Assessing Development on Tidal Land and in Coastal Waterways

Fisheries Queensland
Impact and Assessment Management Unit

Queensland Government

Acknowledgement of
First Nations peoples

I would like to respectfully acknowledge the Traditional Owners and Custodians of the land on which we meet today, and I pay my respects to their Elders past, present and emerging.

I extend that respect to all Aboriginal and Torres Strait Islander peoples here today.

Fisheries matters and development

Development on our coastal foreshores and in our waterways can have an adverse impact on marine plants and fish passage. These things are protected :

- under the *Fisheries Act 1994*, and
- as matters of state environmental significance under the *Environmental Offset Act 2014*

Where works require or result in impacts to fisheries matters it is 'development' and is administered under the *Planning Act 2016*.

Development Assessment - Context

- Development triggers
- Definitions
- Policy
- Factsheets
- Accepted Development
- State Development Assessment Provisions -State Codes 11, 12, 17 and 18
  - Purpose Statements
  - Performance Outcomes
- Prescribed Development Purposes
- Guidelines

Development Triggers

- Removal, destruction or damage of marine plants
- Constructing or raising waterway barrier works in fish habitats
- Development in a declared fish habitat area

Removal , destruction or damage of Marine Plants

Longfin eel

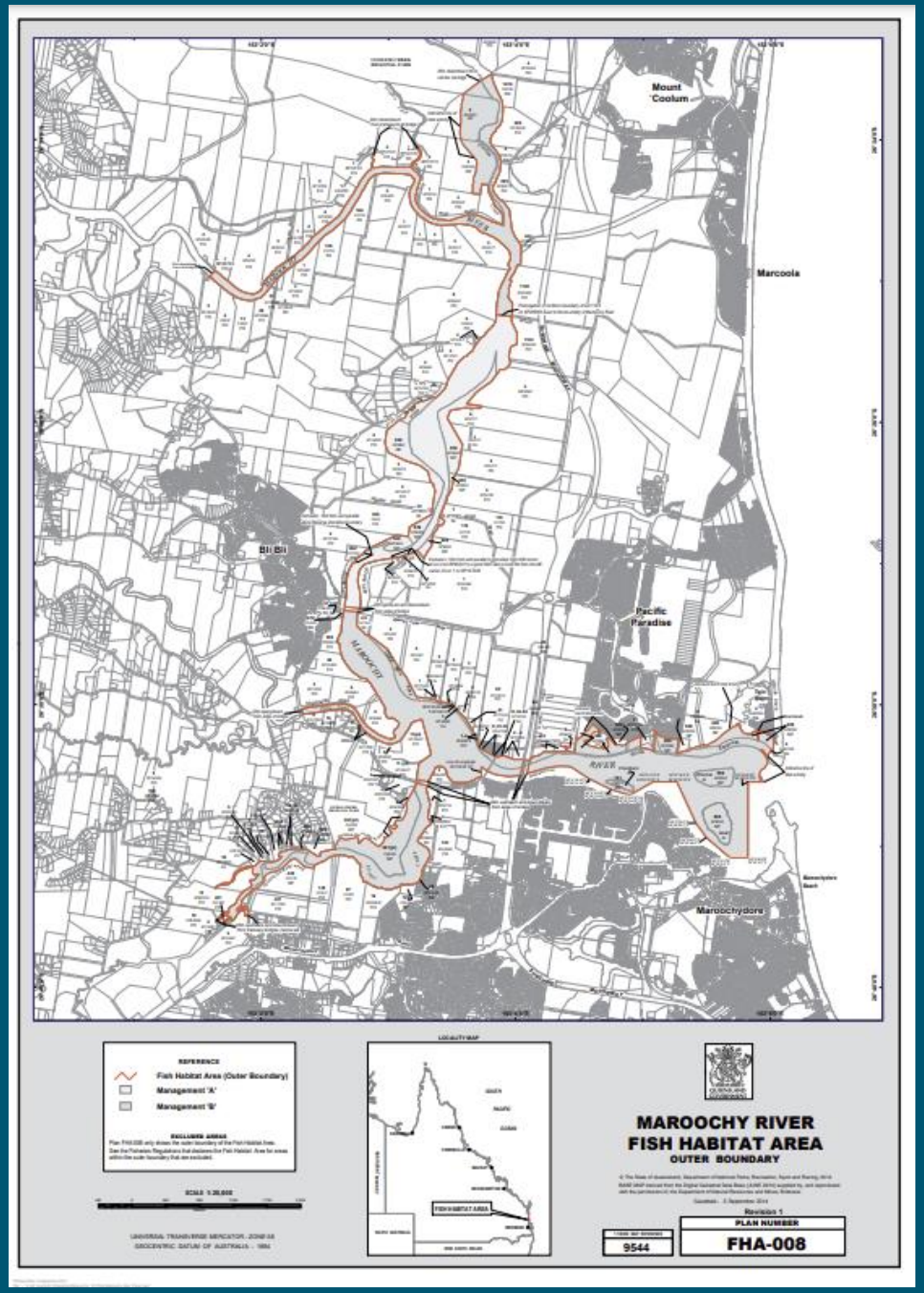
Sea mullet

Tarpon

Mangrove goby

Constructing or raising waterway barrier works in fish habitats

Development in a declared fish habitat area



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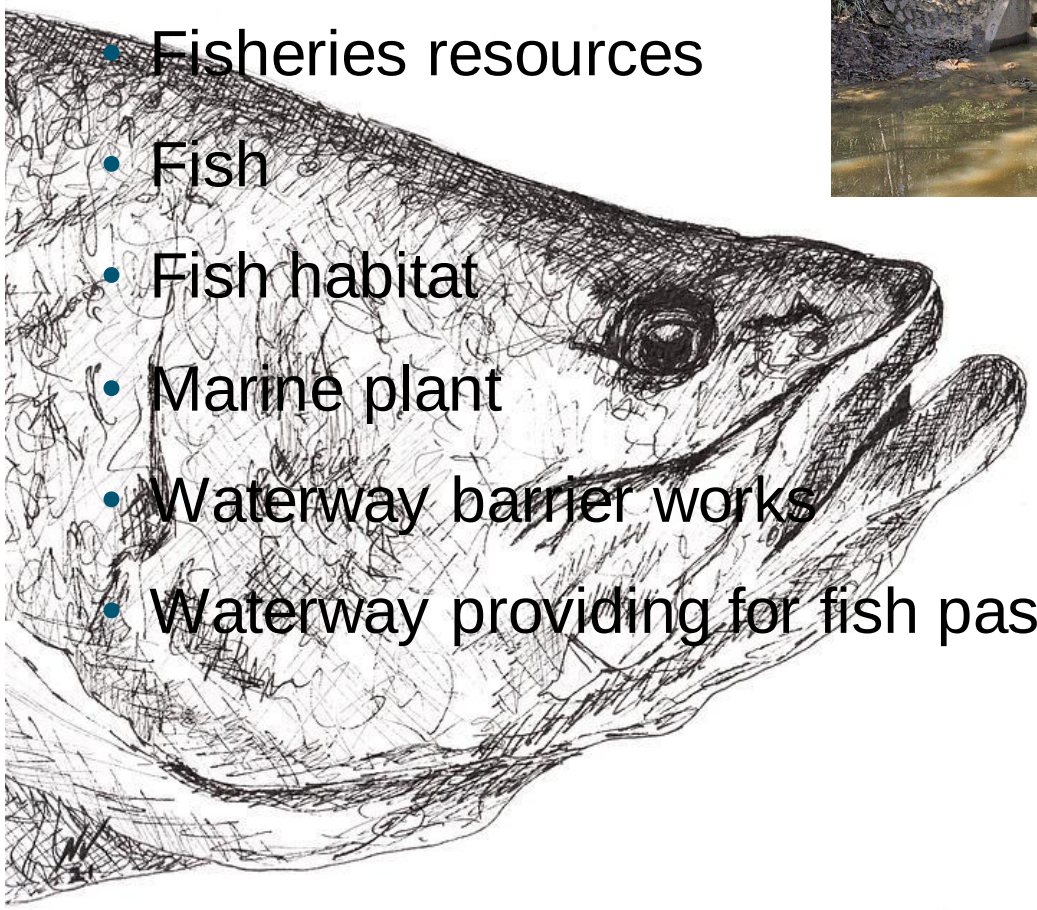
Legislated Definitions

- Fisheries resources
- Fish
- Fish habitat
- Marine plant
- Waterway barrier works
- Waterway providing for fish passage



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Policy – e.g. erosion control works

- Sustain fisheries productivity and conservation fisheries resources and tidal fish habitats
- Ensure that erosion control structures avoid, minimise and mitigate impacts on tidal fish habitats
- Plan for the long term and climate change
- Promote:
  - erosion control structures that restore, or minimise impacts on, fisheries resources and tidal fish habitats
  - Research into erosion control methods that deliver healthy fish habitats

Fact sheets and Accepted Development Requirements

- Fact Sheets – '*What is not a waterway barrier work'* and '*What is a waterway barrier work':*
  - List work types which may or may not constitute development.

- Accepted development Requirements (ADR)
  - Are a self-assessable code which allow some common public and private development types to occur without a development approval.
  - The works must comply with all relevant standards and requirements of the ADR.

