

## 4. STATEMENT OF COMMITMENTS

Relevant to the proposed development, this statement of commitments relate to on site sewage management and stormwater management. The commitments proposed below identify the general risk associated with the development and provides solutions to mitigate the risk.

### 4.1 On Site Sewage Management

Effluent disposal on site will be via secondary treatment systems at a minimum. Tertiary systems involving the use of sand filters may be installed by individual lot owners if desired.

Land Application Areas (LAA) taking the treated waste from the abovementioned systems will be located a minimum of 150 metres from the wetland and a minimum of 40 metres from other drainage lines as per Table 5 of “On-Site Sewage Management for Single Households” February 1998 (NSW Government).

Also, area equal to 200% of that calculated within the On-Site Sewage Management report has been provided on each proposed lot to enable for the provision of an alternative LAA if needed, or to allow alternate dosing of 2 sites. This further reduces the effluent load on any one area and the risk of pollution.

### 4.2 Water Quality Protection & Stormwater Management

Potential sources of nutrient and sediment loads are

1. Access, both during construction and post construction,
2. On site sewage land application areas, and
3. Runoff from the house and surrounding gardens.

In particular, coarse sediments (>2mm), phosphorus, nitrogen and oxygen demanding substances are those elements of concern.

Coarse sediments can be addressed by filter strips and grass swales, phosphorus and nitrogen by a combination of filter strips, grass swales and porous pavements, and oxygen demanding substances can be addressed by infiltration trenches and porous pavements.

Measures to be put into place to address the above sources include:

1. The access to Lots A - E will be constructed in accordance with the requirements of Bega Valley Shire Council, notably DCP2 and the *Design and Construction Specifications*.

There are two phases to stormwater management; first during construction, and second post construction.

During construction, erosion and sediment control measures in strict accord with “Soils and Construction”, March 2004 (Blue Book) will be put in place to ensure only clean runoff leaves the construction site, and to minimize the amount of water entering the site. These measures will be part of the design drawings to be presented to council for their approval as part of the Construction Certificate application.

Measures to be used would include erection of sediment filter fences, the installation of rock aprons on the outlets of all piped culverts, swales to act as infiltration devices and to redirect flows to constructed sediment basins, and ensuring the disturbed areas are kept to a minimum.

Following construction, the establishment of vegetation over all disturbed sites would be a priority. The sediment basins could be converted to small wetlands and the swales would be grassed over and continue directing overland flows to the basins.

The design will incorporate the construction of table drains and culverts. Any culverts needed for the Right of Carriageway will be sized to accommodate a 1 in 5 year storm, with outlet protection to prevent erosion. Table drains will be to council specifications, and on steeper sections will be rock lined to prevent erosion.

2. Measures to be incorporated for OSSM land application areas are:
  - a. Swales upslope of the land application area so as to reduce run-on water.
  - b. The use of secondary treatment systems as a minimum such as aerated systems. Ideally, on Lots A & D, tertiary systems incorporating sand filters would be installed.
  - c. The installation of filter strips and vigorous vegetation between the application area and the natural wetland.
  - d. Minimum setbacks from the wetland of 150 metres for the land application areas. It is noted that the former Department of Natural Resources recommended a Core Riparian Zone (CRZ) setback of at least 40 metres from the top of the bank of the wetland plus an additional 10 metre buffer to protect the CRZ.
3. Measures to be incorporated around the proposed house sites include:
  - a. Install rainwater tanks to receive roof run-off. This will normally be a requirement given that there will not be any reticulated water supply.
  - b. Provide grassed swales directing run-off into gardens and other landscaped areas.
  - c. Wherever possible, pavements are to be constructed from porous materials.