16.10 FLOOD HAZARDS

Refer to Policy sets 8.1, 8.2, 13.1.
Refer to Rule section 16.3.

16.10.1 Scope of Section

This section deals with land uses in relation to stopbanks and berm lands where flood hazards may occur. Information required with resource consent applications is detailed in Chapter 19 (refer, in particular, to 19.2.7).

16.10.2 Land Use

16.10.2.1 Permitted Activities (Land Use)

Any land use is a permitted activity that may be undertaken without a resource consent, if it complies with the following conditions:

Stopbank
(a) Grazing of stopbanks is only by sheep or goats and is undertaken in such a way that a continuous grass sward is maintained.
(b) Any excavation of a stopbank is only undertaken for the purposes of stopbank reconstruction or maintenance, or the installation or removal of any utility service line, provided that the Riverworks Asset Manager of the Council has been notified.

Earthworks
(c) Any earthwork within 10 metres of the top of any river bank or either toe of any stopbank:
   (i) is less than 20 square metres in area; and
   (ii) is open for no more than three days; and
   (iii) is backfilled with the excavated material and thoroughly compacted; and
   (iv) does not raise or lower the level of the land; or
   (v) is associated with the maintenance of road structures.

Woody Vegetation
(d) There is no planting of any woody vegetation or any standing crop of any plant with a mature height greater than 0.5 metres on any berm land unless the vegetation is necessary to maintain the stability of a riverbank and is planted within 10 metres of the bank.

Berm Land
(e) Material deposited on any berm land occupies an area of less than 20 square metres and is deposited for no longer than 10 consecutive days.
(f) All fences on any berm land are of post and wire construction.
### 16.10.2.2 Restricted Discretionary Activities (Land Use)

Any land use that does not comply with the conditions of rule 16.10.2.1 is a restricted discretionary activity.

**A resource consent is required.** Consent may be refused, or conditions imposed, only in respect of the following matters to which the Council has restricted its discretion:

1. The severity and probability of the flood hazard to which the activity is or may be subject, in the light of any available or calculated flooding information.
2. The effects on other property owners of the activity, including damage resulting from the damming or diversion of flood waters by structures or plantings.
3. The effects on road structures, including the need for larger culverts or bridge clearances.
4. The effects of any structure by itself or in combination with other structures on aquatic ecosystems, plant or animal habitat, flow regime or erosion of the river.
5. The design, location, construction and maintenance of any structure.
6. The health and safety of potential property owners.
7. The effects on the community, including physical, economic and cumulative effects.
8. The extent to which future owners of the site are likely to be aware of any flood risk before they purchase a property.
9. The need for a reference to flood risks to be recorded on the title of the land.
10. The extent to which the productivity and versatility of the land may be affected, positively and adversely.
11. Whether or not buildings are relocatable.
12. The duration of the consent (Section 123 of the Act) and the timing of reviews of conditions and purpose of reviews (Section 128).
13. Financial contributions, bonds and covenants in respect of the performance of conditions, and administrative charges (Section 108).

### 16.10.3 Buildings, Berm Lands, Stopbanks

### 16.10.3.1 Prohibited Activities (Buildings, Berm Lands, Stopbanks)

No resource consent shall be granted for the following prohibited activities:

**Construction or Relocation of Buildings**

(a) The construction or relocation of any building which has a floor area greater than 15 square metres on any berm land.

(b) The construction or relocation of any habitable building which has a floor area greater than 10 square metres within:

(i) 20 metres of the landward toe of any stopbank, the crest of which is more than 1 metre higher than the immediately adjacent land; or
(ii) 50 metres of the landward toe of any stopbank the crest of which is more than 2 metres higher than the immediately adjacent land.

**Berm Land**

(c) The erection of any fence on berm land, other than a post and wire fence.

**Stopbank**

(d) The planting of any woody vegetation on any stopbank.

(e) The placing of any object on the crest of a Lower Motueka, Waimea, or Wai-iti stopbank that prevents or may prevent any authorised person from passing or driving a motor vehicle along the stopbank.

### 16.10.20 Principal Reasons for Rules

**Stocking of Stopbanks**

Grazing can be a valuable stopbank management tool and light animals are unlikely to cause significant damage to stopbanks in dry conditions provided that a continuous grass cover is maintained.

**Planting of Woody Vegetation on Berms**

Obstructions to flood flow on berms are generally undesirable but there are locations where trees, etc., could be acceptable subject to conditions, and riparian bank protection is usually essential.

**Deposition of Material**

Obstructions to flood flow are generally undesirable but there are locations where semi-permanent heaps of material is acceptable, subject to conditions. The rules enable minor storage to occur of the type that might be necessary on a farm or roadside aggregate dump or as part of river control activity, but should ensure that larger scale activities will be given due consideration as to adverse effects upon others before commencing. (0.02 hectares is over 14 metres by 14 metres and is therefore a substantial area).

**Buildings**

The prohibition ensures that berms are kept clear of significant obstructions, that incipient stopbank failures can be observed and attended to, and that substantial buildings are kept clear of the most hazardous locations.

The failure of a stopbank over 2 metres in height could result in serious structural damage to a building up to at least 50 metres away and could occur very suddenly.

**Fencing**

Control on the type of fencing on berm land helps to ensure that flood flows will not be significantly impeded on berm land.

**Excavation or Removal of Part of any Stopbank**

Stopbanks are intended to avoid or mitigate damage from floods and their strength must not be adversely affected by any earthwork.
**Destruction or Removal of Vegetation**

Including grazing by livestock or the excavation or removal of any part of any stopbank is intended to avoid damage to a major public asset and possible disastrous failure of that asset. Cattle, horses and deer are heavy enough to damage stopbanks and pig rooting poses an unacceptable risk.

**Planting of any Woody Vegetation**

The prohibition helps to ensure that stopbank stability is not compromised.

**Planting of any Tree or Erection of Structures**

Within 4 metres of the landward toe of any stopbank a restriction on planting and structures helps to ensure that stopbank stability is not compromised and that some access to the toe is possible.

**Placing of any Object on the Crest of Named Stopbanks**

A restriction on stopbank obstructions is necessary to ensure that access for inspection purposes is always possible during floods.