

6.1.22 **DAMS**

Purpose

The purpose of this policy is to provide guidance and clarity with regard to Dams and Dam Construction within the Shire of Manjimup and to ensure a consistent approach is taken when considering applications for Development Approval.

Objectives

To provide clarity and direction with regard to the approval of dams within the Shire of Manjimup and to ensure that dams do not have a negative impact on neighbouring properties or pose a risk to people, property and infrastructure.

Interpretation

For the purpose of this policy, the following definitions apply:

Dam	means a man-made structure and/or excavation for the purposes of water storage.		
On Stream Dam	means a dam located across a water course.		
Off-Stream or Catchment Dam	Means a dam not located across a watercourse.		
Soak	Refers to a dam intersecting groundwater such as perched water tables, hillside seeps and small-semiconfined aquifers.		
Watercourse	means any river, creek, stream or brook in which water flows including where water flow is seasonal, intermittent or occasional, but does not include a man-made drain		

All other terms and references shall have the same meaning as given by the provisions of the Local Planning Scheme No 4 (the Scheme) and associated regulations.

Policy Measures

This policy applies to the construction of all dams within the Shire, where the Shires Development Approval is required in accordance with the provisions of Local Planning Scheme No 4. As prescribed by the Scheme, planning consent is not required for dams within the General Agriculture and Priority Agriculture Zones provided that the toe of the dam wall and all associated infrastructure are to be setback more than 20 metres from a boundary.

Application Requirements

Applications seeking approval for dam construction should, in addition to the generally supporting information (completed application form, site plan and designed drawings), provide the following information:

J	the purpose of the dam;
	the catchment area;
	the capacity of the dam;
Ţ	vegetation to be removed for construction, if any;
	a profile of the dam wall including the provision of a spillway, over-wall pipe
	and/or scour pipe; and
)	a management plan for control of erosion/landscaping.

Dam construction should complement the existing or proposed land use activities on the subject land and surrounding properties and not cause any adverse impacts to the surrounding amenity.

Applications for dam construction will be assessed against the following provisions:

- be constructed with the edge of the dam or base of wall setback a minimum of 20 metres from all property boundaries;
- be constructed so that the high watermark is at least 30m from existing or proposed effluent disposal systems;
- have a minimal impact upon the amenity of the surrounding area, with consideration being given to the visual intrusion of proposed dam walls;
- have associated pumps and ancillary structures (excluding pipes) located behind setbacks prescribed for the applicable zone by the Scheme; and
- where to be used as a potable water source, water drawn from the dam is to be treated to meet the current Australian Drinking Water Guidelines.

The comments of Department of Water and Environmental Regulation (DWER) are to be sought and given due regard by the local government prior to determination of the application.

In the event the application for the dam is approved, the applicant/landowner is to be advised the following:

- a) The landowner is responsible for ensuring the dam is safely constructed and maintained
- b) The owner is liable for any damage caused as a result of the dam being built.

Administration

Where an application for development approval is consistent with this Policy and any other requirement of the Scheme or relevant local planning policy, development approval under Part 10 of the Scheme will be granted under delegated authority to the Chief Executive Officer where no objections have been received during advertising.

Where an application for development approval requires a variation to a provision of this Policy, the variation is to be considered by the local government in accordance with clause 5.5 of the Scheme.

Delegated authority is not to be exercised for the consideration of variations to the Policy or where an objection has been received during advertising.

All applications are to be advertised in accordance with local planning policy LPS4 6.1.2 *Advertising of Planning Proposals* prior to determination.

Assessment Criteria

The following information is intended to guide applicants in their proposal for the development of dams within the Shire.

1.0 Proposed Purpose

- 1.1 The construction of dams will generally only be supported where there is a demonstrated need for water storage associated with an agricultural use or for domestic purposes.
- 1.2 Dams will generally not be supported where they are solely for aesthetic purposes or on lots with an area of less than 2 hectares, where the scale of rural activities does not normally warrant the provision of a dam.
- 1.3 Where an application is made for a new dam on a lot that contains an existing dam, consideration shall be given to whether the additional dam is justified in order to support the use of the land. Where the existing capacity or the combined capacity of the dams exceeds that necessary to support the existing or proposed land use, the proposed dam will not be supported as it does not reflect sustainable water management.

2.0 Siting Considerations

- 2.1 The positioning of dams is one of the most important consideration when minimising negative impacts on waterways. Dams built within a watercourse will impede the natural flow of water and may also have a tendency to cause erosion resulting in movement of sediment downstream.
- 2.2 On-stream dams may also cause disturbance to fringing vegetation and fauna habitat and potentially deprive downstream users of water. Dams constructed within watercourses impede natural base flows and capture out of season rain events.
- 2.3 Applicants are encouraged to site proposed dams so as to minimise the impact on existing vegetation.
- 2.4 During construction of dams earthworks may cause soil to be transported into a watercourse. Appropriate sediment and erosion control methods should be installed to protect riparian eco-systems and downstream users.
- 2.6 Dams should be constructed so the overflow is returned to the stream channel or drainage line prior to it leaving the property. Structures should be in place to ensure that the water does not cause erosion.

