because the disturbance of the declared FHA is temporary and the fish habitat and natural processes in the area are fully restored after the temporary disturbance).

6.10.2 Policy position

To be considered for approval under this purpose, the proposed permanent structure within a management B area must not adversely affect the maintenance of:

- the current fish habitat values and functions of the area
- the community use of the area; in particular, in relation to fishing activities.

For a structure to meet the above requirements, it must:

- have an overriding physical requirement to be within the declared FHA (e.g. a jetty or pontoon needs to be in water to serve its function, whereas a storage shed, car parking area, dwelling, etc. does not)

- be proposed in a part of the declared FHA that the proponent can demonstrate a level of 'rights' that is greater than those of another member of the community (see section 6)
- be limited in size. Public structures may be of a larger size than private structures given that declared FHAs are community property
- be located, designed, and constructed (using materials, construction methods and timing) to minimise all impacts on the declared FHA, including impacts on the community use of the area from a fisheries perspective, and on the current fish habitat values and functions in a management B area
- have a lower level of impact on the declared FHA than all other reasonable options. A lower level of impact is required for a private structure than for a public structure given that declared FHAs are community property.

See Appendix 1 for the specific policy interpretations on various structure types.

6.11 Depositing material for beach replenishment for the purpose of erosion control

6.11.1 Background

Section 60 of the Fisheries (General) Regulation specifies that this prescribed development purpose is only for management B areas and only for the purpose of erosion control.

The replenishment (nourishment) of beaches and foreshores in Queensland is generally proposed to meet the community's recreational and tourism objectives for sandy beaches and/or as an environmentally favourable 'soft' solution to protection from foreshore erosion. Beach replenishment areas are not considered to be 'structures'.

Open beaches, estuarine beaches and beaches fringing tidal waterways in Queensland are key components of natural dynamic coastal processes. Many of these areas have been the focus of beach replenishment works, with varying degrees of success. In particular, beach replenishment may disrupt existing coastal processes, and as such require regular maintenance to retain the desired sand volume and beach profile.

Any form of beach replenishment alters the target habitat. However, the degree of alteration and degree of direct or indirect impact to fish habitats are highly dependent on site-specific factors. A constructed sandy foreshore may provide valuable fish habitat (e.g. as a habitat for benthic animals like worms, bivalves, etc., which are an important food source for other fish). The value and fisheries function of such habitats depend upon factors such as profile, stability and sand particle size. Importantly, the fisheries values of the original habitat that is proposed for replacement may outweigh the potential fisheries values of the replenished, and possibly short-term, sandy beach.

Proponents of beach replenishment generally seek to source sand for the project from as close as possible to the replenishment site to minimise transport costs and avoid amenity issues (e.g. noise, truck movements). However, sourcing sand from within the declared FHA causes a double impact on the area, by altering the replenishment site and dredging of the donor site to source the replenishment material.

6.11.2 Policy position

Dredging or use of other techniques such as 'beach scraping/sand pushing' to obtain replenishment material within a declared FHA is not supported.

A beach replenishment proposal in a management B area must not:

- adversely affect the maintenance of the current fish habitat values and functions of the area
- adversely affect the maintenance of community use of the area, in particular, in relation to fishing activities

- require frequent maintenance (i.e. less than two-year maintenance intervals)
- be designed to create terrestrial land for the placement of structures (e.g. park infrastructure). Creation of terrestrial land for a sacrificial dune or beach may be supported only where this forms an integral part of erosion control design, and will minimise the frequency and impact of ongoing erosion control activities on the declared FHA. This option should only be supported if all other reasonable options would have greater impact on the declared FHA.

A beach replenishment proposal in a management B area must:

- be located in part of the declared FHA for which the proponent can demonstrate a level of 'rights'
- be for control of significant erosion[23]
- be located on a high-energy, sandy sediment shoreline with biological communities adapted to mobile sediments
- provide hydrodynamic modelling or advice from a coastal engineer indicating the likely movement of replenishment material
- source suitable replenishment material from outside a declared FHA (with a minimum buffer distance of 100 metres[24]) or from works within a declared FHA that have been authorised for another purpose
- identify a source of replenishment material for future maintenance
- minimise all impacts on the declared FHA and on the community use of the area through appropriate location, design, replenishment material and methods.

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[23] Refer to Appendix 3 Definitions for definition of 'significant erosion'
[24] Excluding where sediment is sourced from a marked navigation channel.

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8 Authorities

Fisheries Act 1994

Fisheries (General) Regulation 2019

***Human Rights Act 2019* compatibility**

The department is committed to respecting, protecting and promoting human rights. Under the *Human Rights Act 2019*, DES has an obligation to act and make decisions in a way that is compatible with human rights and, when making a decision, to give proper consideration to human rights. When acting or making a decision under this policy, officers must comply with that obligation (refer to Comply with Human Rights Act).

Disclaimer

While this document has been prepared with care, it contains general information and does not profess to offer legal, professional or commercial advice. The Queensland Government accepts no liability for any external decisions or actions taken on the basis of this document. Persons external to the Department of Environment and Science should satisfy themselves independently and by consulting their own professional advisors before embarking on any proposed course of action.

Approved By

Ben Klaassen	23 November 2021
Signature	Date

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Appendix 1 Specific policy interpretations for declared Fish Habitat Areas

The following specific policy interpretations (SPIs) provide a detailed policy position for various structure types and/or declared FHA management issues. SPIs may be updated from time to time, and the currency of these is indicated by the 'effective date' shown. Should an application or enquiry be received for a structure/issue that is not listed below, reference should be made to the discussion of each prescribed development purpose in the section 6. Further policy advice may be sought if required.

In developing policy positions for the prescribed development purposes below, particularly when determining appropriate disturbance footprints for access structures, consideration was given to the *Disability Services Act 2006* and relevant engineering standards. The Act, engineering standards and workplace health and safety requirements are also relevant considerations when assessing proposals for construction of and access to these structures.

SPI 1: Boardwalks

Objective

To provide SPI regarding the assessment of proposals for the construction of permanent boardwalks within declared FHAs.

Background

Boardwalks are pedestrian structures that take either of the following forms:

- plank and chain structures that follow the land profile in terrestrial or upper intertidal areas
- raised plank or decked structures within the intertidal zone.

Boardwalks are generally constructed on public land for an educational purpose and/or to protect sensitive habitats from pedestrian impacts. Boardwalks are a more environmentally sensitive option than footpaths, bitumen and gravel tracks which can affect the topography, hydrology and tidal flow over wetlands, and result in ponding, dieback or other impacts.

Boardwalks may shade fish habitats which reduces fish use of the area and prevents marine plant growth. Provision should be made for adequate light penetration where possible. Possible measures to maximise light penetration under boardwalks include:

- increasing the height of the structure above the substrate
- decreasing the width of the structure
- using a north-south (within 10°) orientation
- using pedestrian decking surfaces that maximise light penetration to the substrate.

Bird hides are often incorporated into a raised plank boardwalk and provide a place from where people can view wader birds as they feed in the intertidal habitats without interfering with their natural feeding behaviour.

Policy position

Boardwalks in both management A and management B areas located over fish habitats should have a design that maximises light penetration under the structure. Justification should be provided if this is not possible, or if shading is not a consideration.

Management A area

Within a management A area, the construction of a permanent boardwalk may only be considered for approval if the boardwalk is for:

- 'research, including monitoring, or educating' (see section 6). To be supported, the boardwalk must be:
  - publicly owned and for public benefit
  - justifiable on the basis of educational benefits that outweigh any impacts
  - strategically located to achieve a high level of community use/benefit
  - located, designed and erected such that it minimises all impacts on the declared FHA, the natural condition of its fish habitats and natural processes and on the community use of the area. This includes substrate surface restoration following construction.

A boardwalk for this purpose may incorporate a bird hide.

- ‘managing fisheries resources or fish habitat’. This could include a boardwalk to prevent access impacts to a fishing structure or area. To be supported, the boardwalk must comply with the policy provisions under the relevant part of section 6.

Other than for the above purposes, a permanent boardwalk structure is assessed to be a permanent structure on tidal land or within the area. Structures for this purpose are not supported by the Fisheries (General) Regulation within a management A area. Refer to section 6.10 for details on this issue.

Management B area

Public boardwalks for ‘education and research’ or for ‘managing fisheries resources or fish habitats in the area’ are subject to the same policy provisions as for management A areas above.

While private boardwalks may legislatively be considered for approval in a management B area (for ‘constructing a permanent structure on tidal land or within the area’), these are not supported as there is no overriding requirement for such structures to be located within (and impact upon) a declared FHA.

SPI 2: Bridges

Objective

To provide SPI regarding the assessment of proposals for permanent bridges within declared FHAs.

Background

In the context of this policy, a permanent bridge is defined to include bridges, culverts and causeways in a declared FHA.

Bridges are most commonly constructed for road, rail or pedestrian purposes, but in some locations bridges are constructed specifically to carry conveyors and pipelines.

Queensland's increasing population continues to demand additional transport corridors, or duplication of existing corridors, to service transport requirements. In coastal areas these new or duplicated transport corridors often require bridges to traverse waterways. Exclusion corridors are often included in declared FHAs to cater for these future bridge duplications or upgrades.

Unless a bridge can be built to span the entire waterway, which may be financially prohibitive, a bridge usually requires support structures within the waterway. These support structures and any associated embankments within the waterway or on adjacent tidal lands will have a direct physical impact on fish habitats. A bridge can also generate impacts that extend beyond its physical footprint, by shading fish habitats, changing water flow patterns, introducing polluted run-off from the bridge surface, impacting on vessel access to areas upstream of the bridge, etc. The level of impact from a bridge is dependent on a range of factors such as size, design, purpose and location.

A key element of good bridge design, from a fish habitat perspective, is to ensure that the structure has the minimum possible impact on waterway processes and fish movement. A bridge that spans the airspace of a declared FHA is within the area (see section 5.2) and requires authorisation. Activities to maintain an existing bridge (e.g. resurfacing, painting etc.), do not require authorisation, if there is no disturbance to the fish habitats of the declared FHA as this is not considered to be works in the declared FHA.

Policy position

Management A area

Within a management A area, the construction of permanent bridges cannot be approved.

A permanent bridge is assessed to be a permanent structure on tidal land or within the area. Structures for this purpose are not supported by the Fisheries (General) Regulation within a management A area. Refer to section 6.10 for details on this issue.

Management B area

Within a management B area, the construction of a permanent bridge may only be considered for approval under the prescribed development purpose 'constructing a permanent structure on tidal land or within the area' (see section 6.10). To be supported, the bridge must:

- be located in or between lands for which the proponent can demonstrate rights
- only have abutments that are outside the declared FHA and not over any tidal land
- be supported on piles only (i.e. culverts, pipes and causeways are not supported) within the declared FHA
- be designed to direct all water run-off from the surface of the bridge for treatment outside the declared FHA

- be located, designed and erected such that it minimises all impacts on the declared FHA, its current fish habitat values and functions, and on community use of the area, including:
  - the location and design of support piles and length of bridge spans must minimise construction and ongoing impacts to the declared FHA
  - the impacts to vessel access upstream of the bridge must be considered
  - the substrate surface is restored following construction.

SPI 3: Fishing platforms

Objective

To provide SPI regarding the assessment of proposals for the construction of permanent fishing platforms within declared FHAs.

Background

Public fishing platforms exist within many waterways around Queensland. They are generally erected by local governments as part of foreshore management projects to provide recreational anglers with a safe and comfortable location for fishing. Fishing platforms are popular fishing locations, particularly for inexperienced and family anglers and those without boats.

The proposed location of a public fishing platform will be influenced by a range of factors including: construction cost, level of habitat disturbance required, existing or projected need, availability of adjacent land for associated facilities, functionality and safety (including for navigation). An important aspect of the siting of a public fishing platform is that it should be in a location that is suitable for fishing (e.g. provides access to sufficiently deep water).

