



To: Freshwater Advisory Group

From: Lois Easton

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SUBJECT: Freshwater Plan: Policy, Methods and Rules for Discharges

Introduction

This paper outlines the proposed policies, methods and approach to rules for discharges within the freshwater plan.

The approach proposed is to use the Schedules of significant waterbodies with the Plan to identify areas where a more precautionary approach to discharges is required. Where the values work undertaken for the Waipaoa Catchment Management Plan has identified issues, or that limits have been exceeded, this also has an impact on discharges. For example the Waikanae Creek is one waterbody which may be identified as a degraded waterbody, and managing discharges to this river will be a key method to improve water quality, aquatic ecosystem health, mauri and food gathering values.

Currently discharges are managed by provisions within the Regional Discharges Plan, however this has a focus on the impacts of point source discharges of major pollutants. In line with the Outcome Statements and draft Objectives developed for the Freshwater Plan, a greater focus on non-point source and diffuse discharges is proposed in the Policy and Methods for the Freshwater Plan.

The draft Policies and Methods are attached as an appendix, but the key components of these are discussed further below:

Proposed Approach to Point Source Discharges

Generally the approach to point source discharges proposed in the plan is to continue to manage these as a Discretionary Activity, recognising that the wide range of types of discharges, contaminants and their impacts means that activity specific rules are not appropriate.

A number of minor discharges such as groundwater pump tests and discharges from reservoirs are proposed as Permitted Activities within set standards. In addition, sewage overflows due to heavy rain are provided for as a Permitted Activity – with standards around public notification, monitoring and reporting.

Because of the sensitivity of Scheduled Outstanding Water Bodies and Regionally Significant Wetlands, it is proposed that point source discharges to these waterbodies is a Non Complying Activity, and strong policy proposed would direct this as an activity which is not anticipated to occur. Similarly point source discharges to identified degraded waterbodies (eg the Waikanae Creek) of contaminants where a water quality limit for that water body has been exceeded are proposed as a Non-Complying Activity.

Existing Prohibited Activity status for point source discharge of untreated sewage or wastewater (except for overflows) and untreated animal effluent is proposed to be retained, and in addition further Prohibited Activities of point source discharges are proposed for:

- solid hazardous or solid animal waste
- organic waste or untreated leachate from the storage of organic material; and
- untreated industrial or trade waste

As well as the Council's investment in upgrading its sewerage reticulation to reduce overflows, point source discharges are also an area where regular compliance monitoring checks are required, and the priority for these would be degraded waterbodies or those where water quality limits have been exceeded. There is also a need within the Region still for more facilities for cleaning of trucks, as truck wastes are a significant water contaminant in the Region.

Proposed Approach to Managing Discharges from Bore Construction and Drilling

Currently bore construction requires a resource consent under the Transitional Plan with set standards for bore construction and pumping tests. It is proposed to continue with the consenting approach, but where Scheduled construction and pumping standards for groundwater bores are met, this would be a Controlled Activity. There may also be some locations and bore sizes where a Permitted Activity standard can be developed – further work is being done to look at this issue.

For groundwater bores which don't meet the construction and pumping standards, or for other bores and wells (eg for oil and gas exploration or extraction) a Discretionary Activity approach is proposed. This is because the potential impacts on the environment are much greater, and more uncertain, than groundwater bores constructed to standards which have been extensively used across the Region.

Discharges to groundwater and bedrock (eg deep well injection, managed aquifer recharge, fracking) are activities for which there is the potential for uncertain environmental effects given the geology of the Region and the lack of detailed information on the extent and location of groundwater resources. A Discretionary Activity regime is proposed for these types of discharges except within 50m of Regionally Outstanding Waterbodies and Regionally Significant Wetlands where this is proposed as a Non Complying Activity.

