

Appendix B:

Infrastructure Improvements on Private Property Strategy

Infrastructure Improvement on Private Property Strategy (IIOPPS)

Endorsed by GDC Asset and Infrastructure Committee - 13 June 2019

Adopted by Council - 27 June 2019

TABLE OF CONTENTS		Page
PREAMBLE		2
1	Purpose	3
2	Principles	3
3	Policies	5
APPENDICES		
1.	DrainWise priority action assessment framework	9
2.	Responsibility decision matrix	12
3.	Criticality ranking	13
4.	Enforcement action diagram	14
5.	Definitions	15
SCHEDULES		
	Schedule 1 – DrainWise Standard Operating Procedures (SOP)	19

Infrastructure Improvement on Private Property Strategy (IIOPPS)

Preamble

Gisborne District Council - Te Kaunihera o te Tairāwhiti (Council) is committed to protecting our community, their homes, their private land, and areas used by everyone from the effects of wastewater overflows. We do this by building and maintaining a public stormwater and wastewater network in the Gisborne urban area and carefully managing it.

The public pipes are only half of the entire network. The other half are private drains and pipes owned by property owners, which also need to be maintained. This means that without the input and cooperation of property owners, we will continue to experience the negative impacts of an urban wastewater system that gets easily overwhelmed when it rains heavily.

This Infrastructure Improvement on Private Property Strategy (IIOPPS) and the DrainWise programme of works are two ways that Council is working in partnership with property owners to make sure that private property drainage infrastructure is working properly, and compliant with the laws that relate to private drains, healthy water and ecosystems and healthy people.

This strategy is enduring, which means it is understood by the public, reflects mātauranga Māori, and is underpinned by regulation and enforcement.

1 Purpose

The purpose of this strategy is to:

- Guide the process that will result in the restoration of broken, illegally-plumbed or missing stormwater and wastewater infrastructure on private property in the Gisborne urban area. This includes the circumstances in which Council will:
 - Require property owners to fix drainage on their property.
 - Make public (Council-owned) infrastructure improvements on private property.
 - Escalate a case of non-compliance to the District Court to issue an order to fix.
 - Consider arrangements that will help make private property infrastructure improvements more affordable.
- Specify the principles that underpin Council's approach to compliance.
- State the legislative instruments and laws that Council will use to enforce compliance. These relate to private drains, healthy water and ecosystems and healthy people.

2 Principles

The principles that underpin the Infrastructure Improvement on Private Property Strategy (IIOPPS) approach to compliance, monitoring and enforcement (CME) are consistent with the Ministry for the Environment's CME best practice guidelines¹ and Council's customer focus.

Council will apply these principles when carrying out CME activities associated with the DrainWise programme.

- ▶ **Tairāwhiti Wai** is one of Council's three strategic priorities, and the foundation principle in this strategy. It reflects our understanding of, and commitment to:

Te Hauora o te Taiao - the health of the environment

Te Hauora o te Wai - the health of the waterbody

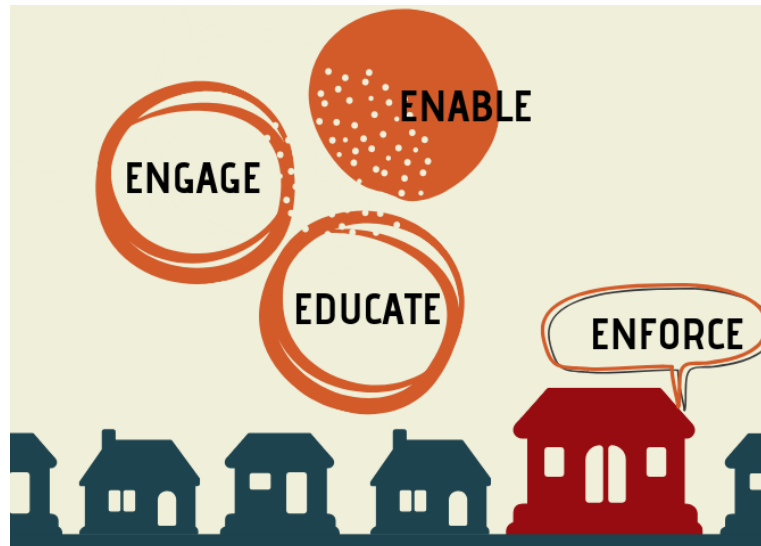
Te Hauora o te Tangata - the health of the people

The inextricable connection between these things is the very reason why Council is working to resolve private property wastewater issues.