Fishing platforms may shade fish habitats which reduces fish use of the area and prevents marine plant growth. Provision should be made for adequate light penetration where possible. Possible measures to maximise light penetration under fishing platforms include:

- increasing the height of the structure above the substrate
- decreasing the width of the structure
- using a north-south (within 10°) orientation
- using pedestrian decking surfaces that maximise light penetration to the substrate.

For the purposes of this policy, private fishing platforms are considered to be private pontoons or jetties as they are for a similar purpose, and are a permanent structure in the declared FHA.

Policy position

Fishing platforms in both management A and management B areas located over fish habitats should have a design that maximises light penetration under the structure. Justification should be provided if this is not possible, or if shading is not a consideration.

Management A area

Public fishing platforms

Within a management A area, a permanent public fishing platform may be considered for approval under the prescribed development purpose ‘providing public infrastructure to facilitate fishing’. To be supported, the public fishing platform must comply with the policy provisions under section 6.6. In addition, views must be sought from the local branch, or state office, of Sunfish and any relevant commercial fishing representative bodies regarding the location of the proposed fishing platform.

Private fishing platforms

Within a management A area, a private fishing platform may not be approved.

A private fishing platform is assessed to be a permanent structure on tidal land or within the area. Structures for this purpose are not supported by the Fisheries (General) Regulation within a management A area. See section 6.10 for details on this issue.

Management B area

Public fishing platforms

Within a management B area, a permanent public fishing platform may be considered for approval under the prescribed development purpose 'providing public infrastructure to facilitate fishing', and must comply with that section of this policy to be supported. In addition, views must be sought from the local branch, or state office, of Sunfish and any relevant commercial fishing representative bodies regarding the location of the proposed fishing platform.

Private fishing platforms

Within a management B area, a private fishing platform may be considered for approval under the prescribed development purpose 'constructing a permanent structure on tidal land or within the area'. To be supported, the private fishing platform must:

- originate from an adjoining lot for which the proponent can demonstrate rights
- not require dredging
- have a total permanent footprint of less than 40 square metres
- not extend through a marine plant fringe of more than 15 metres in width (measured perpendicular to the shore). In this circumstance, the fishing platform access walkway must be less than two metres in width
- not extend from a lot that already has a jetty, pontoon or boat ramp (exchanging the structure could be considered)
- be located, designed and erected such that it minimises all impacts on the declared FHA, its current fish habitat values and functions and on community use of the area. This includes substrate surface restoration following construction.

SPI 4: Jetties, pontoons, floating walkways, boat ramps and mooring piles

Objective

To provide SPI regarding the assessment of proposals for the construction of jetties, pontoons, floating walkways, boat ramps and mooring piles within declared FHAs.

Background

Jetties, pontoons and boat ramps are common structures proposed within declared FHAs throughout the state, and may be either privately owned or public. Impacts of these structures include the direct removal and shading of fish habitats. While such structures may provide artificial fish habitats, these do not maintain the natural (management A area) or current (management B area) condition of fish habitats and natural processes in the area. Fish-friendly designs may be used to minimise impacts of jetties on fish habitats. Possible measures to maximise light penetration under jetties and pontoons include:

- increasing the height of the structure above the substrate
- decreasing the width of the structure
- using a north-south (within 10°) orientation
- using pedestrian decking surfaces that maximise light penetration to the substrate.

Floating walkways are commonly installed as part of a public boat ramp installation or upgrade to assist with vessel launching and safety. Where floating walkways are solely for the purposes of providing pedestrian access with no associated vessel use, they are considered to be a boardwalk (see SPI 1: Boardwalks).

Mooring piles are permanent, private structures used to store vessels in the water. They are often used in boat harbours and ports, but may also be installed for private residential use.

Slipways may also be considered in accordance with this SPI in line with the provisions for boat ramps.

Public

Public jetties, pontoons, floating walkways and boat ramps are often the major access points for the community to enter and use declared FHAs for fishing and other activities. They are usually constructed and operated by TMR or local government. In recent years, TMR has undertaken a strategic approach to planning for public boating infrastructure, including forecasting future demand.

Public boating structures are generally large and expensive to build and maintain, therefore applications for their construction are much less common than those for private vessel access facilities.

Public boating structures may include design elements such as batters, revetments and hardening that is required for the safe and effective functioning of the structure.

The proposed location of one of these public facilities will be influenced by a range of factors, including: construction and future maintenance costs, social impact, level of habitat disturbance required, existing or projected need, available adjacent land for associated facilities, functionality and safety.

The construction of some public boat ramps has caused ongoing environmental problems, particularly in relation to their effect on local coastal processes (e.g. causing erosion problems or interfering with longshore movement of sand). These historical problems illustrate the need for careful consideration of proposals for boat ramps in declared FHAs.

Mooring piles are generally not installed for a public purpose.

Private

Many waterfront property owners view the ownership of a jetty, pontoon or boat ramp as a primary reason for purchasing their property. The demand for these structures is a major management consideration in many Queensland waterways. Floating walkways are not usually installed for a private purpose.

When viewed in isolation, a small private jetty, pontoon or boat ramp may be considered to have limited direct environmental impact. However, due to the popularity of these structures, their cumulative and indirect impacts are an important declared FHA management consideration. As the number of these structures increases with population growth, the impacts on fisheries values and community use of a waterway can increase substantially.

These broader waterway impacts are important considerations in the management of these private structures. Broader impacts from jetties, boat ramps and pontoons include:

- removal of vegetation from the waterway bank for the abutment of the structure may increase the banks susceptibility to erosion at and adjacent to the site, and require bank stabilisation
- increased pressure for dredging to maintain vessel access to the structures (e.g. natural realignment of a channel through natural processes can cause jetties that previously had all-tide access to become inaccessible at low tide, which results in jetty owners requesting approval for dredging to maintain jetty function)
- increased pressure for dredging to construct, extend and maintain navigation channels to service increased numbers of vessels permanently moored on jetties and pontoons within the waterway
- reduced community access to and use of the waterway particularly for fishing (e.g. vessel access near waterway banks may be limited and pedestrian access along intertidal banks at low tide can be impeded by these structures)
- disturbance of local coastal processes (e.g. causing erosion problems or interfering with longshore movement of sand).

Mooring piles may be considered to have limited impact due to their small footprint; however their installation requires similar consideration to jetties and pontoons due to their permanent nature and their effect of occupying part of the waterway for private use.

Policy position

Jetties and pontoons in both management A and management B areas located over fish habitats should have a design that maximises light penetration under the structure[25]. Justification should be provided if this is not possible, or if shading is not a consideration.

Management A area

Public jetties, pontoons, floating walkways and boat ramps

Within a management A area, a public jetty, pontoon, floating walkway, or boat ramp may be considered for approval under the prescribed development purpose ‘providing public infrastructure to facilitate fishing’ and must comply with that section of the policy to be supported.

Private jetties, pontoons, boat ramps and mooring piles

Within a management A area, a private jetty, pontoon, boat ramp or mooring pile may not be approved.

[25] This does not apply to the floating part of a pontoon (as the floatation unit under the decking would usually prevent light penetration) or to parts of a jetty or pontoon used to store boats and support other large objects.

A private jetty, pontoon, boat ramp or mooring pile is assessed to be a permanent structure on tidal land or within the area. Structures for this purpose are not supported by the Fisheries (General) Regulation within a management A area. See section 6.10 for details on this issue.

Management B area

Public jetties, pontoons, floating walkways, boat ramps

Within a management B area, a public jetty, pontoon, floating walkway or boat ramp may be considered for approval under the prescribed development purpose 'providing public infrastructure to facilitate fishing' and must comply with that section of the policy to be supported.

Private jetties, pontoons, boat ramps and mooring piles

Within a management B area, a private jetty, pontoon, boat ramp, or mooring pile may be considered for approval under the prescribed development purpose 'constructing a permanent structure on tidal land or within the area' (see that section of this document).

To be supported, the proposed private jetty, pontoon or boat ramp must:

- originate from an adjoining lot for which the proponent can demonstrate rights
- not require dredging to use the structure[26]
- have a total permanent footprint of less than 40 square metres
- not extend from a lot that already has a jetty, pontoon, boat ramp or adjacent mooring (exchanging the structure could be considered)
- be located, designed and erected such that it minimises all impacts on the declared FHA, its current fish habitat values and functions and on community use of the area. This includes substrate surface restoration following construction.
- Additionally for jetties and pontoons:
  - not extend through a marine plant fringe more than 15 metres in width measured perpendicular to the shore. In this circumstance, the jetty/pontoon access walkway must be less than two metres in width
- Additionally for boat ramps:
  - not extend through a mangrove fringe more than three metres in width measured perpendicular to the shore and the total area of marine plant disturbance required for construction may not exceed 45 square metres

To be supported, the proposed private mooring pile must:

- be entirely within an extension of the side boundaries of the proponent's property and on the same side of the waterway as this property
- not require dredging to use the structure
- not require mangrove trimming or removal to use the structure
- not be adjacent to a lot that already has a jetty, pontoon, boat ramp or adjacent mooring (exchanging the structure could be considered)

[26] Minimal dredging/sediment extraction that is required for the construction of the structure may be allowed.

- be located, designed and erected such that it minimises all impacts on the declared FHA, its current fish habitat values and functions and on community use of the area.

Authorisation of existing jetties, pontoons, boat ramps and mooring piles

Where a jetty, pontoon or boat ramp has already been constructed —either before or after FHA declaration— it is possible to apply for a DA and RAA for that structure. The structure will be assessed on the same grounds as if it is unconstructed. If a structure cannot be approved, it must be removed and a restoration notice may apply. If the structure is approved, the approval is effective from the date of approval, not the date of construction.

SPI 5: Water impoundment structures

Objective

To provide SPI regarding the assessment of proposals for the construction of permanent[27] dams, weirs and other water impoundment structures within declared FHAs.

Background

Permanent dams, weirs and other water impoundment structures are specifically designed to impound water. Impoundments may significantly alter flow regimes and waterway processes, and may impact on fish migratory paths and the distribution of aquatic vegetation. These impacts can affect the waterway upstream and downstream of the structure.

The influence of water flow and freshwater input on the lifecycles of fisheries resources in estuarine and inshore marine habitats (e.g. prawns, fin fish and marine plants) and on maintaining a healthy and productive waterway is widely recognised. Permanent dams, weirs, bunds or causeway structures can have major physical, hydrological and ecological impacts on declared FHAs that are not compatible with FHA management objectives. Water management plans for impoundment structures should accommodate release of appropriate environmental flows to ensure sustainability of the declared FHA downstream.

Policy position

Management A area

Within a management A area, a permanent dam, weir, bund or other water impoundment structure cannot be approved. The impacts of such a structure are contrary to the intent of management A areas, which is focused on the maintenance of the natural condition of fish habitats and the natural processes in the area.

A dam, weir, bund or other water impoundment structure is assessed to be a permanent structure on tidal land or within the area. Structures for this purpose are not supported by the Fisheries (General) Regulation within a management A area. Refer to the section 6.10 for details on this issue.

Management B area

Within a management B area a permanent dam, weir, bund or other water impoundment structure may legislatively be considered for approval under the prescribed development purpose ‘constructing a permanent structure on tidal land or within the area’ (see that section of this document). However, due to the major impact that water impoundment structures have on the maintenance of the current fish habitat values and functions of the area, **these are not supported**.

[27] Note that temporary waterway barrier works may be supported in FHAs in certain circumstances (e.g. to maintain an existing structure or restore fish habitats or natural processes).

SPI 6: Dredging or extracting sediment

Objectives

To provide SPI regarding the assessment of proposals for dredging and extraction of sediment within declared FHAs.

Background

Dredging or extraction of sediment is undertaken within many Queensland coastal waterways for a range of purposes, including:

- navigation enhancement
- sand and gravel extractive industry
- to source sediment for beach replenishment
- to alter direction of water flows to reduce bank erosion
- habitat restoration.