3.0 Design Considerations

3.1 The foundations of a dam must be structurally sound. The clay content, water holding capacity, wall design and spillway and summer flow bypass design are also important factors requiring consideration as part of dam construction proposals. An application for a high risk dam should be accompanied by a report from a suitably qualified professional

- demonstrating that the design considerations outlined in this policy have been properly addressed
- 3.2 Dam design, safety and construction are the responsibility of the landowner. Once a high risk dam is constructed the landowner may be required to submit a structural engineering certification undertaken by a suitably qualified engineer, certifying that the dam has been constructed to an acceptable standard.
- 3.3 On completion of the construction of a dam, an applicant may be required to provide confirmation by a surveyor that the dam construction including setbacks, wall height and capacity of the dam is consistent with that approved.

4.0 Vegetation Removal/Revegetation

- 4.1 Dams will generally not be supported where they require the removal of riparian vegetation. Riparian vegetation plays an important role in water quality and special care needs to be taken to protect remnant vegetation and enhance degraded riparian vegetation. The potential water quality problems associated with vegetation removal include nutrient export, sedimentation, increased salinity and erosion.
- 4.2 Special care needs to be taken when locating a dam. Where riparian vegetation is to be removed, revegetation will be required to be undertaken. Such landscaping is to be in the form of local native species with consideration of shade planting to reduce water lost by evaporation and the planting of sedges and reeds to enhance the water quality and biodiversity.
- 4.3 Approval may be required for the removal of native vegetation under the *Environmental Protection Act 1986*, the Department of Environment should be contacted in this regard.

5.0 Environmental Water Requirements and Water Allocations

The development approval is not required to consider in detail environmental water requirements or water allocation matters, as this is adequately covered by state approval requirements.

6.0 Impact/Risk Assessment Criteria

Applications for Dams Shall be assessed against the risk matrix shown overleaf. In for the Shire/Council to ensure that sufficient information is available to assess the risk associated with a Dam in accordance with Clause 10.2 of Local Planning Scheme No 4, applications for the Shires Development Approval shall be accompanied by the level of information outlined below.

6.1 Low Risk Dams/Soaks

Applications that score less than 10 when assessed against the risk matrix attached are considered low risk.

Advice Notes shall be included on any approval, advising that landowners are responsible for the structural integrity of the dam construction and recommending that the proposed structure be certified by an appropriately qualified contractor or engineer.

6.2 Moderate Risk Dams

Applications that score a total of between 10 and 15 when assessed against the risk matrix shall be considered Moderate Risk Dams.

Advice Notes shall be included on any approval, advising that landowners are responsible for the structural integrity of the dam construction and recommending that the proposed structure be certified by an appropriately qualified contractor or engineer.

6.3 High Risk Dams

Dams that score more than 15 when assessed against the risk matrix shall be supported by the following information:

- a) A certified report on dam structure by a suitably qualified engineer;
- b) A Dam overflow system or spillway designed by a suitably qualified engineer; and
- c) Detailed plans including a cross-section, topographic map/site feature survey and locality plan.

7.0 Determination of Applications

- 7.1 All applications for Development Approval to a Dam may be referred to the Department of Water and Environment for comment;
- 7.2 In addition to point 5.1 above, where an application for Development Approval involves the clearing of indigenous vegetation, specific comments shall be sought from the Department of Water and Environment in respect of the proposed clearing;
- 7.3 As required by the provisions of Local Planning Scheme No 4 all applications for Development Approval to a Dam located less than 100m from State Forest or National Park shall be referred to the Department of Biodiversity, Conservation and Attractions for comment;
- 7.4 Applications involving a relaxation of the required boundary setbacks shall be referred to the adjacent landowners for comment;
- 7.5 When considering an application for Development Approval to a Dam in accordance with this policy, the following matters shall be taken into account:
 - a) The need for the proposed Dam being based on sustainable agricultural production;
 - b) Comments received from relevant government agencies;
 - c) Comments received from adjacent landowners, where applicable;

- d) The provision of the supporting information outlined in point 4.0 above; and
- e) Other matters as prescribed by clause 10.2 of Local Planning Scheme No 4.
- 7.6 Any dam approval shall include an advice note that "This development approval is not a water license or a clearing permit. The proponent is to ensure required DWER approvals are obtained prior to commencement of construction.

Land Area			I
Risk Category	<5ha	5-20ha	20+ Ha
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Construction Type			
On Stream Dam			
- Perennial Stream/River	5	4	3
 Seasonal Stream/River 	4	3	2
Off Stream/Catchment Dam	2	1	1
Soak	2	0	0
Volume			
- 0-10 ML	3	2	1
- 10-100ML	Not Supported	3	2
- 100ML +	Not Supported	Not Supported	3
Wall Height			
- 0 – 5m	3	2	1
- 5 – 10m	Not Supported	3	2
- 10m +	Not Supported	4	3
Dam Wall Design			
- Designed by Engineer	1	0	0
- Designed by Experienced	2	1	1
Earthmoving Contractor			
 Designed by owner or others 	3	3	3
Infrastructure Downstream			
 House downstream of dam 	5	4	4
- Other Dams	4	3	3
- Road infrastructure	3	2	2
- State Forest/No infrastructure	1	1	1
Overflow Infrastructure Proposed			
- Dam Bypass & Overflow	1	0	0
designed by Engineer			
- Dam Bypass & Overflow by	2	1	1
others			
- No infrastructure proposed	5	4	4

ADOPTED - 13 February 2020

EFFECTIVE -11 March 2020

NEXT DUE FOR REVIEW – March 2024

The Administration of this Policy is by the Development and Regulation Division.