¹ Ministry for the Environment. 2018. Best Practice Guidelines for Compliance, Monitoring and Enforcement under the Resource Management Act 1991.

▶ **The 4E's – Engage, Educate, Enable and Enforce**

- We apply the 4E Model as a 'spectrum' (rather than in a linear way), which is considered the most effective way of achieving the highest levels of compliance with regulation².



- Using the model in this agile way means we are able to observe what best influences behaviour change and refine our approach to encourage the highest levels of compliance. It also means that even though we have set up the right mechanisms and processes to escalate matters of non-compliance to the District Court, Council is not obligated to do so and can continue to seek alternative solutions.
 - In line with a compassionate and people-centred approach, we will exhaust every other available mechanism, including consideration of financial assistance or a special needs grant, before initiating enforcement action. Amongst other requirements, Significant Financial Hardship (SFH) as defined is taken into consideration.
- ▶ **Fair, reasonable and proportional**
- We will actively identify those private properties whose pipes (or absence of pipes) are contributing to issues in the public wastewater network.
 - We will be clear with the information and explanations we give to property owners about what they need to do to make sure that they are doing what the law says (compliant). And we will take all reasonable steps to help them identify the best drainage solution at the lowest cost.
 - We will apply regulatory interventions and actions appropriate to the situation.
 - Property owners who voluntarily permit drainage investigations and are willing to make required changes to their infrastructure, but are unable to pay within the set timeframe, will be granted reasonable extensions of time to get the work done – to help make it easier to pay for.

² This approach is endorsed in the 2013 Productivity Commission report *Towards Better Local Regulation*

▶ **Consistency and transparency of process**

- Our actions will be consistent with the applicable legislation and within our powers. These laws are set out in:
 - Resource Management Act 1991 (RMA)
 - Building Act 2004 (New Zealand Building Code (NZBC))
 - Local Government Act 1974 (LGA)
 - Health Act 1956 (HA)
 - Healthy Homes Guarantee Act 2017 (HHGA)
- The way we go about our private property drainage investigations, working with the people who live in and own these properties, will be consistent for similar circumstances.
- Standard Operating Procedures (SOPs) will be developed as required and included as schedules to this strategy.
- We will ensure our staff have the necessary skills and training, and that there are effective processes and quality management systems in place to support them to implement a highly effective compliance model.
- We will document and take responsibility for our regulatory decisions and actions. We will measure and report on our regulatory performance.

▶ **Collaborative and effective**

- We will ensure the community has access to information about what correctly connected stormwater and wastewater infrastructure looks like, and the actions they can take to maintain a properly working drainage system.
- We will give property owners engaged in the DrainWise programme of private drainage investigations, all Council-held information about the condition and function of their stormwater and wastewater drainage infrastructure. This can also include free-of-cost plumbing, drainlaying and technical advice.
- We will include the known status of drain health in property and land information management (LIM) reports. There are standard fees for LIM requests.
- We will report on the actions that Council is taking to address stormwater and wastewater system issues and non-compliance.

▶ **Affordable**

- We will carry out our work in a manner that is sensitive to the community's ability to pay for works.
- There may be circumstances where Council will consider a request to set up the costs of urgent drainage works on their property as a debt to be paid back to Council at agreed terms and interest rates.

