

Sustainable On-Site Sewage Management in Port Stephens

Client

Port Stephens Council

Date

2009 - 2011

Services & Expertise Provided

Review of existing policies and technical material;

Development of on-site sewage hazard maps;

Integrated on-site system and catchment modelling to determine minimum lot size and maximum lot densities; and

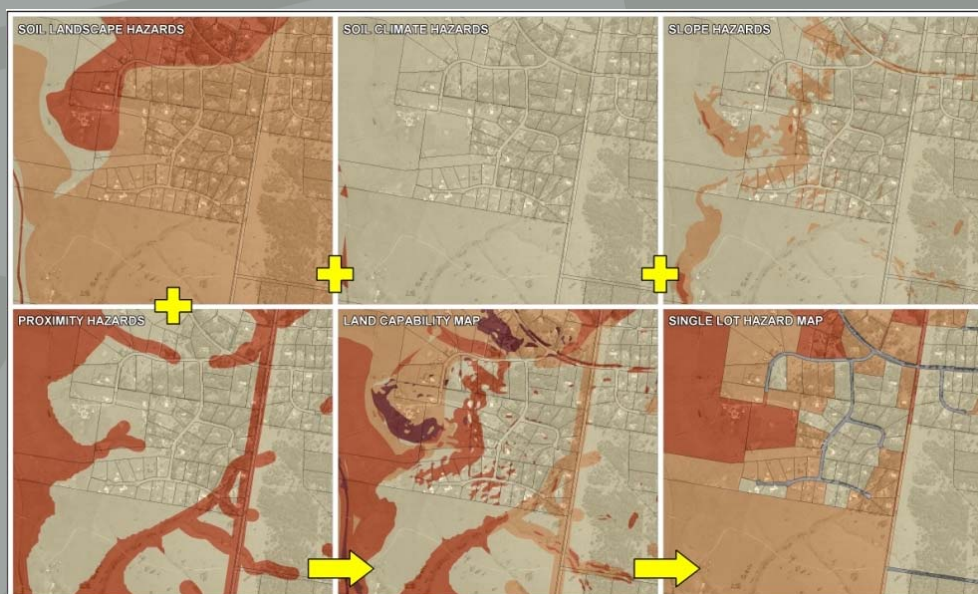
Creation of a Development Assessment Framework.

Port Stephens Council have initiated a comprehensive review of their on-site sewage management policy and planning framework. BMT WBM have been leading this process on behalf of Council. The aim of the project is to create a Development Assessment Framework (DAF) for unsewered areas that is clear and defensible but still adaptable to local conditions.

The first phase of this project focused on development of a technical basis for sustainable on-site sewage management based on local conditions. This involved land capability and hazard mapping using a customised GIS processing logic to assign a general hazard class to all lots.

It also involved continuous long-term on-site system modelling using the Decentralised Sewage Model (DSM) and integration with small catchment runoff and pollutant generation models to estimate minimum lot sizes / maximum lot densities capable of meeting water quality and health protection objectives.

Outcomes of this technical study were used to create the DAF and integrate the new framework into Council planning and approval mechanisms. The DAF provides a consistent but locally adaptable set of investigation and assessment standards for new and replacement on-site systems. It also establishes minimum standards for design and construction.



Creation of On-Site Sewage Hazard Maps