Proposed Approach to Managing Stormwater Discharges

The current Discharges Plan treats storm water as an uncontaminated discharge, however the state of urban waterways in particular, and evidence from across New Zealand indicates that storm water can be a very significant contributor of contaminants – particularly of heavy metals, hydrocarbons, sediment, nutrients and faecal bacteria.

Work is currently underway to quantify the extent of storm water quality problem in Gisborne City, and what contaminants are of particular concern, however it is expected that the problems are likely to be similar to what has been found elsewhere in New Zealand. Accordingly the following approach is proposed:

Permitted Activities

- Existing storm water discharges from the public storm water network as a Permitted Activity – but for the Council’s own work programme to start to include measures such as installing storm water treatment devices in priority locations/catchments.
- Storm water from Road Construction/Maintenance within standards
- New small scale storm water discharges
- New larger scale storm water discharges beyond thresholds – 1000m² of impermeable surface, where treatment of storm water through contaminant reduction methods such as swales, vegetative filter strips and constructed wetlands is undertaken. This would capture things like – a large carpark, a large industrial site, or a multi unit residential subdivision.

Where storm water discharges don’t meet the Permitted Activity Standards and are discharges to waterbodies other than Outstanding Water Bodies and Regionally Significant Wetland, these would be a Restricted Activity.

Any other stormwater discharges are proposed as a Discretionary Activity.

Proposed Approach to Managing Diffuse/Non Point Source Discharges

Diffuse discharges are not currently managed under the existing Discharges Plan, however they have been identified nationally, and within Gisborne, as being a major source of nutrients and faecal bacteria in waterways. In order to achieve the Outcomes sought for freshwater in the Region diffuse discharges need to become more actively managed.

Nutrient Management

From the work done to date it appears that intensive pastoral and arable farming and horticulture, are likely to be the major sources of nutrients in areas with elevated levels. To date the Taruheru River, and some Waipaoa River tributaries on the Poverty Bay Flats have been identified as the locations where nutrient levels are elevated. If further intensive horticulture, arable or pastoral farming is developed in other locations, then it can be expected that without careful management, similar issues will arise.

The approach generally proposed around nutrients is:

- To define intensive horticulture, arable and pastoral farming
- to work with the various industry groups, farmers and growers and apply Best Practice measures which have been developed to existing intensive farming activities through Permitted Activity standards, with a 5 year transitional period to allow Industry Codes of Practice and Best Practice measures to be put in place. The implementation of these measures is required to be outlined in a Farm Environmental Management Plan which is provided to the Council.

Depending on the landuse type, the Farm Environmental Management Plan is proposed to:

- A Land and Environment (LEP) Plan produced under the Beef and Lamb New Zealand Framework
- A plan produced under the Codes of Practice and Best Practice Guidelines developed by HortNZ for nutrient and sediment management

- A plan produced under the Codes of Practice and Best Practice Guidelines developed by the Foundation for Arable Research for nutrient and sediment management
- A plan produced under the Best Practice Guidelines developed by Dairy NZ

In the case of the discharge of greenhouse nutrient solution, this is proposed as a Permitted Activity provided it is done in accordance with the Code of Practice for Management of Greenhouse Nutrient Discharges (2007).

Intensive Livestock Farming

With regard to intensive livestock farming, because of the damage which can be caused to the structure of the banks of waterbodies, and their values from direct winter stock access, a new Winter Intensive Grazing Rule is proposed. This would allow winter intensive grazing (of more than 18 stock units/hectare adjacent to a waterbody) as a Permitted Activity provided that stock are excluded from the edge of streams, lakes and wetlands from 1 May – 30 September. This method would not require permanent fencing, but the exclusion of stock from damaging the banks of waterbodies and associated water quality during the time when their impact is likely to be greatest. This Rule is proposed to apply to new and existing winter intensive grazing, and would require Council to work with farmers to raise awareness about the issue prior to winter 2016.