3 Policies

▶ General

Council will:

- 1) Council will proactively manage private drainage infrastructure (*directly* or *indirectly*) where this is contributing to the consequences of rainwater inflow or infiltration into the public wastewater network.
- 2) Provide an accessible outlet for private property wastewater and stormwater infrastructure to discharge to.
- 3) Assess its ability to help private property owners resolve their on-property wastewater infrastructure issues using the responsibility decision matrix and criticality ranking (Appendices 2 & 3).
- 4) Seek to make voluntary compliance as easy and affordable as possible.
- 5) Provide advice on the lowest possible cost infrastructure improvements that will resolve the issue (in terms of being cost effective and fit for purpose).
- 6) Reinspect properties where private property infrastructure issues have been corrected by the property owner. This will enable Council to be confident that private property drainage infrastructure is compliant with the laws that relate to private drains, healthy water and ecosystems and healthy people.

Note: Any operational policies developed by the 4 Waters Strategy unit to support the implementation of the IOPPS will be referenced in Schedule 1.

▶ Considering public versus private

- 7) Council will, as a first step, *indirectly manage* drainage issues that are the responsibility of the property owner, so that the issues are managed and paid for by the private property owner. Appendix 2 will be used to determine responsibility.
- 8) Council will *directly manage and carry out works* on private property (as authorised under s.459 Local Government Act 1974) only in exceptional circumstances, as informed by the benefits analysis and criticality assessment. This caters for situations where there is a high risk that cannot be managed indirectly or actioned by the property owner within the necessary timeframe.
- 9) As provided for in Appendix 2, where multiple properties are affected and catchment issues are the cause of inflow or infiltration, Council will *directly manage* and undertake public network improvement works (such as network upgrades or extensions) that will reduce flooding on private property because there is a community benefit to preventing the wastewater system being flooded with rainwater.
- 10) Council will refer any requests to carry out public network improvement works or private works on private land to Council's Director Lifelines. Sufficient technical, legal and other relevant information will be provided to enable a decision to be made on such a request.
- 11) Council will prioritise infrastructure improvements on private property based on the assessment framework Appendix 1.

▶ **Cost sharing, recovery and risk**

- 12) Where a property owner is issued a notice to fix requirement³ from Council to address private stormwater and wastewater issues, and Council elects to contribute to costs of any action or provides technical expertise and support, Council will do so without prejudice and without accepting any responsibility for works completed.
- 13) Where Council acts to *directly manage* stormwater or wastewater infrastructure on private property where the issue is in part or wholly caused by a property owner or other third party, Council will enter into a written agreement with that third party in advance of any work being carried out. Where emergency works are carried out without a written agreement in place, Council will wherever possible seek to recoup public costs from that party.
- 14) Where Council will incur costs or additional risk, any financial or other assistance will be subject to a written agreement specifying:
 - a) where a payment is proposed, the purpose and timing⁴ of any payment and any design requirements for works to be covered by the payment
 - b) where Council proposes to carry out physical works as opposed to making a payment to a third party, the purpose and scope of works will be clearly described
 - c) asset ownership and maintenance and renewal responsibilities
 - d) ongoing risks and liabilities
 - e) any applicable timeframes and delivery targets
 - f) any ongoing obligation (if any) by the third party or Council, for example, to maintain or monitor the works.

▶ **Vesting assets to Council**

- 15) Where an asset is to be vested in Council, it needs to be in accordance with the Engineering Code of Practice and Council's Developer Contributions Plan.

▶ **Protection of public stormwater and wastewater infrastructure**

- 16) Council will ensure that all stormwater and wastewater infrastructure under its ownership or management has appropriate protection and access rights to ensure long term functioning and efficient operation and maintenance, utilising the following as appropriate:
 - a) Council ownership (by purchase or vesting) of underlying land
 - b) covenants, easements or other appropriate encumbrances on land titles
 - c) other form of legal agreement with a landowner.

³ This is a statutory notice that requires the property owner to fix an infrastructure issue.

⁴ Reimbursement of costs on completion of required works is preferred over upfront payment, to ensure works are carried out as required.