With the exception of dredging for the purpose of restoring habitats (e.g. removing unauthorised fill), dredging or extraction of sediment are activities that affect the natural or existing fish habitats and waterway and coastal processes in a declared FHA. These activities result in direct impacts on the flora, fauna and habitats within the works area and can have substantial indirect impacts on broader waterway and coastal processes and habitats.

It is important to note that the impacts from dredging or extraction of sediment are not necessarily proportional to the size of the works area. Waterway and coastal processes are extremely complex and a small change in a key location can result in widespread impacts (e.g. a small amount of dredging near a waterway mouth may change the tidal range in the upper tidal reaches). It is difficult to predict with certainty the future behaviour of a waterway as it responds to complex natural forces applied by the tide, flood, littoral transport of sediment, etc., and to the impacts of engineering intervention, such as dredging. Impacts on fisheries resources may occur in the short or long term and eventually result in a loss to the community of a shared resource.

From a fish habitat perspective dredging or extraction of sediment can result in the following impacts:

- significant alteration or removal of the natural habitats and benthic faunal communities within and adjacent to the works area
- alteration of water flow, scour of adjacent habitats and disturbance to the patterns of sand deposition within other parts of the waterway
- mobilisation of sediment and smothering of adjacent habitats
- remobilisation of heavy metals and pesticides
- disruption to fish migration patterns
- increased turbidity.

Note that all channels marked by aids to navigation are excluded from declared FHAs and dredging within such channels is not works within a declared FHA (see SPI 11: Navigation aids and channels).

Policy position

Within management A or B areas, dredging and sediment extraction are generally not supported due to the impacts of these on the community use of the area from a fisheries perspective, and:

- on the natural condition of its fish habitats and natural processes in a management A area, or
- on the current fish habitat values and functions in a management B area.

Specifically, the following activities are not supported within declared FHAs:

- capital dredging for navigation purposes (including new dredging works to maintain vessel access to existing facilities)
- sand and gravel extractive industry
- sourcing sediment for beach replenishment or fill purposes
- disposal of dredge spoil, except where used for beach replenishment in a management B area (see section 6.11).

However, there may be limited circumstances where minimal dredging or sediment extraction may be permissible under particular prescribed development purposes. For example, removal of illegally dumped fill may be authorised under the prescribed development purpose 'restoring the fish habitat or natural processes' (see that section in this document), or minor sediment extraction works required for the installation of a structure. Assessment of proposals for these purposes should particularly consider that dredging and sediment extraction:

- cause direct and indirect impacts to the declared FHA
- affect the natural/current processes and functions of the waterway.

SPI 7A: Industrial water inlet and outlet structures

Objective

To provide SPI regarding the assessment of proposals for the construction of industrial water inlet and outlet structures within declared FHAs.

Background

Within this SPI, 'industrial water inlet and outlet structure' is used as a collective term to include: water inlet and outlet structures for agriculture, aquaculture and industry[28].

Industrial water inlet and outlet structures into coastal waterways are constructed to service a range of adjacent land use activities. Examples include water:

- inlets and outlets for cooling power stations
- inlets for flood water harvesting for agriculture
- inlets and outlets for prawn farms and other land based aquaculture enterprises.

The construction of an industrial water inlet or outlet structure has an obvious direct physical impact on fish habitats within or directly adjacent to its footprint. However, due to their purpose these structures can also generate impacts that extend well beyond the physical footprint. These broader impacts are dependent on factors such as the individual structure's size, design, purpose and location.

The intake of water can affect natural flow patterns within a waterway, potentially changing waterway structure, fish habitats (e.g. through erosion and movement of sand bars) and adult and larval fauna movement. The outlet of water can have similar impacts to those caused by water intake but often also results in the addition of nutrients, sediment, pollutants or water with different thermal characteristics. Appropriate buffers can be employed to ensure that any water entering a declared FHA from a structure located outside the boundary (via overland flow) is be of a suitable quality and does not cause scouring of the area.

Industrial water inlet and outlet structures may take the form of:

- a pipe (or pipes) that follows the natural substrate surface contour to the desired intake or discharge depth
- a pipe (or pipes) that is buried in the substrate and surfaces at the desired intake or discharge depth
- flexible 'elephant trunk' pipe systems
- an excavated intake or discharge channel within which pipes intake or discharge water.

Depending on the individual design, the discharge or inlet structure may incorporate pumps, scour protection and diffusers.

[28] Sewer and water treatment outlets are dealt with under SPI 8B; stormwater outlets are dealt with under SPI 9.

Policy position

Management A area

Within a management A area, the construction of permanent industrial water inlet and outlet structures cannot be approved.

An industrial water inlet or outlet structure is assessed to be a permanent structure on tidal land or within the area. Structures for this purpose are not supported by the Fisheries (General) Regulation within a management A area. See section 6.10 for details on this issue.

Management B area

Within a management B area, the construction of permanent industrial water inlet and outlet structures may only be considered for approval under the prescribed development purpose 'constructing a permanent structure on tidal land or within the area' (see that section of this document). To be supported, the proposed structure must:

- originate from an adjoining lot for which the proponent can demonstrate rights. This includes intake/discharge pipes and necessary associated pumps and transfer pipelines
- use only buried pipelines, surface laid pipeline systems or elephant trunk systems
- not require intake channels and/or dredging (excavation to install a buried pipeline may be supported)
- have an intake and/or outlet volume of water that is assessed to have minimal impact on natural hydrology within the declared FHA
- be located, designed and erected such that it minimises all impacts on the declared FHA, its current fish habitat values and functions, and on community use of the area. This includes substrate surface restoration outside the structure footprint following construction.

In addition, alternative water disposal (e.g. outlets outside of the declared FHA, where any flow into the area will not cause impacts such as scouring) and re-use options must be assessed as impractical.

SPI 7B: Public sewer and water treatment outlets

Objective

To provide SPI regarding the assessment of proposals for the construction of public sewer and water treatment outlet structures within declared FHAs.

Background

The construction of a public sewer or water treatment outlet structure has an obvious direct physical impact on fish habitats within or directly adjacent to its footprint. However, due to their purpose these structures can also generate impacts that extend well beyond the physical footprint. These broader impacts are dependent on factors such as the individual structure's size, design, purpose and location.

The outlet of water can result in the addition of nutrients, sediment, pollutants or water with different thermal characteristics. Appropriate buffers can be employed to ensure that any water entering a declared FHA from a structure located outside the boundary (via overland flow) is be of a suitable quality and does not cause scouring of the area.

Public sewer and water treatment outlet structures may take the form of:

- a pipe (or pipes) that follows the natural substrate surface contour to the desired discharge depth
- a pipe (or pipes) that is buried in the substrate and surfaces at the desired discharge depth
- flexible 'elephant trunk' pipe systems
- an excavated discharge channel within which pipes discharge water.

Depending on the individual design, the discharge structure may incorporate pumps, scour protection and diffusers.

Policy position

Management A area

Within a management A area, the construction of permanent public sewer and water treatment outlet structures cannot be approved.

A public sewer or water treatment outlet structure is assessed to be a permanent structure on tidal land or within the area. Structures for this purpose are not supported by the Fisheries (General) Regulation within a management A area. See section 6.10 for details on this issue.

If the upgrade of an existing structure in a declared FHA requires an increase in the size of the structure by no more than 20 square metres, and results in improved water quality or fish habitat in the declared FHA it may be considered under the prescribed development purpose 'managing fisheries resources or fish habitat'.

Management B area

Within a management B area, the construction of permanent public sewer and water treatment outlet structures may only be considered for approval under the prescribed development purpose 'constructing a permanent structure on tidal land or within the area' (see section 6.10). To be supported, the proposed structure must:

- originate from an adjoining or nearby lot for which the proponent can demonstrate rights. This includes discharge pipes and necessary associated pumps and transfer pipelines
- use only buried pipelines, surface laid pipeline systems or elephant trunk systems
- not require intake channels and/or dredging (excavation to install a buried pipeline may be supported)

- have an outlet volume of water that is assessed to have minimal impact on natural hydrology within the declared FHA
- be located, designed and erected such that it minimises all impacts on the declared FHA, its current fish habitat values and functions, and on community use of the area. This includes substrate surface restoration outside the structure footprint following construction.

In addition, alternative water disposal (e.g. outlets outside of the declared FHA, where any flow into the area will not cause impacts such as scouring) and reuse options must be assessed as impractical.

The upgrade of an existing structure in a declared FHA may be considered under the prescribed development purpose 'managing fisheries resources or fish habitat' if the upgrade requires an increase in the size of the structure by no more than 20 square metres and will result in improved water quality or fish habitat in the declared FHA.

SPI 8: Stormwater outlets

Objective

To provide SPI regarding the assessment of proposals for the construction of permanent stormwater outlets within declared FHAs.

Background

Estuarine and inshore marine waters are strongly influenced by freshwater input. As a result, the fish and fish habitats in these waters have evolved to cope with or depend on freshwater input and variable salinity. A number of studies have found a direct relationship between river outflow and the recruitment of a variety of commercially and recreationally important fisheries species.

Declared FHAs in Queensland have predominantly been declared over estuarine and inshore waterways. Maintenance of biological function and productivity of these areas relies on natural, high quality freshwater inflow.

Freshwater enters declared FHAs via downstream flow, overland flow from catchments, percolation through the soil, constructed stormwater drainage systems and direct input from rain. DES promotes retention of adequate buffers adjacent to declared FHAs and supports catchment management practices that provide appropriate water quality and quantity. However, constructed stormwater drainage outlets may require works within a declared FHA and are therefore subject to specific FHA management consideration.

Stormwater outlets have a direct physical impact on fish habitats within their footprint. However, these structures can also cause impacts beyond their physical footprint, depending on the individual structure's size, design and location. Stormwater discharge can affect natural flow patterns, potentially changing waterway structure and fish habitats (e.g. through erosion and movement of sand bars) and affecting adult and larval fish movement. In addition, stormwater can carry nutrients, sediment and pollutants.

From a fish habitat management perspective 'best practice' stormwater management is a key issue associated with all coastal and catchment development. Incorporation of adequate stormwater design features to reduce the impacts of stormwater discharge on declared FHAs may include:

- incorporating a buffer between the outlet and the declared FHA
- reduced velocities and discharge volumes to optimise water re-use
- improved water quality.

Policy position

Management A area

Within a management A area, construction of permanent stormwater outlet structures cannot be approved. Stormwater must be released outside the boundary of a management A area and may only enter the declared FHA via overland flow provided water flow will not scour the substrate in the area.

A stormwater outlet structure is assessed to be a permanent structure on tidal land or within the area. Structures for this purpose are not supported by the Fisheries (General) Regulation within a management A area. Refer to section 6.10 for details on this issue.

If the upgrade of an existing public structure in a declared FHA requires an increase in the size of the structure by no more than 20 square metres and results in improved water quality or fish habitat in the declared FHA it may be considered under the prescribed development purpose 'managing fisheries resources or fish habitats'.

Management B area

Within a management B area, a permanent stormwater outlet structure may only be considered for approval under the prescribed development purpose 'constructing a permanent structure on tidal land or within the area' (see section 6.10). To be supported, the stormwater outlet structure must meet the following criteria:

- stormwater storage, re-use and disposal on terrestrial land outside the declared FHA has been investigated and is considered impractical
- the structure originates from an adjoining or nearby lot for which the proponent can demonstrate rights
- the structure must incorporate current best practice water quality treatment techniques or apparatus
- the drainage system directly upstream of the structure and outside the declared FHA, incorporates adequate measures to reduce water velocities and discharge volumes (e.g. retention basins)
- the structure is located, designed and erected such that it minimises all impacts on the declared FHA, its current fish habitat values and functions, and the community use of the area This includes substrate surface restoration outside the structure footprint following construction.