New Activities of Intensive Farming

With regard to new activities of intensive farming – whether it be arable farming, horticulture or intensive sheep and beef farming (but not Dairy Farming), diffuse discharges from these activities are proposed as a Permitted Activity in most locations – provided that:

- a Farm Environmental Management Plan is developed; and
- where this involves intensive livestock grazing (greater than 18 stock units/hectare) stock must be excluded from the margins of lakes, wetlands or permanently flowing rivers and stock crossing points should be bridged or culverted.
- Diffuse discharges would not be discharging to a Regionally Outstanding Waterbody or Regionally Significant Wetland
- Water quality limits for the receiving waterbody for the diffuse discharges have not been exceeded

With regard to dairy farming, because of the multiple potential diffuse sources of nutrients (direct grazing, dairy shed effluent, silage, feedlots etc) diffuse discharges from new activities are proposed as a Controlled Activity provided that:

- a Farm Environmental Management Plan is developed; and
- stock must be excluded from the margins of lakes, wetlands or permanently flowing rivers and stock crossing points should be bridged or culverted;
- Diffuse discharges would not be discharging to a Regionally Outstanding Waterbody or Regionally Significant Wetland or to a waterbody where the water quality limits have been exceeded.

In areas where diffuse discharges from new intensive farming activities would discharge to a Regionally Outstanding Waterbody or Regionally Significant Wetland, or where water quality limits have been exceeded, then they are proposed as a Discretionary Activity.

Proposed Approach to Managing Discharges of Solids

These provisions would cover things like fertiliser applications, silage, solid waste at farms, offal pits, corn waste, bark, agricultural manures, processed vegetable waste as well as Landfills.

Currently these are managed through the Discharges Plan, with Permitted Activity standards, and beyond this as a Discretionary Activity.

A similar approach for the Freshwater Plan is proposed, but in order to provide more clarity and certainty, specific activities are proposed to be identified in more detail, and limits set around the size of the discharge, after which a Discretionary Activity consent is required. Further work is currently being done looking at this in more detail.

Proposed Approach to Managing Discharges from Contaminated Sites

These are currently a Discretionary Activity within the Discharges Plan, and this approach is proposed for the Freshwater Plan.

Proposed Approach to Managing Discharges from On-site Wastewater Systems

These provisions have been very recently reviewed by the Council, and it is proposed to keep the provisions largely as they are, with some minor changes to reflect changes in irrigation standards for treated wastewater.

Non Regulatory Methods

In order to achieve the Outcomes sought for freshwater in the Region, and manage the effects of discharges, a range of non regulatory methods are required. In particular a significant emphasis and resource from Council will be needed to help farmers and growers move towards Best Practice and reduce the impacts of intensive farming activities on water quality. The proposed approach introduces new Rules for a range of previously unregulated activities with some transitional periods. These transitional periods are proposed as a time of active Council staff activity – working alongside growers, farmers and industry groups to develop Farm Environmental Plans, and to implement the Codes of Practice developed by industry organisations.

In addition, Council has an important role as a landowner to demonstrate good practice in its own activities – whether it be excluding stock from waterways in the Waipaoa flood control scheme, undertaking riparian management to improve whitebait spawning, or working alongside landowners in priority catchments to identify ways to reduce faecal bacteria at contact recreation and food gathering sites.

This non regulatory activity is critical to achieve successful implementation of the Plan, and will need to be explicitly provided for and funded in Council's Long Term Plan, alongside the regulatory measures included in the Freshwater Plan.

Summary

The proposed approach to discharges in the Freshwater Plan has been developed to reflect the Outcomes sought for the management of freshwater, to protect the key values identified and also to build on the learnings of implementing the Discharges Plan over the last 16 years. A mix of new and existing measures are proposed with a focus on managing the identified water quality issues, and protecting important waterbodies within the Region.