- 17) The circumstances where Council will seek protection or access rights on private land may include the following:
- a) ongoing asset operation and maintenance is or will be wholly or partly the responsibility of Council
 - b) ongoing asset operation and maintenance is not the responsibility of Council, but legal operation and maintenance agreements have been entered into with private landowners and Council performs a monitoring and compliance role
 - c) ongoing asset operation and maintenance is not the responsibility of Council, but circumstances are high risk and it is deemed critical to have Council oversight.
- ▶ **Strategic planning for private property stormwater and wastewater infrastructure**
- 18) Council will act in accordance with higher level national and regional policies that affect *stormwater* management or require action as a result of ecosystem or biodiversity requirements, and this policy and its appendices and schedules will be reviewed and amended as appropriate in response to national and Council policy amendments and developments.
- 19) Council will seek to consider whole catchment issues and opportunities and priorities for network enhancement over time and carry out renewals and maintenance as per agreed levels of service in asset management plans.
- ▶ **IIOPP Strategy effectiveness**
- 20) The following indicators will be used to measure effectiveness of this strategy:
- a) Percentage of successful private property interventions (works completed through implementation of the strategy).
 - b) The number of times emergency relief valves are opened during heavy rain events is reduced to less than two per year.
 - c) Percentage of urban households that discharge water effectively to the stormwater system.
 - d) Other indicators as developed.

APPENDIX 1: DRAINWISE PRIORITY ACTION ASSESSMENT FRAMEWORK

[Extracted from the *DrainWise Wastewater Discharge Reduction Plan*, December 2016]

2.1 Flood waters flowing over and into gully traps (High Impact / Priority)

Flood waters flowing over and into gully traps

- Drain property flooding to the Council system for 10 year flood level
- Raise gully traps above the 10 year flood level
- Divert roof water to Council system if required
- Prevent flooding getting to the property

1. All on-property flooding that has the potential to impact on a house or the wastewater network must be drained to an approved stormwater outlet for a rain event that has a 10% probability of occurring annually (10% AEP). This is in order to prevent stormwater entering the gully trap/s or affecting the house. Council may fund and manage on property flooding including the use of grants/subsidies if available.
2. 10% AEP (flood level) will be determined by the Rain on Ground Map produced by Council's stormwater model. This assumes the worst case – where no formal drainage exists other than natural flow paths.
3. All gully traps must be 150mm below floor level or meet the requirements of the building code. This is a property owner's cost.
4. Gully traps to be raised once any on-property flooding is resolved. Council may fund.
5. If downpipes are discharging directly to ground in a flood area and are contributing to flooding the downpipes will be required to be connected to an approved outlet. Council may fund and manage.
6. Where Council construct a drain on private property it will generally be designated as a common shared private or private drain unless there is a need to maintain an interest in the drain(s) and will declare it to be a public drain. Criteria that will be used to assess a public drain will be:
 - a. Where 3 or more properties are affected by flooding and the most practical option is one drain.
 - b. Council needs to provide a public drain onto private property for efficient drainage of the network.
 - c. Where Council does not provide an approved outlet nearby.

2.2 Water getting into leaking gully traps (High Impact / Priority)

Water getting into leaking gully traps

- Inspect and repair/replace broken and leaking gully traps

7. Inspect, repair or replace any leaking gully traps as determined by a water test. Council may fund.
8. If a major repair of the gully trap is required the condition of the sewer lateral will also be assessed to check if additional repairs are likely which may lead to reduced costs overall and less disruption. Council may fund.

2.3 Roof water being piped directly to gully traps or lateral wastewater pipes (High Impact / Priority)

Roof water piped into gully traps or lateral wastewater pipes

- Require downpipes to be connected directly to Council system

9. Where downpipes from roofs are directly discharging into gully traps the property owner is responsible for paying for their removal and piping to an approved outlet. Completion within 1-3 months.

