

16 UTILITIES

16.1 Background

The term ‘utilities’ refers to the facilities and services that are necessary for the functioning of the City, and includes:

- Transportation, such as roading, rail and pedestrian transport.
- Telecommunications.
- Utilities, such as energy supply, sewerage, waste disposal and water supply systems.

16.2 Resource Management Issues

16.2.1 *The sustainable management of the City’s utilities is important as they are necessary to the functioning of the City and provide the framework for future development and use of resources, including water resources.*

The City would not be able to function effectively or efficiently without essential facilities and services. Utilities are important physical resources that enable residents to provide for their economic, cultural and social well-being and their health and safety.

The future well-being of the City’s population will continue to rely on major investment and sustainable management of utilities. This investment should be soundly managed and developed, taking into account the long term environmental values and needs of the community and the environment.

An urban area with an integrated public transportation system is more resource efficient than a City completely dependent on private vehicle use. The current scale and pattern of development in Upper Hutt is based on both private vehicle and public transport use. Private motor vehicles are used by more than half of Upper Hutt’s workforce as a means to get to work. More than half of the work force travels outside of the City to work, using either public transport or private motor vehicles. Access to public transport is an important resource management issue.

Stormwater drainage systems are necessary, particularly in urban areas, for health and safety reasons. In low-lying areas drainage is needed for healthy and acceptable living conditions. In urban areas, a stormwater drainage network with safe inlets, secures the community from flooding. River and stream control systems work to minimise human and economic losses from flooding. Utilities can be affected by flooding and it is also possible for them to adversely impact on flooding patterns.

The Council's sewerage system provides a safe, cost-effective and socially acceptable system for removing human waste. An efficient sewerage system with properly designed and maintained pumping and drainage systems, sufficient treatment, and suitably located final effluent discharge points, is the best protection against pollution.

16.2.2 *Potential adverse effects on the environment caused by the development and use of utilities.*

Providing, locating and operating a network of facilities and services can impact upon both the natural and physical environment. As an example, adverse effects from the development of utilities may occur during their establishment when the visual impact of the facilities is not in harmony with environmental amenity. On the other hand, utilities often have special technical and operational requirements which place constraints on where they can be located.

Changes to the infrastructure of the City will need to be managed to avoid, remedy, or mitigate adverse effects on natural and physical resources and on amenity values.

16.2.3 *The efficient, convenient and safe movement of people, vehicles and goods in the City.*

The location, design and characteristics of activities, subdivision and development can adversely affect the safety, accessibility and efficiency of the roading network and the quality of the environment. Appropriately located activities, and well-designed subdivision and development, can contribute to the convenience and viability for access by walking, cycling and public transport. Roads themselves (including the State Highway network) contribute to the convenience, viability, and access to activities enjoyed by City residents.

16.2.4 ***The limits that rural roading places on subdivision and development.***

Mangaroa Hill Road, Blue Mountains Road, Akatarawa Road, and parts of Moonshine Hill Road and Mount Cecil Road require major upgrading to be able to accommodate further significant development. Such upgrading may have significant adverse environmental effects.

The limits that the rural roading system places on further development not only apply to formed and sealed roads, but also to the large number of 'paper roads' within the City. The pressure to subdivide with access to these paper roads can pose a public interest issue. Council could be placed in a position where it may have to spend public money on road upgrading where the community would receive little benefit in return. The limited access provisions applying to State Highway 2 and the nature of other roads in the Kaitoke area impose limits on further development in this part of the City.

16.3	Objective
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16.3.1 ***The sustainable management of physical infrastructure so that it can meet both the needs of today's community and the reasonably foreseeable needs of future generations.***

Infrastructure is an essential part of the City's physical resources, and its maintenance is essential to the social, economic, and cultural well-being of people, as well as to their health and safety. Efficient resource use relates not only to the shorter-term economic use of resources, but also to the longer-term environmental effects of resource use.

An efficient city needs effectively operating utilities. The location and operation of these utilities can adversely affect the environment.

Many sites for utility operations will be provided by statutory designations.

16.4	Policies
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16.4.1 ***To ensure that the establishment, operation, maintenance and upgrading of essential utilities in the City avoids, remedies or mitigates any adverse environmental effects.***

The City is dependent upon the efficient provision of facilities and services to maintain people's health and safety and to support economic, social and cultural activities. There should, therefore, be

opportunity to provide for the development, maintenance and use of essential facilities and services, as long as they can meet, or do not significantly compromise, environmental standards. This includes standards to address the potential adverse effects that are specific to utilities and services, such as the impacts of transmission lines and sewage disposal systems. The underground installation of facilities and services will be promoted where appropriate, in order to help avoid, remedy or mitigate adverse effects, especially on visual amenity. Where utilities are required to be sited above ground, the site or route selection process should seek to minimise adverse environmental effects.