APPENDIX

Discharges to Water and Land: Draft Policies and Methods

Policy Wording	Regional Rules	Other Methods
<p>Section: Liquid Discharges – Point Source</p>		
<p>Manage point source discharges to land and water so that the existing ecosystem functions within the Region’s water bodies are retained and that point source discharges to sensitive aquatic ecosystems, nohoanga (food gathering sites) and important swimming sites are avoided where possible and that point source discharges to Regionally Significant Wetlands and Regionally Outstanding Waterbodies.</p>	<p>Permitted Activities – Within Performance Standards</p> <ul style="list-style-type: none"> • sewage overflows from sewerage reticulation • discharges from groundwater pump tests • dye tracing • discharges from reservoirs <p>Discretionary Activities</p> <ul style="list-style-type: none"> • Other point source discharges except to Outstanding Waterbodies and Regionally Significant Wetlands • Point source discharges where this will result in a water quality limit being exceeded in the receiving waterbody 	<p>Council upgrades to its sewerage reticulation to reduce the frequency of overflows</p> <p>Council to work with the industry to get more truck wash facilities and promote good practice.</p>
<p>Encourage discharges to land or constructed wetlands before water where :</p> <ul style="list-style-type: none"> • liquid wastes have high levels of organic waste or other contaminants that are likely to be toxic to aquatic organisms, or • where the effects of the discharge are either uncertain or likely to result in the water quality limits for the receiving water body to be exceeded. 	<p>Non Complying Activities</p> <ul style="list-style-type: none"> • Point source discharges to Outstanding Waterbodies and Regionally Significant Wetlands • Point source discharges beyond water quality limits <p>Prohibited Activities</p> <p>Discharges of:</p> <ul style="list-style-type: none"> • Untreated sewage (except emergency overflows) • Solid or hazardous waste, or solid animal waste • Untreated animal effluent from an effluent storage facility • Organic waste or untreated leachate from organic waste storage 	<p>Council will continue to consult with tangata whenua over waste disposal options.</p> <p>Where waterbodies are degraded the Council will include targets and methods for restoration of water quality and include them in the relevant Catchment Management Plan</p>
<p>There are no direct discharges to surface water bodies or groundwater of:</p> <ol style="list-style-type: none"> 1. Untreated sewage, wastewater (except as a 	<ul style="list-style-type: none"> • Untreated industrial or trade waste 	<p>Provide information and advice to the public, industry and land users on</p>

Policy Wording	Regional Rules	Other Methods
<p>result of extreme weather related overflows or system failures)</p> <ol style="list-style-type: none"> 2. Solid or hazardous waste or solid animal waste 3. Animal effluent from an effluent storage facility or stock holding area 4. Organic waste or leachate from storage of organic material; and <p>Untreated industrial or trade waste</p>		<p>the requirement for, and proper handling of, waste discharges.</p>
<p>Section: Liquid Discharges – Discharges to Groundwater and Bedrock including from bore construction</p>		
<p>Manage the use of bores and galleries, including decommissioned bores, so that they do not result in the contamination of surface water or groundwater through backflow of water, or surface water and contaminants entering bores or galleries.</p>	<p>Controlled Activities</p> <ul style="list-style-type: none"> • Installing a groundwater bore in accordance with bore standards <p>Discretionary Activities</p> <ul style="list-style-type: none"> • Any other bores (including oil and gas bores, groundwater abstraction bores not meeting standards) except where these occur in or adjacent to a Regionally Outstanding Waterbody or Regionally Significant Wetland • Discharges to groundwater and bedrock (this includes Managed Aquifer Recharge, Fracking and Deep Well Injection) except where these occur through or within 50m of a Regionally Outstanding Waterbody or Regionally Significant Wetland <p>Non Complying Activities</p> <ul style="list-style-type: none"> • Any bores or discharges to groundwater and bedrock where they occur through or within 50m of a Regionally Outstanding Waterbody or Regionally Significant Wetland 	<p>Requiring keeping of records Bore inspections Paying a monitoring fee More Methods to be developed</p>
<p>Any bore penetrating bedrock is cased to prevent any potential contaminants leaking into the overlying aquifers, and when decommissioned, the release of contaminants from the bedrock into the overlying aquifers, and any entry of contaminants from the land surface into the well or bore is prevented.</p>		
<p>Avoid groundwater or surface water contamination from the use of chemicals, materials or additives or the escape of hydrocarbons during the exploration for, or extraction of, hydrocarbons in solid, liquid or gaseous form.</p>		