2.4 Lateral wastewater pipes from houses to the main network leaking (Medium Impact / Priority)

Lateral wastewater pipes leaking

- Inspect, repair/replace, prioritise based on age and leakiness (range of timeframes to achieve compliance)

10. Sewer laterals will be inspected using CCTV based on risk of leakage. If faults are identified repairs/replacement will be required.
11. All private sewer lateral repairs/replacement will be funded by the property owner/s. There will be flexibility as to when the repairs/replacement will be required to be completed. From time of notification:
- High priority repairs/replacement will have 2 years to complete, and will have some or all of:
 - Lateral located in a ponding area
 - Identified faults
 - Pipe age older than 70 years
 - High leakage / infiltration
 - High groundwater level.
 - Medium priority repairs/replacement will have 5 years to complete, and will have some or all of:
 - Lateral located in a ponding area
 - Identified faults
 - Medium Leakage/infiltration
 - Pipe age older than 50 years.
 - Low priority repairs/replacement will have 10 years to complete, and lateral has identified faults.

2.5 Council's wastewater system leaking at main and lateral wastewater pipes and access points (Low Impact / Priority)

Council's pipes and access points leaking

- Continue annual renewal of mains, manhole and Council's portion of the sewer lateral

12. Council will maintain a renewal programme approved as part of the Long Term Plan process. Priority will be given to the leakiest pipes where possible.

APPENDIX 2: RESPONSIBILITY DECISION MATRIX

There are opportunities for Council to assist private property owners. These depend on where the water is coming from.

This is a summary of circumstances that will contribute to determining where responsibility for fixing private property drainage issues sit.

Where is the water coming from?	Who should pay?	What will Council do in this scenario?
Rainwater flows from Council asset, for example, road, easement or Council land	Council	Arrange for contractors to fix the issue.
Where the public stormwater network is: <ul style="list-style-type: none"> • Under-capacity and is part of the problem. • Too far from a private property boundary for a private connection. • The public connection point presents unreasonable challenges for the property owner. 	Council	Arrange for contractors to fix the issue.
Rainwater flows from multiple neighbouring properties (catchment area), ordinarily by means of an overland flow path	Council or property owners	Property owners will be required to ensure roof water is connected into the public network. If flooding is caused by more than mismanaged roof runoff, Council will investigate public infrastructure solutions to capture surface flows.
Rainwater flows from neighbour's property	Neighbour	Mediate the discussion between the property owner experiencing the water ponding issue and the owner of the property causing the issue (this is a building code compliance matter).
Directly off the roof or driveway of the same property experiencing the ponding issue	Property owner	Work with the owner to find the most effective fix at the lowest cost. Issue a Notice to Fix and return to re-inspect after the set timeframe has expired.

Property owners are wholly responsible for all private wastewater and stormwater infrastructure on their property.