Assessable Development

- State development Codes:
  - State code 11: Removal, destruction or damage of marine plants
  - State code 12: Development in a declared fish habitat area
  - State code 18: Constructing or raising waterway barrier works in fish habitats
- Compliance with these codes is based on the capacity of a development to meet:
  - Performance outcomes, and
  - Purpose Statements

Purpose Statements

Maintain the health and productivity of fisheries resources and fish habitat

Maintain the extent, distribution, diversity and condition of marine plant communities and protect the ecological functions to which they contribute

Maintain fish movement and connectivity throughout waterways and within and between fish habitat

Avoid, minimise, mitigate impacts to matters of state environmental significance such that there is an acceptable significant residual impact.

Three Important Precepts

1. Aspects of development are only permitted on tidal land [or waterways] where there is a functional requirement, and the development cannot be feasibly located elsewhere. Ancillary elements (such as rest rooms and offices) are to be located outside of tidal land [or waterways].

2. Removal, destruction or damage to marine plants as a result of erosion control structures or beach replenishment only occurs where there is an immediate and significant threat of erosion to:
    1. the use of the land for its existing or approved purpose;
    2. infrastructure, structures or buildings are not expendable or not able to be relocated

3. Avoid habitat substitution

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Erosion Control Works

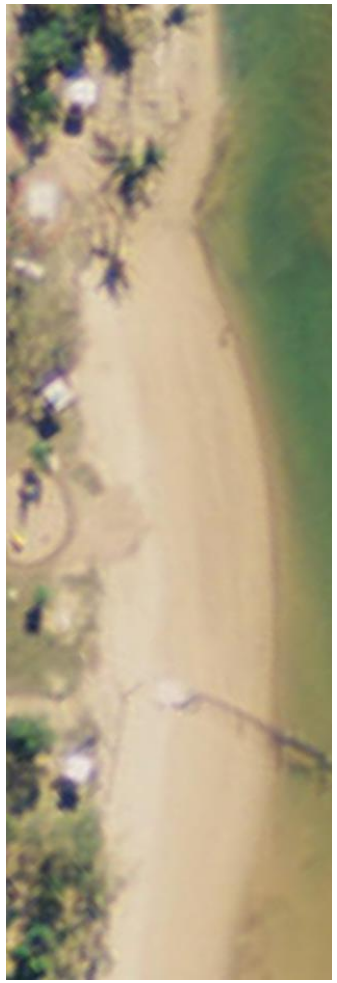
The trubble with rock revetement and seawalls

Hardening of the bank or foreshore has historically been the go-to solution for erosion control.

But these structures:

- Permanently remove fish habitat from productivity
- Substitute one habitat for another
- Do not encourage the recovery of marine plant or riparian habitat
- Redirect erosive energy
- Modify inundation patterns and the processes of erosion and accretion, and
- Often result in further works and additional impacts to fish habitat.

The assessment response has been to encourage applicants to consider 'softer' more natural (nature-based) options where possible.



The ‘softer option’ option

- Landscaping – e.g. terrestrial and tidal profiles,
- Use of natural materials e.g. timber piles, coir mat and logs, rock fillets,
- Utilise natural processes – e.g. sediment traps, natural recruitment,
- Temporary structures
- Reinstatement of endemic fish habitat

Justify with evidence

- The works have a functional requirement to be located on tidal land or a waterway
- There is an mmediate and significant threat of erosion
- The works avoid, minimise and mitigate ongoing and future impacts to tidal fish habitats
- Result in a net benefit to fisheries productivity
- Are part of a larger strategy or social and environmental commitment.

Avoid

- Is the erosion natural – is doing nothing an option
- Can the cause be identified and addressed
- Is retreat possible
- Can infrastructure be relocated
- Can the erosion control structure(s) be designed or located to avoid:
  - marine plants or waterway barrier works, and
  - the modification of natural processes
- Show that the works are timed to avoid impacts

Minimise

- Demonstrate with evidence
  - All fisheries resources on and adjacent to site have been identified
  - Works the least impact viable option
  - Works are the minimum size and scale required to achieve project objectives
  - Areas of permanent or temporary impacts
  - Fish will not be harmed or trapped.
  - Restricted use of herbicides
  - Restore areas of temporary impacts

Mitigate

- Demonstrate with evidence the works resolve erosion issues and will help:
  - Restore natural processes – inundation patterns, erosion and accretion
  - Reinstate
    - locally representative fish habitat
    - Riparian buffers
    - Natural substrates, profiles and waterway features
- Manage impacts now and into the future






Trialling something new

Call it what it is - Erosion control works

Provide a plan that includes:

- Scope
- Objectives
- Rationale
- Key performance indicators
- Milestones
- Methods
- Timing

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