The upgrade of an existing structure in a declared FHA may be considered under the prescribed development purpose 'managing fisheries resources or fish habitat' if the upgrade requires an increase in the size of the structure by no more than 20 square metres and will result in improved water quality or fish habitat in the declared FHA.

SPI 9: Marinas and port facilities

Objective

To provide SPI regarding the assessment of proposals for the construction of permanent marinas[29] and port facilities within declared FHAs.

Background

Marinas and ports are major infrastructure developments in Queensland waters. They generally require substantial capital dredging works, the construction of major facilities, wave protection structures, ongoing maintenance and significant alteration of the existing fisheries values of the area.

The development of a port is an infrastructure development of state significance. Given their very large development cost and the fact that Queensland has an existing network of ports distributed around its coastline, it is unlikely that the development of new ports within declared FHAs will be a regular management issue. If a new port was required, its extensive development planning and impact assessment studies would identify the locations of any declared FHAs and their constraints on development. A decision regarding the location of a new port would be made at the whole-of-government level with appropriate community consultation. If such a decision required port development within a declared FHA, formal amendment to the boundary of the declared FHA to exclude that area would be required.

Marinas generally require impacts of a lesser scale than those for a port development (i.e. channels are not as deep, facilities are of a smaller scale, etc.). However, marinas are more common within coastal waters and consequently are more likely to be proposed within or adjacent to a declared FHA.

The presence of a marina significantly alters natural or existing fish habitats and processes within the development area and severely limits the ability of the community to use that area for other than marina activities. These impacts are contrary to the intent and purpose of the declared FHA network.

Where an area has only small-scale individual vessel access facilities there is generally an acceptance by boat owners that their vessel must be appropriate for any natural navigational constraints of the area. Marina development may trigger increased pressure for alteration of natural areas for navigation purposes, which can have major effects on the fish habitats and natural processes of the area.

Policy position

Management A area

Within a management A area a marina or port cannot be approved. The impacts of such a structure are contrary to the intent of a management A area, which is focused on the maintenance of the natural condition of fish habitats and the natural processes in the area.

A marina or port is assessed to be a permanent structure on tidal land or within the area. Structures for this purpose are not supported by the Fisheries (General) Regulation within a management A area. See section 6.10 for details on this issue.

Management B area

Within a management B area a marina or port may be considered for approval under the prescribed development purpose ‘constructing a permanent structure on tidal land or within the area’ (see section 6.10). However, marinas and ports comprise a large collection of structures that have major and ongoing impacts on the maintenance of the current fish habitat values and functions and the community use of the area. Due to the

[29] Refer to the Appendix 3 Definitions for the definition of ‘marina’.

scale of these impacts the construction of marinas and ports **is not supported** within a management B area.

Buffers

A minimum buffer of 100 metres should be maintained between declared FHAs and development where possible[30] . Larger developments with larger impacts (e.g. ports with heavy industry or frequent vessel traffic) may require larger buffers if the specific site characteristics allow.

[30] See the DAF guideline FHG003 Fisheries guidelines for fish habitat buffer zones (Bavins et al. 2000).

SPI 10: Buoy moorings

Objective

To provide SPI regarding the assessment of proposals for the construction of permanent vessel buoy moorings within declared FHAs.

Background

Buoy moorings are widely distributed within Queensland's coastal waters[31]. These structures are located where suitable depth and protection from prevailing wind and wave action are available. These structures may be placed:

- adjacent to the owner's private property
- within recognised mooring areas
- scattered throughout an area as individual facilities.

Generally moorings are for the purpose of securely storing larger, non-trailerable vessels on an ongoing basis. However, moorings for other purposes do exist (e.g. cyclone moorings in North Queensland, or public moorings to avoid anchoring impacts on sensitive reef habitats). People who do not live directly adjacent to the waterway may also own moorings.

TMR holds the primary responsibility for the management of buoy moorings in Queensland. Approval of the location of a proposed buoy mooring is required from TMR prior to the placement of a mooring. In addition to the TMR approval, authorisation from other government agencies (e.g. DES, GBRMPA and DAF) may also be required for the placement of a buoy mooring, depending on the location.

Buoy moorings are often proposed within declared FHAs. A key issue in relation to the consideration of private moorings within declared FHAs is that mooring proponents often cannot demonstrate a level of rights to use the area that is greater than any other member of the community.

In some locations, including within declared FHAs, designated mooring areas (DMAs) have been established by TMR or other waterway managers. A DMA is a spatially defined area within a waterway to which moorings are confined and managed and is usually agreed between the various approval agencies. The DMA has specific limits on the number and type of moorings and vessels that can be accommodated. These limits may be set by TMR (or other waterway managers) based on the area of the DMA.

Placement of vessel moorings for emergency health and safety purposes is authorised under the accepted development requirements. This code also authorises placement of certain public and private moorings in a management B area.

Environmentally-friendly moorings

Mooring chains of 'traditional' block and tackle buoy moorings drag on the substrate around their moorings, resulting in significant scouring of sediments and disturbance to seagrass and other benthic marine plants. The amount of disturbance can be more than 0.1ha per vessel, in the shape of a halo (Batton & Derbyshire 2011). An environmentally-friendly mooring (EFM) is a buoy mooring that results in very little or no substrate disturbance by keeping the vessel and all mooring tackle off the substrate at all times.

[31] Mooring piles are dealt with under SPI 5.

Policy position

Management A area

Within a management A area, the placement/construction of a permanent buoy mooring may only be considered for approval if the mooring is:

- a designated cyclone mooring identified under a Port Cyclone Contingency Plan, in which case it could be considered for approval under the prescribed development purpose 'ensuring public health or safety' (see that section of this document). To be supported the cyclone mooring must be:
  - specifically identified under the Port Cyclone Contingency Plan by the controlling authority (e.g. a port authority)
  - located in accordance with a cyclone mooring plan (identifying current and future demand) by the controlling authority
  - only used during a cyclone event or other genuine emergency situation
  - available for use by other vessels authorised by the relevant regional Harbour Master in the event of a cyclone, if it is not required by its owner (the mooring may be private or publicly owned)
  - located, designed and erected such that it minimises all impacts on the declared FHA, its natural processes and on community use of the area.

or

- a component of a project for 'restoring the fish habitat or natural processes' aimed at restoring a particular habitat type within the declared FHA (most likely a coral habitat) that has been, or is likely to be, degraded through vessel anchor damage. To be supported, the mooring must:
  - be a public mooring or for use by protected area managers
  - be of an environmentally-friendly mooring design
  - comply with the criteria for the restoration of fish habitats or natural process detailed in that section of this document.

A mooring for a purpose other than those listed above is assessed to be a permanent structure on tidal land or within the area. Structures for this purpose are not supported by the Fisheries (General) Regulation within a management A area. See the section 6.10 for details on this issue.

Management B area

Within a management B area, the placement/construction of a permanent buoy mooring may only be considered for approval if the mooring is:

- a designated cyclone mooring identified under a Port Cyclone Contingency Plan, in which case it could be considered for approval under the prescribed development purpose 'ensuring public health or safety' (see section 6.5). To be supported, the cyclone mooring must be:
  - specifically identified under the Port Cyclone Contingency Plan by the controlling authority (e.g. a port authority)
  - located in accordance with a cyclone mooring plan (identifying current and future demand) by the controlling authority
  - only used during a cyclone event or other genuine emergency situation

– available for use by other vessels authorised by the relevant regional harbour master in the event of a cyclone, if it is not required by its owner (the mooring may be private or publicly owned)

– located, designed and erected such that it minimises all impacts on the declared FHA, its current fish habitat values and functions and on community use of the area.

or

- a component of a project for 'restoring the fish habitat or natural processes' aimed at restoring a particular habitat type within the declared FHA (most likely a coral habitat) that has been, or is likely to be, degraded through vessel anchor damage. To be supported the mooring must:

  – be a public mooring or for use by protected area managers

  – be of an environmentally-friendly mooring design

  – comply with the criteria for the restoration of fish habitats or natural process detailed in that section of this document.

or

- a public or private mooring (considered under the prescribed development purpose 'constructing a permanent structure on tidal land or within the area' [see section 6.10]) that:

  – will be located directly adjacent to a lot for which the proponent can demonstrate rights

  – will not be located adjacent to a lot that already has a jetty, pontoon, boat ramp or adjacent mooring (exchanging the structure could be considered)

  – has an environmentally-friendly mooring design

  – will be entirely within an extension of the side boundaries of the proponent's property and on the same side of the waterway as this property

  – does not require dredging to use the mooring

  – will be located, designed and erected such that it minimises all impacts on the declared FHA, its current fish habitat values and functions and on community use of the area.

or

- located and registered with TMR/GCWA within a DMA
- of an environmentally-friendly mooring design[32].

[32] The accepted development requirements specify the design requirements to allow the mooring to be installed without an approval. Note there are some circumstances where the use of environmentally-friendly mooring technology may not be feasible or available.

SPI 11: Navigation aids and channels

Objectives

To provide SPI regarding the assessment of proposals for the construction of navigation aids within declared FHAs, and for determining the extent of navigation channels excluded from declared FHAs.

Background

Navigation channels defined by aids to navigation are important for the safe movement of vessels in coastal and estuarine waters. Most navigation aids in Queensland waters are installed and maintained by TMR however in Gold Coast waterways the Gold Coast Waterways Authority (GCWA) undertakes this responsibility.

Provisions have long existed within fisheries legislation that exclude all navigation channels marked by aids to navigation from declared FHAs. Currently, this is specified in section 78 of the Fisheries (General) Regulation. This reflects the incompatibility of dredging activities with declared FHA management, and the precedence of transport legislation to ensure maritime safety. An aid to navigation is 'a device designed to be used for navigation or the guidance of mariners' and includes beacons, buoys, lights, lighthouses, marine marks, radio aids or signals [*Transport Operations (Marine Safety) Act 1994*].

The location of channels marked by aids to navigation is usually not identified on declared FHA plans. This is because it is accepted that natural deep water channels will move laterally over time. From a fish habitat management perspective, it is preferred that navigation markers are moved to identify the location of a natural deep water channel rather than maintaining the channel in a fixed location by dredging that is working against the natural hydrodynamic processes in the area. The placement/relocation of official lateral marks for a navigation channel does not constitute works within a declared FHA as the markers are part of the 'channel marked by aids to navigation'. Where channel markers are moved (or removed altogether), the previously marked area automatically becomes part of the declared FHA if it is within the outer boundary.

It is also possible that navigation aids may be placed to extend the marked length of a channel. This extended navigation channel area would automatically be excluded from a declared FHA. In practice, in some circumstances dredging may be required to extend the length of a navigation channel prior to installation of channel markers. Amendment to the declared FHA boundary to exclude the proposed dredged area would be required for such works to proceed.

Navigation channels often lead directly to public destinations (e.g. public boat ramps, anchorages and marinas) as the channel endpoint or as a key destination along the channel route. In this case the excluded area extends to that destination, even if the channel markers stop short of the destination. However, the destination is not considered part of the channel.

Navigation aids located outside the channel, other than port and starboard lateral marks, may be required within a declared FHA. These include isolated danger marks (used to indicate the location of rocks and reefs, etc.), special marks (used to indicate pipe outfalls, etc.), cardinal marks (which indicate safe water beyond the mark), channel leads and isolated danger marks. If such navigation aids are outside the marked navigation channel these are within the declared FHA and require authorisation for their placement and maintenance.

It is rare for a navigation channel to be comprehensively marked with navigation aids along its entire extent. In practice, this means that the location and extent of a navigation channel may be difficult to determine. For example, a channel may only be marked by port lateral marks with no starboard marks to show the width of the channel. In such cases, it may be necessary to seek advice from TMR/GCWA regarding the channel width in the particular location.

