



## 8.1 Issues

Discharge of stormwater and discharge of water from pumped field drainage has the potential to cause erosion of the banks of the receiving waterway by scouring; and flooding of the receiving waterway, both up and downstream.

Use of dyes and other materials to trace movement of water has the potential to be toxic to aquatic organisms. It can create concern among viewers unaware of its true nature. Discharges from water supply reservoirs or pipelines have the potential to introduce water treatment chemicals that may have adverse effects. It could also cause localised flooding and erosion.

Runoff of sediment from earthworks has the potential to change the natural clarity and colour of water-bodies. It can adversely affect aquatic life.

Discharges from temporary lowering of groundwater levels have the potential to cause localised flooding or erosion.

By the strict definition of the Resource Management Act most stormwater is probably contaminated.

However, for the purpose of this plan it is best to think of uncontaminated stormwater as having such a low level of contaminants that the contaminants themselves will have minimal adverse effect on the environment. At this level the discharge of uncontaminated stormwater can be considered alongside the discharge of water into water.

The discharge of "contaminated" stormwater is no different from the discharge of any other liquid contaminant and the issues and management should be considered accordingly. See chapter 6.

Discharge of uncontaminated stormwater and water from other sources can cause scouring, erosion of watercourse banks and bed around the discharge point and possibly downstream. Also the addition of extra water volume to a watercourse can cause flooding upstream and downstream.

With the discharge of water to water there is the additional cultural issue of the discharge of mixing water bodies or transfer of water from one catchment to another. Maori find this practice offensive as it degrades the Mauri of both water bodies.

Dye tracing is a useful technique for scientific research. It is generally harmless but can cause alarm to those viewing it because of the prominent colour.

## **8.2 Objectives**

1. Discharges of stormwater to watercourses, either directly or via pumped field drainage should be managed to avoid, remedy or mitigate adverse effects including contamination of natural water, erosion of the banks or beds, or flooding as far as practicable.
2. Discharges of water to water should be managed to recognise and avoid adverse effects on the Mauri of the waters.
3. Addition of dyes to water for scientific research should be managed to avoid any adverse effects on the receiving waters.

### Principal Reason for Objectives 1-3

Provided the adverse effects specified in the objectives are addressed, the activities mentioned will have little or no impact on the sustainable management of water and waterways.

## **8.3 Policies**

1. To provide for the discharge of water-to-water that have minor or no adverse effects on the receiving water body without the need for a resource consent.

### Principal Reason

Where there would be little or no adverse effects there is no reason to put people, and the Council to the time and effort of consents applications.

2. When considering applications to discharge water to water, to take into account:
  - ▶ The sensitivity of the receiving environment.
  - ▶ Classification of receiving waters pursuant to section 69 of the Resource Management Act 1991.
  - ▶ The values of tangata whenua that may be affected.
  - ▶ The physical processes acting on the area of discharge including temperature change, scouring, erosion, and flooding.

Principal Reason

This will enable the adverse effects of any proposal to discharge water to be assessed and addressed.

## **8.4 Rules for Discharges of Water to Water**

### **Permitted Activity**

#### **Rule 8.4.1 Point Source Discharge of Stormwater**

Except as provided in Rule 8.4.6, Point source discharge of stormwater shall be a **permitted activity** subject to:

1. The discharge shall be for the purpose of draining water arising from land, roofs, paved areas or streets.
2. The discharge shall be by pipe or open drain into a natural watercourse which is the natural receiver of surface drainage water from that area.
3. The discharge shall not cause erosion of the banks or bed of the watercourse at, or downstream of, the discharge point.
4. The discharge shall not give rise to any flooding of land upstream or downstream of the discharge point.
5. After reasonable mixing, the discharge shall meet the following water quality standards:
  - a) Suspended solids not more than 25 mg/l above receiving water concentration.
  - b) Total grease and oil no more than 40 mg/l.
  - c) Enterococci no more than 275/100 ml.
  - d) No conspicuous change in the colour or visual clarity.
  - e) No emission of objectionable odour.

Principal Reason

Stormwater complying with these requirements would have minimal effects on water quality in the district. There is therefore no need to impose controls.

(Enterococci standard based on "Provisional Microbiological Guidelines for Recreational and Shellfish Gathering Waters in New Zealand" Jan 1992, Public Health Services, Ministry of Health.)

#### **Rule 8.4.2 Point Source Discharge of Stormwater from Road Construction and/or Maintenance**

Except as provided in Rule 8.4.6, the point source discharge of stormwater from activities associated with the construction and/or maintenance of roads shall be a **permitted activity** subject to:

1. The discharge shall be for the purpose of draining and/or diverting water for the duration of activities associated with the formation and/or maintenance of a road.
2. The discharge shall be by pipe or open drain into a natural watercourse which is the natural receiver of surface drainage water from that area.
3. The discharge shall not cause erosion of the banks or bed of the watercourse at, or downstream of, the discharge point.

