

Septic Tank Guidance - Land Capability Assessments

What is a Land Capability Assessment?

A Land Capability Assessment (LCA) is an assessment of the risks of harm to human health and the environment of a proposed or existing septic tank, or onsite wastewater management system (OWMS), taking into account the proposed or existing use of the system. An LCA provides information about the site and soil conditions, including an assessment of the land's capability to sustainably manage wastewater onsite. It may also provide recommendations on proposed onsite wastewater treatment, the treatment level required, and effluent dispersal and management strategies.

The LCA allows Council to understand the environmental and human health risks of the septic tank and make an informed decision on the viability of sustainable managing wastewater onsite.

When will I need a Land Capability Assessment?

A LCA may be required when:

- Proposing a subdivision in an unsewered area.
- Applying to install an onsite domestic wastewater management system:
 - in an environmentally sensitive area;
 - on a property with significant site constraints;
 - where Council has advised a Land Capability Assessment is required.

A lot-scale LCA may not be required if Council is satisfied that the site is low risk or if there is adequate site and soil information gathered through existing investigations such as a regional, catchment or township-based LCAs. A LCA must be undertaken by a suitably qualified and experienced professional.

What should a Land Capability Assessment contain?

LCAs are specific to individual proposals and can vary in what they contain. Nonetheless, all LCAs must provide sufficient detail of all aspects of the risk assessment, along with a comprehensive rationale for all proposed management strategies. The following provides a guide of what could be included in a LCA.

- Executive summary provide a summary of the report with all key points.
- Introduction an introduction to the report, describing the purpose, proposed septic tank and site.
- Background an overview, any objectives, background and limitations of the report
- Key site features and information this may include:
 - \circ $\;$ Land zoning, property boundaries and planning specifications
 - Topographic mapping, including position of surface waters. If an intermittent stream that is found to be a drainage line (drainage depression) with no defined banks and the bed is not incised. The topography of the drainage line should be demonstrated in writing and photographs.
 - Aerial photography



- o Climate data
- Geological mapping and data
- Soil mapping, surveys and testing data
- Mapping of groundwater resources, including domestic and public supply bores
- o Location of services such as water, sewer, gas and electricity
- Environmental constraints, such as flooding, bushfire, protected habitats and Special Water Supply Catchment areas
- o Any plans or strategies relating to onsite wastewater management in the area
- Current or previous land use, such as agriculture, use of dams and bores, water use and impact of proposed development.
- Incidence of site constraints such as poor drainage, high runoff, shallow soils, vegetation, rock outcrops, intended location of site structures and access.
- Land capability land capability assessment matrix producing a risk rating, soil permeability rates and management protocols.
- Design of the onsite wastewater management system recommended system, including the effluent treatment and design based on the features and capability of the site. This section should also include design and specification details, all relevant sizing calculations, and the location of effluent disposal areas and reserve areas.
- Management and maintenance detail on the management and maintenance requirements, and any mitigation measures if required.
- Conclusion summary of key findings and recommendations.
- About the Author details of professionals involved in developing the LCA.
- Appendices aerial photographs, site photographs, site plan, locality map, site maps of existing and proposed features, map of proposed subdivision layout, map of wastewater management areas, soil classification data and testing details, and any supporting documentation and references.

Detailed guidance on the LCA report can be found on the Municipal Association of Victoria website.

Who can prepare a Land Capability Assessment?

Landowners or developers are responsible for engaging a suitably qualified and experience professional to undertake a Land Capability Assessment.