Policy position

Official navigation aids placed by TMR/GCWA that are within and mark the extent of a navigation channel (generally port and starboard lateral marks) are excluded from declared FHAs and as such do not require FHA authorisation. Despite this, new navigation channels are not supported, nor the placement of navigation aids to extend the length of a navigation channel upstream or downstream, in a declared FHA. Where extension of a navigation channel into a declared FHA is proposed DES will work with TMR/GCWA to ensure that all other reasonable options are considered.

Placement of navigation aids outside of navigation channels (e.g. channel leads) and within a declared FHA require authorisation, and may be considered for approval under the 'ensuring public health or safety' prescribed development purpose. To be supported the navigation aid must be designed and erected such that it minimises all impacts on the community use of the area from a fisheries perspective, and:

- on the natural condition of its fish habitats and natural processes in a management A area, or
- on the current fish habitat values and functions in a management B area.

Where the location and extent of a navigation channel is uncertain (e.g. no starboard lateral marks), staff should seek advice from TMR/GCWA regarding a designated channel width. If there is no designated channel width, the width of the channel is considered to be 25 metres from any lateral channel marks.

Where a channel marked by aids to navigation leads directly to a public maritime access facility (boat ramp, pontoon, jetty) or a marina, the area excluded from the declared FHA is considered to extend to the seaward end of the maritime access facility or marina entrance. The excluded area does not include the facility or marina itself.

SPI 12: Revetments, groynes and gabions

Objective

To provide SPI regarding the assessment of proposals for the construction of permanent revetments, groynes and gabions within declared FHAs.

Background

Erosion of waterway banks is caused by:

- natural coastal or riverine processes (influenced by tidal movement, wave attack, floods, ability of soils to be eroded, etc.)
- human activities that influence natural coastal or waterway processes (e.g. alteration of flows, vessel wash, clearing of riparian vegetation, dredging).

Natural erosion and accretion are vital processes that provide the dynamic structure that is the basis of diverse estuarine and riverine fish habitats (e.g. undercut banks, shallow flats, snags). Maintenance and enhancement of these natural processes helps to ensure a natural, diverse and productive waterway.

Good land use planning identifies the natural movement of waterways as an important development constraint and provides appropriate buffers to allow this movement to occur. Historically, in some coastal Queensland locations, such planning has not occurred and natural waterway movement is limited by significant adjacent development and infrastructure. This creates demand in these locations for erosion protection.

In addition, in some Queensland waterways natural erosion processes are significantly amplified as a result of human activities. These activities not only create additional pressure from adjacent landowners for erosion protection but can also significantly impact on fish habitat values. Erosion may cause significant concern to landowners adjacent to a waterway. To minimise the potential requirements for erosion management, declared FHA boundaries are located to exclude major erosion prone areas where possible.

Revetments, groynes and gabions are common methods of controlling bank erosion[33]. These may be constructed from a range of materials, including concrete, rock and filled geotextile fabric. Such structures may involve extraction of sediment and/or dredging as part of their construction; and their presence may affect coastal and waterways processes. Careful assessment is required to ensure that the erosion is mitigated rather than worsened or transferred further along the waterway bank.

Determining the cause of erosion is critical for its effective management. If erosion is caused by human activities, it is likely to be more effective to treat the cause rather than only using erosion control structures to manage the 'symptom'. Managing the cause of erosion is also likely to have greater benefits for fisheries resources. Erosion caused by natural processes may be best managed by allowing for these processes to continue (e.g. through use of buffers and retention of riparian vegetation).

Where erosion protection is unavoidable, determining the most appropriate type and design of the structure will be highly site specific. From a fish habitat perspective, erosion protection structures (e.g. gabions) that also serve to maintain or establish bank vegetation (e.g. mangroves) may have greater benefit than structures focused at only achieving erosion protection. In addition, filled geotextile fabric may have benefits over harder materials in some circumstances, including easier removal where required.

[33] Beach replenishment is also used for erosion control; refer to section 6.11 for more details on this activity.

Policy position

Management A area

A revetment, groyne or gabion is assessed to be a permanent structure on tidal land or within the area. Structures for this purpose are not supported by the Fisheries (General) Regulation within a management A area. See section 6.10 for details on this issue.

Significant erosion areas within a management A area that are a direct threat to non-relocatable dwellings and infrastructure, should be managed through early and timely construction of erosion protection outside the boundary of the declared FHA (e.g. within the boundary of the eroding property). Exclusion of the erosion area from a management A area by boundary amendment, or conversion to a management B area, may be appropriate to allow for erosion control works for clearly demonstrated public benefit, including safety (e.g. a house is at risk of collapse).

Management B area

Within a management B area, a revetment, groyne or gabion may only be considered for approval under the prescribed development purpose 'constructing a permanent structure on tidal land or within the area' (see section 6.10). To be supported, the revetment, groyne or gabion must meet the following criteria:

- The works location is in part of the declared FHA for which the proponent can demonstrate a level of 'rights' or interests.
- The proposed location of the structure shows evidence of significant erosion, or there is an immediate threat of significant erosion, which would result in the loss of one or more of the following:
  - the ability to use the land for its existing or approved purpose
  - buildings, structures or infrastructure that are not expendable or not able to be relocated
  - a significant cultural heritage site (e.g. shell middens).
- There is an inadequate erosion buffer zone and managed retreat is not possible.
- The proposal may include minimal regularisation of the shoreline where it is required to maintain a consistent alignment with adjacent properties and existing shoreline hardening structures, as part of an erosion control strategy for the location.
- The proposal is assessed as the best available erosion management solution from both the erosion management and fish habitat management perspectives, and is located, designed and erected so that it minimises all impacts on the declared FHA, its current fish habitat values and functions, and on community use of the area. This includes substrate surface restoration outside the structure footprint following construction.

SPI 13: Overhead electricity and communication cables

Objective

To provide SPI regarding the assessment of proposals for the construction of permanent overhead electricity and communication cables within declared FHAs.

Background

Section 79 of the Fisheries (General) Regulation excludes overhead electric lines and telecommunication cables from being within the declared FHA where these structures are not in contact with land, water or plants in the area. In other words, a cable occupying only airspace above the declared FHA is not in the area and does not require authorisation to interfere with the declared FHA. Any part of a cable or associated infrastructure that is in contact with land, water or plants within the boundary of a declared FHA is in the area and requires authorisation to interfere with the declared FHA.

This legislative provision recognises that the construction of new overhead electricity and communication lines generally results in limited impact on declared FHAs. Large towers allow electricity lines to span substantial distances and minimise interaction with declared FHAs. Other construction practices, such as underground directional drilling, cause less impact than installation of towers.

It is important to maintain required safety margins between vegetation and overhead cables. Vegetation type and expected maximum growing height will determine the required height of an overhead cable.

Maintenance of powerlines may be authorised under the accepted development requirements. Maintenance works in a declared FHA that does not comply with the accepted development requirements require approval under the prescribed development purposes for maintenance of existing structures (see section 6.9).

Policy position

Management A area

Permanent overhead electricity or communication cables and supporting infrastructure (e.g. poles and towers) that would be in contact with land, water or plants within a management A area cannot be approved.

Electricity or communication cables and supporting infrastructure that is in contact with the land, water or plants within a declared FHA is assessed to be a permanent structure on tidal land or within the area. Structures for this purpose are not supported by the Fisheries (General) Regulation within a management A area. See section 6.10 for details on this issue.

Management B area

Permanent overhead electricity or communication cables and supporting infrastructure (e.g. poles and towers) that would be in contact with land, water or plants within a management B area may be considered for approval under the prescribed development purpose ‘constructing a permanent structure on tidal land or within the area’ (see that section of this document). To be supported, the permanent overhead electricity or communication cables and their support infrastructure must meet the following criteria:

- Rights over the works area can be demonstrated (e.g. a power infrastructure easement).
- Spanning the declared FHA is not a practical option.
- The cable span length minimises construction and ongoing impacts to the declared FHA.
- Permanent filling (e.g. the construction of permanent raised pads for the support structures or access causeways) is not part of the proposal.

- Future maintenance of the cables and their support infrastructure has been considered and will not result in major impacts on the declared FHA.
- The impacts from placement of associated warning signs, if necessary, have been considered and are minimal.
- The structure is located, designed and erected such that it minimises all impacts on the declared FHA, its current fish habitat values and functions, and on community use of the area. This includes substrate surface restoration outside the structure footprint following construction.

SPI 14: Filling of lands

Objective

To provide SPI regarding the assessment of proposals for the filling of submerged or intertidal lands within declared FHAs.

Background

The placement of fill to raise the substratum level of submerged or intertidal land to create land that is above the level of highest astronomical tide (HAT) enables the filled area to be used as terrestrial land. This allows the land to accommodate structures that would otherwise be affected by tidal inundation. There are two significantly different forms of filling:

1. Reinstatement of terrestrial lands that have recently become tidal due to erosion (also known as reclamation). The period that such lands have been tidal is relatively short and re-conversion to terrestrial land constitutes a return to a recent, pre-existing state. Such filling is characteristically a management response for erosion control, and may have to be repeated due to ongoing erosion or catastrophic events. This form of filling is likely to be more justifiable from a fisheries perspective as the tidal lands have existed for a relatively short period. However, this form of filling is less relevant to declared FHAs, as the network contains little terrestrial land that has recently become tidal.
2. Conversion of tidal lands to terrestrial lands, where these have historically been tidal (i.e. these lands have endured as tidal through natural processes in the long-term). Such filling is characteristically associated with development of new facilities, or expansion of existing facilities (e.g. ports, marinas, carparks), and is likely to be a 'one-off' program (e.g. for capital works). Impacts of this form of filling on fish habitats and fisheries resources are likely to be greater due to the enduring nature of the existing tidal lands that will be lost.

Any filling of submerged or intertidal lands within a declared FHA results in total and permanent loss of the fish habitat values that were previously present. Filling also affects natural or existing coastal processes and therefore usually requires revetment to ensure the stability of the reclaimed area can be maintained. A filled area can also substantially alter water flow characteristics, which may damage upstream and downstream habitats. Conversion of tidal land to terrestrial land is particularly unacceptable within declared FHAs due to the permanent loss of lands that have been tidal in the long-term.

Policy position

Management A and B areas

Filling of submerged or intertidal lands is not supported in declared FHAs due to its impacts on the fish habitats and natural processes/current fish habitat values and functions of the area. Conversion of fish habitats to terrestrial land is contrary to the intent of FHA declaration.

An exception to the above may apply for beach replenishment in a management B area that results in creation of land that is within the active beach/nearshore system. This exception is only supported where all other reasonable options would have greater impact on the declared FHA and the created land is:

- not for the placement of structures or infrastructure
- a sacrificial dune or beach that is an integral part of erosion control design, and will minimise the frequency or impact of ongoing replenishment or other erosion control activities on the declared FHA.

SPI 15: Signs

Objective

To provide SPI regarding the assessment of proposals for the construction of permanent signs within declared FHAs.

Background

The declared FHA concept encourages community use and enjoyment of the area. It is therefore important for management of declared FHAs to allow for the placement of signage to warn people of danger and improve understanding of the management and values of the area.

Placement of a warning or information sign may have little impact on a declared FHA. However, some warning signs require illumination at night or must be visible for a significant distance around the area of danger. Unless carefully located, these signs can involve substantial ongoing impacts to a declared FHA through vegetation trimming for placement and maintenance.

Placement of new safety and warning signs with an overriding requirement to be placed within a declared FHA may be authorised under the accepted development requirements.

Note: Navigation aids are not considered to be signs and are discussed in SPI 11: Navigation aids and channels.