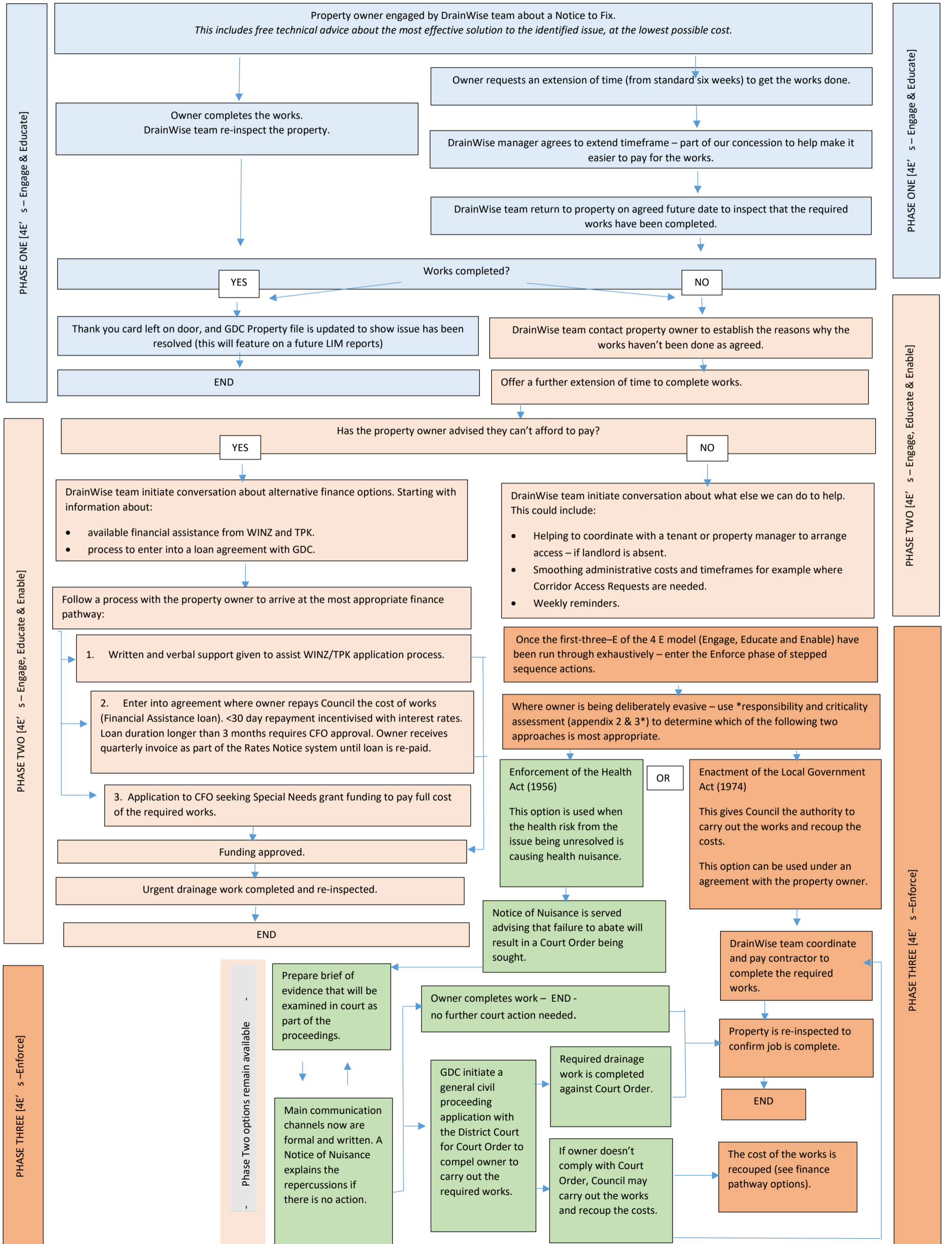
APPENDIX 3: CRITICALITY RANKING

Category	Inflow									Infiltration				
Detail	Direct connection between private stormwater and wastewater infrastructure			On-property ponding / flood waters flowing into private wastewater infrastructure						On-property wastewater infrastructure leaking			On-property ponding / flood waters contribute to groundwater entering below-ground wastewater infrastructure	
Examples	Downpipes (roof water) piped into gully traps	On-property stormwater (rainwater) laterals connected into wastewater pipes	Roof runoff directed into wastewater inspection pits or terminal vents	Open inspection pits	Open terminal vents	On-property wastewater pipes open to inflow	Gully trap surrounds too low	Gully trap surrounds cracked	Unsealed terminal vents and inspection pits	Wastewater pipes cracked / broken / joins leaking	Gully traps broken below-ground	Terminal vents and inspection pits broken below-ground	Stormwater downpipes do not connect to an approved Council outlet	Roof spouting is broken
	1	1	1	2	2	2	3	3	3	4	5	5	6	7

This is used in conjunction with Appendix 2- responsibility matrix- to prioritise where Council funding (through the public pipes on private property scheme) may be best applied for maximum effect, and the priority focus areas for the DrainWise programme (down pipes out of gully traps, and lateral connections)

APPENDIX 4: ENFORCEMENT ACTION DIAGRAM

This diagram describes the steps, where it has been determined through the DrainWise programme, that there is a private property drainage that is the owner's responsibility to fix.



APPENDIX 6: DEFINITIONS

The following terms have been used in the strategy. We have defined them here for the purpose of being clear about how these words apply in the context of this strategy.

