

GUIDELINES for Preparing a Flood Potential Statement

This guideline is intended to provide advice to applicants on Preparing a Flood Impact Statement.

What is a Flood Potential Statement?

A Flood Potential Statement is a document which is to be prepared to enable Council to conduct an adequate environmental assessment of development works which are not located within land defined as 'flood affected land' however, given the location of development with regard to watercourses, creeks or main stormwater infrastructure pipes, may be susceptible to water inundation.

When is a Flood Potential Statement Required?

A Flood Potential Statement is required for any development:

- located on land known to experience overland flows,
- within 40m of a watercourse, creek, or
- a main stormwater infrastructure pipe located on or near the development site.

Scope of Report

Any report submitted should reflect the size, type and location of the development, be commensurate to the scope of the works proposed and consider its relationship to surrounding development.

Technical Requirements of a Flood Potential Statement

The technical requirements of a Flood Potential Statement are to be provided in three (3) main areas:

1. *Water Inundation Consideration*

This section is to:

- Detail where the likely water inundation will occur from. This is to include the source of inundation relative to the site and the direction of water flows.
- The level and extent that water inundation may occur to. This is to include the 1 in 100 year flood level where applicable (calculations to be provided).

Council can provide catchment specific data such as catchment size and indicative locations of stormwater infrastructure where applicable.

2. *Assessment of Impacts*

This section is to detail compliance with Clause 47 of WLEP 2000 in particular:

- Detail the potential impacts of the potential water inundation
- Detail how the development is to be sited and designed to minimise impacts of water inundation on the property, having regard to the existing land form and source of potential water inundation.
- Detail how buildings or works potential affected by water inundation are to be constructed and the types of materials proposed to be used to reduce water impacts. The following is a list of possible Flood compatible materials.

Building Component	Flood Compatible Material
Flooring and Sub Floor Structure	Pier and beam construction or Suspended reinforced concrete slab
Floor Covering	Clay tiles Concrete, precast or in situ Concrete tiles

Building Component	Flood Compatible Material
	Epoxy formed-in-place Mastic flooring, formed-in-place Rubber sheets or tiles with chemical-set adhesive Silicone floors formed-in-place Vinyl sheets or tiles with chemical set adhesive Ceramic tiles, fixed with mortar or chemical set adhesive Asphalt tiles, fixed with water resistant adhesive
Wall Structure	Solid brickwork, blockwork, reinforced, concrete or mass concrete
Windows	Aluminium Frame with stainless steel rollers or similar corrosion and water resistant material.
Doors	Solid panel with waterproof adhesives Flush door with marine ply filled with closed cell foam Painted material construction Aluminium or galvanised steel frame
Wall and Ceiling Linings	Brick, face or glazed Clay tile glazed in waterproof mortar Concrete Concrete block Steel with waterproof applications Stone natural solid or veneer, waterproof grout Glass blocks Glass Plastic sheeting or wall with waterproof adhesive
Insulation	Foam or closed cell types
Nails, Bolts, Hinges and Fittings	Galvanised Removable pin hinges
Fences	Wooden horizontal slatted fences with capacity to allow flood flow through.

Note: The above is not an exhaustive list of Flood compatible materials

- Detail if the development would result in any adverse impacts on the site upstream or downstream of the location of water inundation, and what these potential impacts would be.
- Detail how the development would respond to impacts with regard to water levels during a 1 in 100 year storm event, including depths or velocities (Calculations are to be included)
- Detail relative floor levels to AHD
- Detail if the development may require car movement prevention devices and where they are to be located. This includes measures such as bollards and gates which can be engaged in a flood event to prevent movement of vehicles downstream.
- Detail inter-relationship between existing and proposed Stormwater Management Systems and how these systems respond to potential water inundation.
- Provide comment on any relevant Australian Standards and / or best practice principles

3. Mitigation measures to reduce impacts

This section is to consist of a clear simple statement of all mitigation measures to be incorporated into the development to reduce the potential impacts of water inundation. This is section is to directly relate to Section 2.

Other General Requirements of Reporting

All reports are to:

- include an executive summary,
- be professionally prepared,

- include calculation formulae,
- be clearly referenced using an accepted academic referencing system (eg. Harvard),
- provide analysis of development against relevant Commonwealth and State Legislation,
- provide analysis of development against relevant State and Regional Planning Policies,
- provide analysis of development against relevant Local Environment Plan and Policies,
- include a conclusion detailing key points,
- provide development recommendations and construction methodologies and,
- provide qualifications of author.

For further information contact Natural Environment Unit on 9942 2111 or [via webmail](#).

Definitions

Australian Height Datum means a common national surface level datum approximately corresponding to mean sea level.

Creek means any watercourse, whether ephemeral, intermittent or perennial, whether on its natural course or altered by human interference, whether channelled or not. It also includes any drainage lines able to be identified by a linear vegetation assemblage reflective of regularly moist soil conditions or by a weed plume consistent with regularly moist soil conditions (MWH Australia Pty Ltd 2004, *Warringah Creek Management Study*).

Development means:-

- (a) the use of land, and
- (b) the subdivision of land, and
- (c) the erection of a building, and
- (d) the carrying out of a work, and
- (e) the demolition of a building or work, and
- (f) any other act, matter or thing referred to in section 26 that is controlled by an environmental planning instrument, but does not include any development of a class or description prescribed by the regulations for the purposes of this definition (*Environmental Planning and Assessment Act, 1979*).

Development Consent means consent under Part 4 of the *Environmental Planning and Assessment Act, 1979* to carry out development and includes, unless expressly excluded, a complying development certificate (*Environmental Planning and Assessment Act, 1979*).

Flood affected land means land below the 1 per cent annual exceedance probability flood level (Warringah Local Environmental Plan 2000).

Watercourse means any river, creek, stream or chain of ponds, whether artificially modified or not, in which water usually flows, either continuously or intermittently, in a defined bed or channel, but does not include a waterbody (artificial). (*Standard Instrument—Principal Local Environmental Plan (NSW)*)

The definitions contained are derived from the documentation identified after each definition. Accordingly, the definition contained within the original documentation supersedes the definition contained within this section.