Policy position

Management A area

Within a management A area, the construction of a permanent sign[34] may only be considered for approval if the sign is for the purpose of:

- warning the public of a hazard or danger. A sign for this purpose would be considered for approval under the 'ensuring public health or safety' prescribed development purpose (see section 6.5). To be supported, the warning sign must be designed and erected to minimise all impacts on the declared FHA, its natural processes and on community use of the area. In particular, there should be no disturbance of marine plants unless this would compromise the purpose of the warning sign
- research or education. A sign for this purpose would be considered for approval under the 'researching, including monitoring, or educating' prescribed development purpose (see section 6.4). To be supported, the sign must have educational benefits that outweigh any impacts, and must be:
  - for public benefit
  - strategically located to achieve a high level of community use/benefit
  - located in an area that requires no disturbance of marine plants for sign placement or to enable sign visibility
  - located, designed and erected to minimise all impacts on the declared FHA, its natural processes and on community use of the area.

A sign for a purpose other than for the purposes above is assessed to be a permanent structure on tidal land or within the area. Structures for this purpose are not supported by the Fisheries (General) Regulation within a management A area. See section 6.10 for details on this issue.

[34] Public notification signs may be required in declared FHAs as a condition of a DES approval for works in a declared FHA.

Management B area

Within a management B area, the construction of a permanent sign may only be considered for approval:

- for the purpose of warning the public of a hazard or danger. A sign for this purpose would be considered for approval under the 'ensuring public health or safety' prescribed development purpose (see section 6.5). To be supported, the warning sign must be designed and erected to minimise all impacts on the declared FHA, its current fish habitat values and functions and on community use of the area. In particular, there should be no disturbance of marine plants unless this would compromise the purpose of the warning sign
- for the purpose of research or education. A sign for this purpose would be considered for approval under the 'researching, including monitoring, or educating' prescribed development purpose (see section 6.4). To be supported, the education sign must have educational benefits that outweigh any impacts and must be:
  - publicly owned and for public benefit
  - strategically located to achieve a high level of community use/benefit
  - located in an area that requires no disturbance of marine plants for the sign placement or to enable sign visibility
  - located, designed and erected such that it minimises all impacts on the declared FHA, current fish habitat values and functions and on community use of the area.

Within a management B area, a sign for purposes other than those listed above may legislatively be considered for approval under the prescribed development purpose 'constructing a permanent structure on tidal land or within the area' (see section 6.10). However, signs for other purposes (e.g. an advertising sign) do not have an overriding physical requirement to be within a declared FHA and are not supported.

SPI 16: Mosquito control

Objective

To provide SPI regarding the assessment of proposals for mosquito control within declared FHAs. **Background**

Coastal insect pest (mosquito and biting midge species) control programs have been undertaken in Queensland for many years. The majority of these control programs are conducted by local governments and focus on the control of mosquito species capable of transmitting arboviruses to humans and animals. Major arboviruses affecting residential communities in Queensland include Ross River virus, Japanese encephalitis and dengue virus.

The spread of arboviruses is acknowledged as a serious public health issue that requires cooperation across management agencies for effective control. Research has shown that mosquitoes are a significant virus vector, specifically those species that inhabit inter-tidal saltmarsh environments. 'Nuisance' insect pests, such as biting midges, are not arbovirus vectors.

Mosquito control programs have historically relied on the use of chemicals within known saltmarsh mosquito breeding areas (e.g. shallow ponds) to inhibit breeding success. Since the 1990s, chemical controls have been supplemented with habitat modification techniques (runnelling) designed to maintain drainage patterns but increase tidal flushing within these breeding areas. Runnelling results in improved flushing, which interrupts the mosquito breeding cycle, and introduces fish species that prey upon the mosquito larvae.

Policy position

An approval is not required for pest management using pesticides and/or biological control of mosquitoes undertaken in accordance with FHA CoP *The lawful use of physical, pesticide and biological controls in a declared Fish Habitat Area* (DES 2017).

Management A and B areas

Works for the control of 'nuisance' pest insect species (e.g. midges) is not supported within declared FHAs.

Within management A and B areas, chemical and habitat modification measures to control mosquitoes may be considered for approval under the 'ensuring public health or safety' prescribed development purpose (see section 6.5). To be supported the mosquito control techniques must comply with the following criteria:

- Any part of a declared FHA that is to be the subject of mosquito control must be identified for that purpose in a Mosquito Management Plan developed in accordance with the Mosquito Management Code of Practice for Queensland (LGAQ 2014).
- The chemical control of mosquitoes must be undertaken in accordance with the provisions of section 5.4 of the Mosquito Management Code of Practice for Queensland (LGAQ 2014), or later versions.
- Runnelling that complies with the policy guidelines defined in FHMOP003 Departmental procedures for permit applications assessment and approvals for insect pest control in coastal wetlands (White & Beumer 1996) is the only form of habitat modification for insect pest control that is supported within a declared FHA. The key design criteria for a runnel include:
    - increase tidal flushing
    - follow lines of natural water flow
    - be no deeper than 30 centimetres
    - have a 3:1 width:depth ratio
    - a spoon shape with gently sloping concave sides

– all mosquito control activities must be designed and undertaken such that they minimise all impacts on the community use of the area from a fisheries perspective, and:

– on the natural condition of its fish habitats and natural processes in a management A area, or

– on the current fish habitat values and functions in a management B area.

- Consideration should be given to management of acid sulfate soils (ASS) and appropriate disposal of ASS material.

SPI 17: Tidal aquaculture

Objective

To provide SPI regarding the management of tidal aquaculture within declared FHAs.

Background

Aquaculture on tidal lands in Queensland currently consists of the following activities:

- edible oyster culture—growing oysters on racks or on long lines in tidal waters
- pearl oyster culture—growing oysters on long lines in which pearl baskets are suspended in tidal waters
- cage culture—growing fish in sea cages
- sea ranching—extensive seeding of juvenile animals (e.g. scallops, bêche-de-mer) in tidal waters and subsequent harvest as per a commercial fishery

Edible and pearl oyster culture and cage culture involve the placement of artificial structures within the waterway to support or retain the aquaculture product. These structures can be large in scale and their presence restricts community access within the area. As with any structure within a waterway, the natural processes beneath and around these structures may be affected by their presence. Aside from the physical impact of the oyster furniture (racks and long lines), oyster culture is generally considered to have limited environmental impacts. Oysters obtain their nutrition by filtering nutrients present naturally in the water column without any requirement for supplementary feeding. As artificial feeding is not required, the impacts on water quality from oyster culture are relatively low.

Cage culture requires the addition of food to the caged fish and results in the production of substantial quantities of faecal material. While nutrient release (e.g. excess feed and other wastes) into surrounding waters can be reduced by appropriate cage design and management techniques, water quality impacts have historically been a major issue of concern with cage culture ventures in Australian waters.

Sea ranching relies on the natural environment to support and grow the seeded animals to a commercially viable size. Ranching does not usually require the construction of structures or supplementary feeding; however, seeding of an area with a large quantity of individuals from one species could potentially affect the local ecological balance. Sea ranching in Queensland waters is currently evolving and a precautionary approach to its possible impacts on declared FHAs is taken in this policy.

More recently, the cultivation of other species (e.g. seaweed) has been identified as an opportunity for existing aquaculture operations to diversify production.

Oyster culture in the Moreton Bay region

The oyster industry has a long history in Queensland, with the first licences issued in 1874. The industry reached peak production in the late 1800s and production levels have slowly declined since that time. When the declared FHA program commenced in 1969, there were significantly more licensed oyster areas than there are today, particularly within the Moreton Bay area.

Much of the Moreton Bay region continues to support potentially high-quality oyster growing areas, including within declared FHAs. The Oyster Industry Plan for Moreton Bay Marine Park (DAF 2015)[35] supports and promotes the development of the commercial oyster industry within Moreton Bay. It is appropriate that the provisions of this policy reflect those within the oyster industry plan. This is achieved under the Exemption heading of the policy position below.

[35] This plan was originally developed in 2008 and revised in 2015.

Policy position

Sea ranching

Sea ranching is not supported in declared FHAs due to possible, and largely unknown, impacts of the addition of large numbers of seeded animals on:

- the natural condition of fish habitats and natural processes (management A area), or
- the current fish habitat values and functions (management B area) in the area.

In addition, there may be issues of community access, including for fishing, to ranching areas.

Management A area

Within a management A area, the construction of oyster racks, oyster long lines, sea cages and other tidal aquaculture structures cannot be approved. An exception to this restriction exists in the Moreton Bay region and is discussed under the 'Exemption' heading below.

Oyster racks, oyster long lines, sea cages and tidal aquaculture structures are assessed to be permanent structures on tidal land or within the area. Structures for this purpose are not supported by the Fisheries (General) Regulation within a management A area. Refer to section 6.10 for details on this issue.

Management B area

Within a management B area, the construction of aquaculture oyster racks, oyster long lines, sea cages and other tidal aquaculture structures may be considered for approval under the prescribed development purpose 'constructing a permanent structure on tidal land or within the area' (see section 6.10). However, such aquaculture ventures require a substantial area of a declared FHA to be alienated from community use. The maintenance of the community use of a declared FHA is fundamental to its management. The loss of unrestricted community access to a significant area of a declared FHA for a private purpose such as a commercial aquaculture operation is not supported. A departure from this restriction exists in the Moreton Bay region and is discussed under the Exemption heading below.

Exemption

This policy exemption is intended to support the Oyster Industry Plan for Moreton Bay Marine Park, while ensuring that any impacts on the FHA network are minimised.

There is also a small number of existing tidal aquaculture operations located within declared FHAs outside of the Moreton Bay region. Policy advice should be sought regarding relocation of tidal aquaculture structures within declared FHAs outside of the Moreton Bay region (see also section 6.9).

The placing of structures within licensed oyster areas does not constitute works within a declared FHA, and does not require FHA approvals, if the structures:

- meet the provisions of the Oyster Industry Plan for Moreton Bay Marine Park
- do not constitute 'tidal works' as defined under the Coastal Act.

Within management A areas, this exemption will allow for aquaculture furniture that meets the specifications in the Oyster Industry Plan for Moreton Bay Marine Park. However, structures that require tidal works approval (e.g. pile moorings and fixed work platforms) must be considered as 'works' within a declared FHA. These works cannot be authorised within a management A area, as there is no relevant prescribed development purpose.

Within management B areas, this exemption will allow for all structures specified under the Oyster Industry Plan for Moreton Bay Marine Park, including those that require tidal works approval, as:

- Those structures that do not require tidal works approval are not considered as works within a declared FHA.
- Those structures that do require tidal works approval may be authorised under the prescribed development purpose 'constructing a permanent structure on tidal land or within the area'.

The following specific provisions apply to licensed oyster areas within declared FHAs in Moreton Bay:

- There will be no expansion from the existing[36] total area of licensed oyster areas within declared FHAs in the Moreton Bay region. This results in a maximum of 259.9 hectares of oyster areas within declared FHAs in the Moreton Bay region[37].
- The Oyster Industry Plan for Moreton Bay Marine Park identifies a number of oyster areas within the Moreton Island and Myora oyster growing areas that are not to be reallocated in the event they are surrendered, cancelled or not renewed. A voluntary option of relocating these oyster areas to an existing but unused oyster area is also available to the oyster grower. Those areas that are not to be reallocated will be relinquished and the sites rehabilitated.
- Apart from those areas not to be reallocated at Moreton Island/Myora, an approved oyster area that is surrendered, cancelled or not renewed may be reallocated in the same location.
- In some circumstances the oyster area may be reallocated in a different location within the declared FHA or within other declared FHAs in the Moreton Bay region if the oyster area is no longer suitable for oystering. The oyster area can be reallocated in a different location providing:
  - The reallocated licensed oyster area is no larger than the original area.
  - The original site will be rehabilitated.
  - The proposed site must not include areas of particular fish habitat value that would be adversely affected by the oyster culture operation (e.g. extensive seagrass, which could be impacted by trampling and shading from oyster furniture).
  - The proposed site must not include areas of particular significance for community use, including navigation areas and highly used recreational, commercial or traditional fishing areas (e.g. a highly used yabby bank).
  - There is no expansion from the existing total area of approved oyster areas within any individual FHA, with the exception of the Jumpinpin–Broadwater FHA, which has a limit of 25 hectares total area of approved oyster area, providing:
    - Any increase in the total area of licensed oyster areas within the Jumpinpin–Broadwater FHA can only occur if an equivalent area is not reallocated within declared FHAs in Moreton Bay.
    - Community access to the area, in particular for the recreational bream fishery, is not significantly affected.
- Any aquaculture approval cultivating other species (e.g. seaweed) must comply with the infrastructure requirements in the Oyster Industry Plan for Moreton Bay Marine Park.