Costs

- Capital: The cost of undertaking works or constructing/enhancing/renewing assets, including planning, design, acquisition and support costs;
- Operational: The ongoing cost of using, maintaining and altering assets in sound working order in accordance with accepted industry and Council standards; and
- Life-cycle: The sum of the acquisition and ownership costs of an asset over its life-cycle from design stage, manufacturing, use, and maintenance through to disposal.

Cost-Benefit Analysis

Assessment of benefits and costs, expressed in monetary or other terms, where possible adjusted so that all flows of benefits and costs over time are expressed in terms of their Net Present Value (NPV).

Effect

Includes:

- a) any positive or adverse effect
- b) any temporary or permanent effect
- c) any past, present, or future effect
- d) any cumulative effect which arises over time or in combination with other effects— regardless of the scale, intensity, duration, or frequency of the effect, and also includes:
- e) any potential effect of high probability
- f) any potential effect of low probability which has a high potential impact.

This is the definition used in the Resource Management Act 1991.

Significant Financial Hardship

The KiwiSaver Act 2006 defines SFH as an inability to meet minimum living expenses. In the context of this strategy it is used to recognise that there are times where some people will find it impossible to meet the financial obligations of making their property compliant without some sort of financial assistance.

Work and Income New Zealand (WINZ) have grants available for New Zealand citizens or permanent residents who need money for urgent or unexpected costs – and for whatever reason, are unable to pay another way. The criteria for these grants is set by WINZ, but the main things they look at in their process to considering an application, include:

- how much you and your partner earn
- any money or assets you and your partner have
- whether you knew the cost was going to come up
- whether you could have covered the cost yourself
- how the grant/financial assistance/payment will help your situation

Council doesn't have any influence on this assessment, however if we have asked a property owner to do plumbing or drainage work on their property – they will have a letter from us describing what needs to be fixed, and by when. This letter should be used as part of an application for funding from WINZ.

Council will only consider an application for its Special Needs grant (to be paid back within agreed timeframes and interest rates) or Financial Assistance fund (not required to be repaid to Council) if the property owner has applied unsuccessfully to another government fund.

Land

Includes all estates and interests, whether freehold or chattel, in real property. It includes:

- a) estates and interests in land
- b) buildings and other permanent structures on land
- c) land covered with water
- d) plants, trees, and timber on or under land

This is the definition used in the Property Law Act (2007) and Land Transfer Act (2017).

Manage

Manage includes:

- Direct action (*directly*): undertaking physical works.
- Indirect action (*indirectly*): enforcement of private responsibility (including bylaws, Resource Management Act provisions including permitted activity or consent compliance actions, and Local Government Act provisions), approval of Stormwater Management Plans, education, advocacy, referral to other departments or authorities, providing advice, and may include temporary health and safety measures such as fencing or signage to mitigate risk.
- Proactive: planned monitoring and other actions that are routinely or periodically undertaken, to identify and remedy potential issues and risks and enable their prevention or mitigation prior to more significant issues occurring.
- Reactive: unplanned actions that are undertaken in response to problems that have occurred.

Mātauranga Māori

Can be defined as 'the knowledge, comprehension, or understanding of everything visible and invisible existing in the universe', and is often used synonymously with wisdom. These days, the definition is usually extended to include present day, historic, local, and traditional knowledge; systems of knowledge transfer and storage; and the goals, aspirations and issues from an indigenous perspective.

Multi-Criteria Analysis

Analysis of options involving multiple criteria (including costs and benefits), which have different means of measurement, not all of which may be monetary.

Notice to Fix

This is a statutory notice issued for breaches of the Building Act (2004, S164), Local Government Act (1974, s459), Health Act (1956, Part 2 s30), or Regulations under these Acts. A notice to fix requires the property owner to remedy a breach.

Nuisance

Is applied in this strategy as it is defined under s29 in the Health Act (1956) as:

"... a nuisance shall be deemed to be created in any of the following cases, that is to say: where any pool, ditch, gutter, watercourse, sanitary convenience, cesspool, drain, or vent pipe is in such a state or is so situated as to be offensive or likely to be injurious to health ..."

