

# Wetlands of the Fleurieu Peninsula

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# What do we want to do?

- Halt ongoing destruction
- Protect, conserve, improve, manage and build resilience of remaining
- Increase area of occupation
- = downlisting of threatened status



# What policy instruments do we have?

- Environment Protection and Biodiversity Act 1999 EPBC Act
- Natural Resource Management Act 2004
  - WAP
- Native Vegetation Act 1991
- National Parks and Wildlife Act 1972

| Goal   | Legislative tool                         |
|--|--|
| Halt ongoing destruction   | EPBC Act<br>NVAAct<br>NRM Act<br>NPW Act |
| Protect, conserve, improve, manage and build resilience of remaining | EPBC Act<br>NRM Act                      |
| Increase area of occupation  | ?EPBC Act<br>?NRM Act                    |

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# EPBC Act 1999

## >> What is a significant impact?

A 'significant impact' is an impact which is **important, notable, or of consequence**, having regard to its **context or intensity**. Whether or not an action is likely to have a significant impact depends upon the **sensitivity, value, and quality** of the environment which is impacted, and upon the **intensity, duration, magnitude and geographic extent** of the impacts. You should consider all of these factors when determining whether an action is likely to have a significant impact on matters of national environmental significance.

## >> When is a significant impact likely?

To be 'likely', it is **not** necessary for a significant impact to have a greater than 50% chance of happening; it is sufficient if a significant impact on the environment is a **real or not remote** chance or possibility.

If there is scientific uncertainty about the impacts of your action and potential impacts are serious or irreversible, the **precautionary principle** is applicable. Accordingly, a lack of scientific certainty about the potential impacts of an action will not itself justify a decision that the action is not likely to have a significant impact on the environment.

## Critically endangered and endangered ecological communities

### Significant impact criteria

An action is likely to have a significant impact on a critically endangered or endangered ecological community if there is a real chance or possibility that it will:

- reduce the extent of an ecological community;
- fragment or increase fragmentation of an ecological community, for example by clearing vegetation for roads or transmission lines;
- adversely affect habitat critical to the survival of an ecological community;
- modify or destroy abiotic (non-living) factors (such as water, nutrients, or soil) necessary for an ecological community's survival, including reduction of groundwater levels, or substantial alteration of surface water drainage patterns;
- cause a substantial change in the species composition of an occurrence of an ecological community, including causing a decline or loss of functionally important species, for example through regular burning or flora or fauna harvesting;
- cause a substantial reduction in the quality or integrity of an occurrence of an ecological community, including, but not limited to:
  - assisting invasive species, that are harmful to the listed ecological community, to become established; or
  - causing regular mobilisation of fertilisers, herbicides or other chemicals or pollutants into the ecological community which kill or inhibit the growth of species in the ecological community; or
- interfere with the recovery of an ecological community.

## Schedule 1—Principles of native vegetation clearance

### 1—Principles of clearance of native vegetation

Native vegetation should not be cleared if, in the opinion of the Council—

- (a) it comprises a high level of diversity of plant species; or
- (b) it has significance as a habitat for wildlife; or
- (c) it includes plants of a rare, vulnerable or endangered species; or
- (d) the vegetation comprises the whole, or a part, of a plant community that is rare, vulnerable or endangered; or
- (e) it is significant as a remnant of vegetation in an area which has been extensively cleared; or
- (f) it is growing in, or in association with, a wetland environment; or
- (g) it contributes significantly to the amenity of the area in which it is growing or is situated; or
- (h) the clearance of the vegetation is likely to contribute to soil erosion or salinity in an area in which appreciable erosion or salinisation has already occurred or, where such erosion or salinisation has not yet occurred, the clearance of the vegetation is likely to cause appreciable soil erosion or salinity; or
- (i) the clearance of the vegetation is likely to cause deterioration in the quality of surface or underground water; or
- (j) the clearance of the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding; or
- (k) —
  - (i) after clearance the land will be used for a particular purpose; and
  - (ii) the regional NRM board for the NRM region where the land is situated has, as part of its NRM plan under the *Natural Resources Management Act 2004*, assessed—
    - (A) the capability and preferred uses of the land; and
    - (B) the condition of the land; and
  - (iii) according to that assessment the use of the land for that purpose cannot be sustained; or
- (l) the clearance of the vegetation would cause significant harm to the River Murray within the meaning of the *River Murray Act 2003*; or
- (m) the clearance of vegetation would cause significant harm to the Adelaide Dolphin Sanctuary.

# NRM Act 2004

## Dam Construction (Section 127(3)(d) and 127(5)(a))

Where a Water Allocation Plan applies, the objectives and principles contained within the Water Allocation Plan should be used as the basis for assessment.

4. Collection or diversion of water flowing in a watercourse, or over land, must not adversely affect downstream water dependent ecosystems by causing reduced stream flow duration, lengthened periods of no or low flow, or other such impacts, unless it is part of a Regional Natural Resources Management Plan project of the Board (eg constructed wetland).
5. Dams shall not adversely affect the environmental flow requirements of ecosystems dependent on surface water or watercourses.

## Location

8. Dams, including dam walls and spillways must not be located:
  - a. in, immediately upstream, or immediately downstream of, ecologically sensitive areas;
  - b. in areas prone to erosion;
  - c. on-stream for third order streams of higher; or
  - d. where it is likely to adversely affect the migration of aquatic biota.

# Enter: Science

- ....MODE III Science *‘Science that is done in the context of its application but which also influences the context and application through engagement in a contextual and recursive debate’ (Harris 2007)*
- There’s more than one ‘I’ in scientific consensus

# Common themes

- Negative/irreversible change = state transition and ecological thresholds
- Species, community, component and ecosystem specific
- Perceptions of value – what do we consider is important to protect and how bad is bad?

Token flow chart....