[36] Total area that existed in 2008, when the Oyster Industry Plan was first developed

[37] This is a reduction compared to the number of oyster areas in FHAs in 1996 when there were 87 oyster areas covering 339.3 hectares.

SPI 18: Tenure

Objective

To provide SPI regarding applications for tenure in declared FHAs.

Background

All land in Australia that has been granted by the Crown is held by tenure rather than absolute ownership[38], as the Crown alone is the source of all tenure. Unallocated State land (USL) is the base 'tenure' over which other tenures are granted. Land may be allocated under the *Land Act 1994* under a range of tenures, including (but not limited to):

- road for public use
- permit to occupy (PTO)
- reserve for a community purpose
- term, perpetual or freeholding lease
- freehold.

Land may also be dedicated as a protected area under the *Nature Conservation Act 1992* or as a state forest or a timber reserve under the *Forestry Act 1959.*

Issue of a mining authority (permit, claim, licence or lease) under the *Mineral Resources Act 1989*, the *Petroleum Act 1923* or the *Petroleum and Gas (Production and Safety) Act 2004* does not change the tenure of the land.

Creation of tenure allows the tenant to control and occupy the land (e.g. local government control of a dedicated road).

In deciding the appropriate tenure over lands and/or waters, DoR evaluates the land to assess the most appropriate tenure and use for the land. The evaluation also takes account of state, regional and local planning strategies and policies and the objectives of the *Land Act 1994*.

All USL and national park land[39] within the outer boundary shown on an FHA plan is automatically included, unless specifically excluded (refer to section 5.2 for more details).

Following FHA declaration, it is possible that tenure within declared FHA boundaries may be changed, through:

- granting of tenure over lands (including structures on those lands) that were USL at the time of declaration
- conversion of lands to USL that were, at the time of declaration, under another form of tenure. Applications for the granting of tenure (other than national park land or environmental reserve) over USL are generally not supported within a declared FHA as this may infer a level of rights to the tenant that is not compatible with FHA management. For example, an application to change a portion of USL within a declared FHA to a form of tenure such as a term lease would not usually be supported.

It may be appropriate to support the granting of tenure where approval of a structure is supported by this policy and tenure is required for insurance purposes or to support a properly made application. For example, if an RAA

[38] Ownership is not 'absolute' as the state may withhold rights (e.g.to minerals) and the land is subject to legislative controls.
[39] Refer to the Appendix 3 Definitions for definition of 'national park land'

is approved for the construction of a jetty within a management B area declared FHA, there would be no objection to the granting of tenure over this structure should this be required for insurance and liability purposes.

In circumstances where tenure is required for a proposed structure, it is recommended that the RAA application be lodged prior to the tenure application.

Note that the granting of tenure over lands that are included in a declared FHA has no effect on the application of FHA management to those lands. That is, those lands remain within the area and subject to declared FHA management despite the subsequent change of tenure. Similarly, lands shown within the outer boundary of a declared FHA but are excluded remain so regardless of tenure changes. Any changes to the lands included in a declared FHA can only be made by amendment to the Fisheries (General) Regulation. Investigation of tenure history is usually required to determine if a particular tenure was granted over a parcel of land prior to FHA declaration.

Lands within or adjoining a declared FHA boundary that were not USL or national park at the time of declaration, and which are subsequently converted to either of these tenures, may be considered for inclusion within the area by amendment to the Fisheries (General) Regulation.

Note that under section 52 of the Fisheries Act, a resource allocation authority does not confer any right of ownership or tenure over the land, waters or resources on the holder.

Policy position

The granting of tenure (other than national park or environmental reserve) over fish habitats that are USL within a declared FHA is not supported, except if for:

- an approved structure or a structure that was in place prior to FHA declaration and tenure is required for insurance and liability purposes (no works other than for maintenance are required on the existing structure)
- a structure that has been issued an RAA for interference with a declared FHA.

Where the subject land is terrestrial and has no fish habitat value, the granting of tenure for a proposed development[40] that would normally be incompatible with declared FHA management (e.g. a public boat ramp car park) may be considered if:

- there is no reasonable alternative site for the proposed development outside the declared FHA
- the proposed development will not affect fish habitat values in the area
- appropriate buffers from fish habitats in the area will be implemented.

Lands within or adjoining a declared FHA boundary that are converted to USL or national park may be incorporated into the area by amendment to the Fisheries (General) Regulation if the land has fish habitats suitable for FHA declaration.

[40] The proposed development would have to fall within one of the prescribed development purposes specified in the Fisheries (General) Regulation.

SPI 19: Emergency works

Objective

To provide SPI regarding emergency works in declared FHAs.

Background

An emergency means an event or situation that involves an imminent and definite threat requiring immediate actions (whether before, during or after the event or situation), other than routine maintenance due to wear and tear[41]. The works may be reversible after the emergency period has passed.

Example: Storm events cause instability to infrastructure requiring immediate repair. Note that obvious, ongoing erosion should not be allowed to progress to a point where infrastructure is threatened. Emergency works typically include works to construct or repair/replace:

- revetments
- rockwalls
- bunds
- levees
- bridge footings/pylons
- bed level crossings
- causeways
- culverts etc.

Any of these works conducted in tidal areas would be considered to be 'tidal works'.

Events that occur as a result of lack of maintenance, or a failure to undertake appropriate remedial works for a structure that has previously been identified as having defects, are **not** considered to be emergencies.

> *Example: Infrastructure deteriorates to an unusable state due to lack of maintenance. Maintenance requirements that are not authorised by the accepted development requirements would require approval (RAA and DA).*

Emergency works in a declared FHA are dealt with under the Fisheries Act and the Planning Act. The emergency works provisions of the Fisheries Act prevail over those of the Planning Act to the extent of any inconsistency (Planning Act s166). Both Acts require that written notice of the works is provided 'as soon as reasonably practicable' after the works start.

Section 88B(3) of the Fisheries Act allows for emergency works to be carried out without the need for an RAA, while section 166 of the Planning Act provides an exemption from the need for a development permit for emergency works. The Fisheries Act states that the works must be required because of an emergency endangering:

- the life or health of a person, or
- the structural safety of a building.[42]

    (i) The Planning Act states that emergency works may also be necessary because an emergency endangers 'the operation or safety of infrastructure, other than a building' or for tidal works –

[41] Section 166 *Planning Act 2016*
[42] See Appendix 3 Definitions for definition of 'building'.

'the structural safety of a structure for which there is a development permit for operational works that is tidal works'. Section 166 (2) outlines the requirements a person must comply with when carrying out necessary operational work that is tidal works in an emergency, e.g. making a safety management plan and taking reasonable precautions and exercising proper diligence to ensure the works or related structure are in a safe condition.

In this instance, the Planning Act requires application for any development permit that would otherwise have been required (as soon as reasonably practicable after starting the activity). A copy of the safety management plan must be provided to the enforcement authority and written notice of the works must be provided to all of the enforcement authority, chief executive and assessment manager.

If the development application is refused, the emergency works must be removed as soon as practicable and premises restored to the condition they were in immediately before the activity was carried out.

Restoration works may be required to remove emergency works and associated materials, after the emergency has passed. These works are considered part of the emergency response and do not require FHA approvals.

Example: Minor oil spill in wetland requires emergency response to build temporary bund. Removal of the bund several months later requires removal of mangrove seedlings or other marine plants that have colonised the temporary bund.

Policy position

Emergency works are works (in either management A or management B areas) that are:

- urgent and immediate
- required to respond to an imminent and definite threat
- related to a public health and safety purpose or structural safety of a building.

Works undertaken that do not constitute emergency works, e.g. from a lack of adequate maintenance, may be investigated for possible breach of the Fisheries Act and/or Planning Act.

Emergency works that do not constitute tidal works

Neither a DA nor an RAA is required for emergency works in a declared FHA[43] if the works are not tidal works. Written notice is to be provided within five working days of emergency works commencing.

Any restoration works required to remove works and associated materials would be undertaken within six months of the onset of the emergency.

Emergency works that are tidal works

Written notice is to be provided within five working days of emergency (tidal) works commencing. A development application must be made for emergency works that have been carried out in a declared FHA where these are tidal works, as soon as reasonably practicable after starting the emergency work[44]. An RAA is not required.

[43] See Fisheries Act section 88B(3).
[44] See Planning Act section 166.

SPI 20: Protecting declared FHAs through complementary planning

Objective

To provide SPI on complementary planning considerations that will protect and maintain declared FHAs.

Background

Declared FHA management is based on the strategic protection of areas that have high fish habitat value, and placement of development away from these areas. FHAs have been declared in many locations along the Queensland coast, some in areas with a moderate amount of human use, others in more remote locations. The early declaration of FHAs provides a planning constraints layer to be used in future land use and development planning, and ensures that these areas are protected into the future.

Declared FHAs are a matter of state environmental significance (MSES) in the State Planning Policy (SPP) (DILGP 2017). Their management is captured in the state interest of biodiversity. This means that declared FHAs are becoming well integrated into planning processes.

In making or amending a planning scheme and designating land for community infrastructure, a planning scheme is to appropriately integrate the state interest by:

- identifying MSES
- locating development in areas that avoids significant adverse impacts on MSES
- facilitating the protection and enhancement of MSES
- maintaining or enhancing ecological connectivity.

The SPP also applies in the making or amending of a regional plan. If there is any inconsistency between the SPP and a local government planning scheme or regional plan, the SPP prevails. The State planning policy – state interest guideline: biodiversity (DILGP 2016) provides guidance on how to meet the SPP requirements for biodiversity.

Declared FHAs should be considered not only in local government planning schemes and regional plans but other planning documents such as master plans, natural area and conservation plans and land use studies, and planning for specific issues such as maritime infrastructure requirements and proposed material changes of use.

This SPI provides additional considerations to the SPP on how declared FHAs are to be protected and maintained through complementary planning.

Policy position

Declared FHAs may be protected through planning by meeting the following desired environmental outcomes:

- The landward boundary of declared FHAs is fringed by a strip of terrestrial public land, the width of which should be appropriate to the topography of the area. This provides a range of benefits to the FHA and its management, including:
  - facilitating public access to the declared FHA
  - physically separating and buffering the declared FHA from adjacent land uses
  - reducing 'right's[45] for private water access facilities to be constructed into the declared FHA and their associated impacts

[45] Refer to section 6.1.

  - providing an area for natural waterway erosion and accretion processes to occur, which supports ecological productivity and provides fish habitat diversity. This also has the benefit of allowing hydrodynamic processes to occur without impacting on significant infrastructure or requiring erosion protection works.
  - providing a corridor for fauna movement along the waterway
  - providing an area to accommodate sea level rise and associated ecological changes.
- Access nodes for the general public to use the declared FHA (e.g. public boat ramps, fishing platforms, beach access points) are strategically planned, and the planning processes should consider:
  - maximising the public benefit of the structure
  - minimising the impact to the declared FHA
  - availability of land for associated land based facilities (e.g. car parks and amenities blocks) outside the declared FHA.
- Water dependent development precincts (e.g. marinas, marine precincts) are strategically planned to be in locations that avoid declared FHAs, and the planning process should consider:
  - declared FHA management limitations on the approval of structures, dredging and spoil disposal
  - minimising potential impacts to the values of the FHA that can result from increased vessel traffic (e.g. erosion from boat wash)
  - minimising potential impacts to fishing in the declared FHA.
- Stormwater quality and any point source water discharges entering the declared FHA are managed to ensure that the water quality within the declared FHA is maintained or improved over time. Discharge conditions and water quality objectives for the area are to be complied with, and best management practices and new water quality improvement technologies are to be employed.
- Stormwater run-off volume and velocity entering the FHA is managed in a manner that minimises impacts to the habitats, fauna and vegetation within the declared FHA, and as far as practical, in a manner that maintains or restores the natural/current run-off regime of the catchment.
- Catchment planning and education initiatives embrace and incorporate declared FHAs to reinforce the connectivity between the catchment and declared FHAs.