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Section: Liquid Discharges – Stormwater		
<p>Manage the impacts of stormwater discharges from urban Gisborne through:</p> <p>a) Promoting low impact stormwater management and requiring it where there is a need to:</p> <ul style="list-style-type: none"> • Improve the quality of stormwater discharges; or • Reduce peak flows associated with additional runoff; or • Protect outstanding water bodies and wetlands; or • Protect the values of sensitive receiving environments; and <p>b) Require significant stormwater discharges to provide a stormwater management plan that ensures water quality objectives, targets and limits for the receiving water body will not be compromised by the discharge</p>	<p>Permitted Activity</p> <ul style="list-style-type: none"> • Existing storm water discharges from the public network • New storm water discharges within standards – no discharges to Outstanding Water Bodies and Regionally Significant Wetlands • Large areas (>1000m²) of impermeable surfaces required to treat storm water before discharge <p>Restricted Discretionary Activity</p> <ul style="list-style-type: none"> • Pumped storm water drainage <p>Discretionary Activity</p> <ul style="list-style-type: none"> • All other storm water discharges 	<p>Development of an Integrated Catchment Management Plan for the Gisborne City Stormwater system within a set timeframe– and through this identification of works to improve water quality Council works eg installing gross pollutant traps, sand filters, ponds or other stormwater treatment devices</p> <p>Design Guidelines</p> <p>Review of the Engineering and Works Code of Practice</p> <p>Consequential change to the Subdivisions Rule in the Discharges Plan</p>
Section: Diffuse/ Non Point Source Discharges		
<p>Work with industry and landowners to develop best practice measures for the management of diffuse discharges and progressively implement these through catchment management plans.</p>	<p>Permitted Activity</p> <ul style="list-style-type: none"> • Diffuse discharges from existing horticulture, arable and pastoral farming activities • From 2016 in winter (1 May-30 September) intensively grazed (>18 stock units/ha) stock must be excluded from the banks of rivers, lakes 	<p>Guidelines</p> <p>Case studies</p> <p>Demonstration projects</p> <p>Advisory service (eg development of Farm Environmental</p>
<p>Where intensive land use occurs, or water quality limits are exceeded, require industry best practice</p>		

Policy Wording	Regional Rules	Other Methods
measures to maximise nutrient use efficiency and minimise nutrient run-off and sedimentation to be adopted.	<p>and wetlands.</p> <ul style="list-style-type: none"> • Intensive arable, horticulture and pastoral farming activities established prior to the date of notification of this plan, from 1 July 2020 onwards shall have prepared a Farm Environmental Management Plan in accordance with Good Management Practice and provide those records to the Gisborne District Council. • New activities of intensive arable, horticulture, and sheep and beef farming established after the date of notification of this plan, except where diffuse discharges would be to: <ul style="list-style-type: none"> ○ an Outstanding Water Body or Regionally Significant Wetland; or ○ a waterbody where the water quality limits have been exceeded provided that they have prepared a Farm Environmental Management Plan and that stock are excluded from waterbodies • Discharge of greenhouse nutrient solution – in accordance with the Code of Practice for Management of Greenhouse Nutrient Discharges (2007) <p>Discretionary Activity</p> <ul style="list-style-type: none"> • Other diffuse discharges from intensive farming 	<p>Management Plans) Education Programmes Catchment Management Plan specific rules</p>
Section: Solid Discharges		
Discharges of solids to land should be managed so that there are no diffuse discharges or that diffuse	<p>General Rule</p> <ul style="list-style-type: none"> • Applies to Permitted Activities 	To be developed