4. The discharge shall not give rise to flooding of land upstream or downstream of the discharge point.
5. After reasonable mixing, the discharge shall meet the following water quality standards:
  - (a) (i) For receiving water having a suspended solid concentration less than 200g/m<sup>3</sup>:  
50g/m<sup>3</sup> above receiving water concentration.
  - (ii) For receiving water having a suspended solid concentration greater than 200g/m<sup>3</sup>:  
a suspended solid concentration no greater than 25% above receiving water concentration.
  - (b) Total grease and oil no more than 40mg/l.
  - (c) Enterococci no more than 275/100ml.
  - (d) No conspicuous change in the colour or visual clarity.
  - (e) No emission of objectionable odour.

This rule shall not apply to the routine operation of stormwater drainage systems associated with public and private roads which shall be a permitted activity in terms of this Plan.

#### Principal Reason

This rule applies specifically to the construction and maintenance of public and private roads. The term "road" is defined in Appendix 2 (Glossary) of the Plan. The rule does not seek to control the routine discharge of stormwater from roads, nor the daily maintenance operations on a public road undertaken by the controlling authority.

The reason is that the controlling authority of a public road cannot fully control the sources of pollution that routinely accumulate on public roads, nor can it reasonably be expected to control the third party use of public roads.

The Rule provides that where road construction and maintenance activities exceed the stated standards the work will be significant enough to warrant a resource consent, and any effects associated with those works will be addressed through the resource consent process.

#### **Rule 8.4.3 Dye Tracing**

The discharge of dye tracing materials into water shall be a **permitted activity** provided that:

- a) The Gisborne District Council is notified at least 24 hours prior to the release of any traces.
- b) The tracing material and its discharge concentration are to be non toxic, and biologically and chemically inert.

#### Principal Reason

There will be no adverse effect from such discharges. As such exercises are highly visible prior notification is needed to avoid un-necessary investigation of reports from members of the public.

#### **Rule 8.4.4 Discharges from Water Supply Reservoirs or Pipelines**

The discharge of potable water into fresh water from any water storage reservoir, or water supply pipeline, excluding domestic storage and pipelines, which does not contain:

- ▶ Disinfectants, or antiseptics, except not more than not more than 0.3 mg/l of free or combined residual chlorine.
- ▶ Not more than 1 mg/l of fluoride.
- ▶ More than 50 mg/l of suspended solids.

shall be a **permitted activity** provided that the discharge complies with the conditions below.

##### **Conditions:**

1. The Gisborne District Council is notified at least 48 hours prior to any such discharge.
2. The discharge shall not cause any erosion at, or downstream of, the discharge point.
3. The discharge does not alter the natural course of the river or stream.

**Note:** Discharge of water containing any substances other than those listed or quantities in excess of those listed is deemed to be discharge of contaminants to water. See Section 6.4.

##### Principal Reason

This is a routine activity with no adverse effects.

#### **Rule 8.4.5 Discharge of Water from Groundwater Pump Tests and Temporary Groundwater Level Lowering Activities**

The discharge of water from groundwater pump tests and other temporary ground water lowering activities shall be a **permitted activity** subject to the following conditions:

1. The discharge shall not give rise to any flooding (in this instance flooding does not include the controlled ponding or detention of water in a manner that will cause no adverse effects) of land or assets upstream or downstream of the discharge point under any conditions.
2. The discharge shall not cause any erosion at, or downstream of, the discharge point.

##### Principal Reason

This is a routine activity with no adverse effects if the conditions are adhered to.

**Note:** This permitted activity covers the discharge from dewatering activities; there is still a requirement to obtain resource consent to take the water in the first place.

### **Restricted Discretionary Activity**

#### **Rule 8.4.6 Pumped Stormwater Drainage**

The discharge of pumped stormwater drainage shall be a **discretionary activity**. The Council will limit its discretion to:

- ▶ The timing of the discharge by setting maximum water levels on the receiving watercourse.
- ▶ Ensuring the banks of the receiving watercourse are adequately protected against scouring.
- ▶ Ensuring there is appropriate warning to other beneficiaries of the receiving drain to indicate when the pump is operating.
- ▶ Those matters contained in policy 8.3.2.

Principal Reason

There is the potential to cause flooding and scouring if such discharges are not managed. Because volumes of discharges and conditions in surrounding drains can vary widely it is not feasible to establish standard conditions which would enable this activity to be permitted as of right.

**Note:** Pumping of stormwater by council or the fire service to prevent a likely loss of life, injury or serious damage to property is permitted under section 330 of the RMA, as Emergency Works.