Appendix 2 Relevant legislation and policy

Coastal Protection and Management Act 1995

Environmental Offsets Act 2014

Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth)

Environmental Protection Act 1994

Environmental Protection (Water) Policy 2009

Fisheries Act 1994

Fisheries (General) Regulation 2019

Great Barrier Reef Marine Park Act 1975 (Commonwealth)

Human Rights Act 2019

Land Act 1994

Marine Parks Act 2004

Mineral Resources Act 1989

Native Title Act 1993 (Commonwealth)

Native Title Act 1993 (Queensland)

Nature Conservation Act 1992

Planning Act 2016

Planning Regulation 2017

Significant Residual Impact Guidelines – Queensland Environmental Offsets Policy

State Development and Public Works Organisation Act 1971

State Planning Policy

Statutory Regional Plans

Survey and Mapping Infrastructure Act 2003

Transport Infrastructure Act 1994

Appendix 3 Definitions

"Act" refers to the *Fisheries Act 1994*.

"**acid sulfate soil (ASS)"** means soil or sediment containing highly acidic soil horizons or layers affected by the oxidation of iron sulfides (actual ASS) and/or soil or sediment containing iron sulfides or other sulfidic material that has not been exposed to air and oxidised (potential ASS). The term 'acid sulfate soil' generally includes both actual and potential ASS. Actual and potential ASSs are often found in the same soil profile, with actual ASS generally overlying potential ASS horizons.

"aquaculture" means the cultivation of live fisheries resources for sale other than in circumstances prescribed under a regulation.

"aquaculture furniture" means a cage, rack, tank, tray or anything else used, or capable of being used, in aquaculture or to assist in aquaculture.

"arboviruses" means viruses borne by arthropods.

"beach replenishment" means the placement of sand along a foreshore to supplement the existing quantity of sand. Also known as 'beach nourishment', 'beach restoration' or 'beach fill'.

"beach scraping" means the transfer of sand by pushing or scraping from the lower beach to the upper beach, usually by bulldozers or front-end loaders. Also known as 'sand pushing' or 'beach bulldozing'.

"benthic infaunal community" means the organisms living within the sediment.

"biodiversity" means the diversity of plant and animal life on earth at the genetic, species and ecosystem levels.

"bridge" means a structure across a waterway, including bridges, causeways and culverts, which affords passage.

"buffer" means a separation area designated to moderate adverse influences from development construction and operation activities on fish and fish habitats.

"building" means a fixed structure that is wholly or partly enclosed by walls and is roofed, and includes a floating building and any part of a building, as defined in the *Planning Act 2016*.

"bund" means an embankment, often constructed to form a barrier across a wetland area, or formed through the action of natural processes (e.g. a build-up of sand across a creek mouth).

"cadastral boundary" means a property boundary defined in the official Queensland Government register of lands (cadastre), which determines and defines land ownership and boundaries.

"**Chief executive**" means chief executive (or delegate) of DES.

"Coastal Act" means Queensland *Coastal Protection and Management Act 1995.*

"CoG" means the Coordinator-General.

"creel survey" means a technique for estimating fish catches by interviewing fishers and surveying their catch.
"DAF" means Queensland Department of Agriculture and Fisheries.

"declared Fish Habitat Area (FHA)" means an area declared under the *Fisheries Act 1994* to be a Fish Habitat Area.

"designated mooring area (DMA)" means an area designated for moorings under an agreement, plan or legislation, by DES, TMR and any other relevant agencies.

"**development approval (DA)"** means a development approval under the *Planning Act 2016*. A development approval may be in the form of a preliminary approval, a development permit or a combination of both.

"Digital Cadastral Data Base (DCDB)" means the spatial representation of the property boundaries in Queensland and their related property descriptions.

"DSDIP" means the (former) Queensland Department of State Development, Infrastructure and Planning.
"DES" means Queensland Department of Environment and Science.

"ecologically sustainable development (ESD)" means using, conserving and enhancing the community's fisheries resources and fish habitats so that:

- the ecological processes on which life depends are maintained
- the total quality of life, both now and in the future, can be improved.

The principles of ecologically sustainable development are:

- enhancing individual and community wellbeing through economic development that safeguards the wellbeing of future generations
- providing fairness within and between generations
- protecting biological diversity, ecological processes and life-support systems
- in making decisions, effectively integrating fairness and short and long-term economic, environmental and social considerations
- considering the global dimension of environmental impacts of actions and policies
- considering the need to maintain and enhance competition, in an environmentally sound way
- considering the need to develop a strong, growing and diversified economy that can enhance the capacity for environmental protection
- that decisions and actions should provide for broad community involvement on issues affecting them
- the precautionary principle.

"emergency" means an unforeseen occurrence or event that requires urgent and immediate works or related activity for public health and safety purposes.

"filling of lands" means conversion of tidal lands to terrestrial lands, where these have historically been tidal and reinstatement of terrestrial lands that have recently become tidal through erosion ('reclamation'). See SPI 14: Filling of lands.

"fish" includes, but is not limited to, fin fish, crustaceans, molluscs, echinoderms, sponges and worms, whether living or dead.

"fish habitat" includes land, waters and plants associated with the life cycle of fish, and includes land and waters not presently occupied by fisheries resources.

"Fisheries Act" means the Queensland *Fisheries Act 1994.*

"fisheries productivity" means the biomass of fish produced in a given area over a given time.

"Fisheries (General) Regulation" means the Queensland Fisheries (General) Regulation 2019.

"fisheries resources" includes fish and marine plants.

"footprint" includes the area a structure occupies.

"GCWA" means the Gold Coast Waterways Authority.

"highest astronomical tide (HAT)" means the highest level of the tides that can be predicted to occur under average meteorological conditions and under any combination of astronomical conditions.

"intertidal" means the area of land between the extent of the highest and lowest astronomical tides.
"land" includes foreshores and tidal and non-tidal land.

"lawful structure" means an existing structure constructed in compliance with all the requirements under any Act relevant to a structure of that type at the time of construction.

"maintain" means to keep a structure in due condition, operation or force; keep unimpaired; keep its function. Can include relocation or exchange of a structure to maintain its function where there is net benefit to the declared FHA. Does not include dredging to maintain access or increasing the size (footprint) of a structure.

"management A area" means an area within a declared FHA identified by the words 'management A' on the FHA plan mentioned in schedule 3 of the Fisheries (General) Regulation for the declared FHA.

"management B area" means an area within a declared FHA identified by the words 'management B' on the FHA plan mentioned in schedule 3 of the Fisheries (General) Regulation for the declared FHA.

"marina" means an area of tidal water primarily used for storage of multiple vessels secured to fixed or floating platforms that can be used to access the vessels. The marina may also include uses such as slipways, boat ramps, and fuel wharves.

"marine plant" means a plant (a 'tidal plant') that usually grows on, or adjacent to, tidal land, whether it is living or dead, standing or fallen; the material of a tidal plant, or other plant material on tidal land; and a plant, or material of a plant, prescribed under a regulation or management plan to be a marine plant. 'Marine plant' does not include a declared plant under the *Rural Lands Protection Act 1985*.

"MSES" means a matter of state environmental significance in relation to the State Planning Policy.

"midden" means a mound or deposit consisting of shells of edible molluscs and other refuse, marking the site of prehistoric human habitation.

"national park land" means land that is dedicated under the *Nature Conservation Act 1992* as any type of national park, a conservation park, or a resources reserve, as defined in the Fisheries (General) Regulation 2019.

"DES" means the Queensland Department of Environment and Science.

"DoR" means Queensland Department of Resources.

"offsets (environmental)" means positive measures taken to counterbalance negative environmental impacts that cannot otherwise be avoided or minimised. An offset may be located within or outside the geographic site of the development and should be legally secured. Previously referred to as 'mitigation measures'.

"Planning Act" means *Planning Act 2016*

"Planning Regulation" means Planning Regulation 2017.

"pontoon" means as defined in the *Coastal Protection and Management Regulation 2003,* pontoon refers to a structure consisting of the following components:

- a flotation unit
- an access walkway for the flotation unit
- a system for mooring the floatation unit and access walkway

- an abutment.

"precautionary principle" means the principle that, if there is a threat of serious or irreversible environmental damage, lack of scientific certainty should not be used as a reason to postpone measures to prevent environment degradation, or possible environmental degradation, because of the threat.

"private" means owned by an individual, group, company, etc. for a private residential or commercial use.

"PTO" means permit to occupy.

"**public safety (works for)"** works to ensure the public is safe (i.e. free from injury or danger).

"public" means for a use relating to the provision of services or infrastructure for the public by government, Natural Resource Management groups, and energy and water suppliers.

"public use" means available for free use by any member of the public, without prior permission.

"reclamation" means reinstatement of terrestrial lands that have recently become tidal through erosion. See SPI 14: Filling of lands.

"regularisation" means the process of making a shoreline more consistent in alignment.

"resource allocation authority (RAA)" is an authority to interfere with a declared fish habitat area for a prescribed declared fish habitat area development. It is issued under part 5, division 3, subdivision 2A of the *Fisheries Act 1994*.

"restoration" involves actions to return a site to an agreed pre-existing condition (implies a final objective to return all aspects of the previous system) or actions to build resilience of fish habitats, fisheries productivity and natural ecological processes.

"rights" is discussed in section 6.

"runnelling" means construction of shallow, spoon-shaped channels that increase the connectivity of isolated mosquito breeding pools to tidal waters, resulting in more frequent flushing.

"SARA" means the State Referral and Assessment Agency.

"SDAP" means State Development Assessment Provisions, a statutory instrument under the *Planning Act 2016* that contains the matters the chief executive may have regard to when assessing a development application.

"significant erosion" means erosion that has resulted in, or if left uncontrolled would result in, the loss of one or both of the following in the short term: the ability to exercise the existing as-of-right or approved use of the property; and/or buildings, structures or infrastructure that are not expendable or that cannot to be relocated.

"SPI" means specific policy interpretation.

"SPP" means **"**State Planning Policy".

"Planning **Act"** means *Planning Act 2016.*

"structure" means something built or constructed (e.g. a building, bridge, dam or drain). A structure includes excavated, dredged or filled areas ('constructed' areas), which should have defined dimensions, but does **not** include a beach replenishment area.

"substrate" means the surface on which an organism lives, including the sea bed or bed of a water body.
"subterranean" means below the surface of the earth or underground.

"tidal land" includes reefs, shoals and other land permanently or periodically submerged by waters subject to tidal influence.

“tidal works” means as defined in the Coastal Act.

“**TMR”** means the Queensland Department of Transport and Main Roads.

“unlawfully” means without authority under the Fisheries Act, or other legal authority, justification or excuse under an Act.

“USL” means unallocated state land.

“vector” means carrier of disease or infection from one organism to another.

“vessel staging area” means the area beside a boat ramp where a vessel is temporarily held while removing the vessel from the water.

“waterway” includes a river, creek, stream, watercourse or inlet of the sea.

“waterway barrier works” means a dam, weir or other barrier across a waterway.

“wetland” means an area of permanent or periodic/intermittent inundation, whether natural or artificial, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six metres. Examples include billabongs, marshes, swamps, lakes, mud flats, mangrove forests and shallow seagrass beds.