Policy Wording	Regional Rules	Other Methods
discharges are within the water quality limits for that waterbody.	<ul style="list-style-type: none"> • Total Nitrogen to not exceed : <ul style="list-style-type: none"> ○ 150 kg/ha/year and 30 kg/ha/31 days onto grazed pasture underlain by sandy and pumice soils ○ 200 kg/ha/year and 50 kg/ha/31 days onto grazed pasture underlain by other soils ○ The reasonable nitrogen requirements of the crop being grown on ground other than grazed pasture <p>Permitted Activity</p> <ul style="list-style-type: none"> • Fertiliser application where applied in accordance with the Fertiliser Association Code of Practice 2007 except within 20m of Outstanding Water Bodies • Depositing of inert substances (within a limit and standards) • Solid waste at farms – 50m³ per year within standards • Stockpiles, bark, agricultural manures, offal pits, silage pits etc within standards and with maximum volume per year on the farm they are produced <p>Discretionary Activity</p> <ul style="list-style-type: none"> • All other solid discharges – including landfills within standards <p>Non Complying Activity</p> <ul style="list-style-type: none"> • Landfills which don't meet the standards <p>Prohibited Activity</p> <ul style="list-style-type: none"> • Discharges of ozone depleting substances 	
Landfills and other waste collection or disposal sites are designed and sited to avoid the contamination of groundwater or surface water either through the direct discharge of hazardous substances to water, or the leaching of contaminants into or onto land where they may enter water.		
<p>Siting of new facilities for handling, processing, treating storing or disposing of solid waste, and associated contaminated or potentially contaminated materials (including landfills, transfer stations, treatment or bulk storage facilities) should be avoided in or near the areas set out below, if they would create adverse effects. (Long list of locations)</p> <p>The adverse effects of any existing landfill or waste disposal site will be avoided, remedied or mitigated to the fullest extent practicable.</p>		

Policy Wording	Regional Rules	Other Methods
Section: Discharge Consents – timeframes, assessment criteria		
Where water quality limits have not been exceeded, and there is a high level of certainty of outcome, issue discharge consents for 15-30 years.		NA
When considering applications for resource consents for point-source discharges of liquid waste to land or water, Council may require as a condition of consent specific Discharge Management Plans. These Management Plans shall deal with any relevant matters listed in Schedule xxx of the Plan. Conditions of consent should require that holders of such consents shall annually review the Discharge Management Plan and provide an annual report to the Council identifying the matters specified in Schedule xxx of this Plan that are relevant to the consent.		
Section: Non regulatory mechanisms		
<p>Council will develop a package of effective non regulatory methods aimed at improving water quality and ecosystem health in all water bodies. These could include:</p> <ul style="list-style-type: none"> • Best practice guidelines – including promoting existing industry best practice guidelines • Demonstration projects and case studies • Provision of advice and information at a farm/property or activity scale on improving water quality • Development of water quality improvement plans for farms in priority areas 	NA	<ul style="list-style-type: none"> • Best practice guidelines – including promoting existing industry best practice guidelines • Demonstration projects and case studies • Provision of advice and information at a farm/property or activity scale on

Policy Wording	Regional Rules	Other Methods
Financial assistance programmes for riparian retirement, wetland protection and development and restoration of priority water bodies		<p>improving water quality</p> <ul style="list-style-type: none"> • Development of water quality improvement plans for farms in priority areas
<p>Council will develop demonstration projects on its own land which provide case studies of best practice for water quality management. These could include:</p> <ul style="list-style-type: none"> • Improvement in habitat in fish spawning areas • Stock exclusion requirements in lease agreements for stopbank areas <p>Construction of fish passages in priority locations</p>		
Council will work with iwi to identify through the catchment management planning process targets and methods for the restoration of the mauri of degraded water bodies.		

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