A Notice of Nuisance under the Health Act can be issued by Council directing a property owner to carry out works to fix a drainage issue where it is causing a health risk.

Order to Fix

This is a statutory notice issued by a District Court (subject to Council initiating civil proceedings). An order to fix requires the owner and the occupier to both abate and prohibit the recurrence of the nuisance. It specifies the work that must be done in order to abate the nuisance, and the time within that shall be done.

Owner

As defined in the Property Law Act (2007), in relation to land, means the holder of an estate in fee simple or a life interest in the land.

Private Land

Any land, or interest in *land*, held by a person other than the Crown; or a Crown entity within the meaning of the Public Finance Act (1989). This is the definition used in the Treaty of Waitangi Act (1975).

Property

Means everything that is capable of being owned, whether it is real or personal property, and whether it is tangible or intangible property, and includes any estate or interest in property.

The term *property* is interchangeable with the term '*private land*' and the term '*land*'.

This is the definition used in the Property Law Act (2007) and as interpreted in the New Zealand Building Code Handbook (Building Act 2004).

Practicable

Reasonably achievable having regard to the likelihood of delivering a successful outcome, the costs and affordability (public and private) of doing so (including comparisons with other options), and other constraints in any given circumstance.

Private Stormwater System

Any component of the stormwater network that drains water from premises on private land to a receiving environment or up to the point of service connection with the public stormwater network and include pipes, gutters, downpipes, catchpits, swales, subsoil drains, stormwater treatment devices, rainwater tanks and any stormwater management device or redundant stormwater system.

Note: Watercourses on private land form part of the private stormwater system unless they are part of the public stormwater network.

Private Watercourse

A watercourse running through private land.

Public Stormwater Network

Includes:

- a) any stormwater pipe, drain, drainage channel, land drainage work or treatment facility, built by Gisborne District Council or vested in or under the control or ownership of Council
- b) any stormwater drain, drain, land drainage work or treatment facility declared by the Council to be a public drain under s462 of the Local Government Act 1974.

Public Watercourse

Any watercourse on public land or watercourse declared by Council to be a public drain under s462 of the Local Government Act 1974, forming a component of the public stormwater network.

Stormwater

Stormwater is rain. When rain falls on buildings, car parks, roads and driveways, if it does not soak into the ground, it follows its natural flow path downhill until it reaches a watercourse or is collected by a pipe system (the stormwater network).

Stormwater Network

A set of facilities and devices, either natural or man-made, which are used to convey runoff of *stormwater* from land, reduce the risk of flooding, and to improve water quality, and includes:

- a) open drains and watercourses, overland flowpaths, inlet structures, pipes and other conduits, manholes, chambers, traps, outlet structures, pumping stations, treatment structures and devices.
- b) the public stormwater network.
- c) private stormwater systems.

Wastewater

Also known as sewage. Wastewater is the used water that goes down sinks, washing machines, showers, baths and toilets.

Wastewater Network

Is a big system of pipes and access points (manholes) that enables wastewater to move from individual properties to the wastewater treatment plant. In Gisborne, our wastewater network services about 14,750 homes and businesses.

Water Sensitive Design

Water Sensitive Design (WSD) approach means an interdisciplinary approach to land use and development planning, design and implementation which integrates land use and water management, to minimise adverse effects on freshwater systems and coastal environments, particularly from stormwater runoff.

Watercourse

An open channel through which water flows or collects (be it natural, modified or artificial), either continually or intermittently, or has the potential to do so, and includes river and stream beds, gullies, natural depressions, ditches, and drainage channels. In all cases, this includes associated flood zones, riparian margins, channel migration zones, wetlands and river mouths.

SCHEDULE 1: DrainWise Standard Operating Procedures

TO BE DEVELOPED BY 4 WATERS STRATEGY UNIT – as required

For example:

1. Property inspections
2. Individual Agreements for Public Pipe on Private Property (PPOPP)
3. Escalating non-compliance to District Court – to issue an order to fix.
4. Competency training