Subdivision may be required to provide for special facilities or activities (such as substations, transformer sites, pumping station sites, and roads). There are therefore subdivision standards in each zone which recognise the special subdivision requirements for utilities.

Utilities can both be affected by flooding, and affect flood patterns. Therefore, it is appropriate that the location of utilities in flood prone areas is regulated (Chapter 33).

16.4.2

To require an assessment of alternative methods and sites for proposed utility developments which have significant implications for resource use, or which may cause significant adverse environmental effects.

The development of the City's infrastructure can have major implications for resource use. Large new proposals, such as a new energy distribution facility, highway, or sewage treatment plant, can be significant users of resources, and can cause significant adverse environmental effects. They can also have implications for other aspects of the City's economic activity and social life. For example, a major improvement to the roading network will generate changes in vehicle use, and open up opportunities for land development in some areas and may foreclose opportunities in other areas. Major developments in the City's infrastructure should therefore be carefully managed to promote sustainable management.

Consideration of alternative methods and sites is an important means of promoting sustainable resource use, and should be undertaken for those activities which have significant resource use implications. The broader considerations of the use of these resources should be integrated into the District Plan process.

16.4.3 *To promote the efficient and effective use of existing utilities and to encourage the co-siting of compatible facilities.*

Utilising the spare capacity of existing systems can be a more efficient use of resources than the development of new systems. Where such use can be demonstrated to be practicable and reasonable, it should be promoted. This policy is not intended to prevent competition between resource users or to prohibit growth; it simply seeks to promote the efficient use of natural and physical resources. For example, urban infrastructure will generally be used more efficiently if new residential developments are contained within existing urban areas, rather than dispersed or ribbon forms of development. Consolidation of settlements promotes the efficient use of existing infrastructure capacity and facilitates the viable introduction of new facilities. Council intends to support this policy by promoting costing and charging regimes for Council's services and utilities which take into account the longer-term environmental implications of resource use and development.

Questions of long-term efficiency should be addressed in the planning of new infrastructure systems, and this can be promoted through liaison with infrastructure providers and by requiring the assessment of such matters in designation, subdivision and land use consent processes.

Co-siting of facilities can reduce adverse effects on the environment by reducing the proliferation of similar facilities. Co-siting may be promoted by consultation between relevant organisations, and by ensuring that such matters are addressed in designation and resource consent processes.

16.4.4 *To promote the safe and efficient use and development of the transportation network.*

The transportation network is a major physical resource in the City. The land and other resources used for transportation need to be sustainably managed.

There are a number of reasons for promoting a safe and efficient transportation network, including:

- The land and associated resources required by the existing transport system represent a significant level of investment and commitment. To promote the purpose of the Act, it is desirable that existing systems are used and developed efficiently.
- The efficient use of energy and resources in the design, management and use of transportation systems should be promoted.

- Efficiency would be promoted through the integration of different modes and types of transport and by improving the network. The beneficial effects of any development such as increases in safety or reduction in travel times must also be taken into account.

The transport system also needs to be maintained and developed without creating significant adverse effects on the environment.

Minor changes to the transport system can be undertaken without the need for stringent controls, although they may need monitoring to identify and manage their cumulative effects. However, large-scale transportation projects, or developments within areas of environmental sensitivity, require careful assessment to identify potential effects and possible mitigation measures.

Rural roads place limits on further development in certain areas of the City because of their condition or potential capacity. Closer subdivision in these areas may be restricted because of the demand that it would place on these roads and the likely costs incurred by the Council. Other rural activities can cause damage to roads or create dangerous situations where roads are not designed to accommodate such traffic. The upgrading of such roads can place a heavy financial burden on the community and have significant adverse environmental effects. Therefore, a requirement for financial contributions and/or limitations on development is an appropriate response.

16.4.5

To promote accessibility within the City and between the City and neighbouring areas.

Access into and around the Central Business District, suburban shopping areas and industrial areas is important for both businesses and the community. This is facilitated by the availability of adequate car parking facilities and the close proximity of railway stations and the bus interchange.

In certain circumstances, car parking can have an adverse effect on the environment of an area. The proliferation of on-street car parking can adversely affect the visual and amenity values of an area, generate noise and make manoeuvring of vehicles difficult and unsafe. It may be necessary to require that sufficient on-site car parking is provided for any proposed activity, or that a financial contribution is made so that it can be developed by Council to avoid problems. The car parking requirements of the Plan have been developed on the basis of anticipated car parking demand and availability of car parking facilities.

The ability of people to have access to a variety of transport modes enables greater choice and means that transportation services can be used in a more efficient manner.

Most of Upper Hutt is well suited to cycling because of its topography. The bicycle is a useful, efficient and environmentally friendly form of transport. Although cycling is catered for within the present roading system, conflict can arise between cyclists, pedestrians and vehicular traffic. These conflicts need to be minimised or avoided to promote safety and encourage people to use dedicated cycling facilities. Convenient cycling and walking routes to community focal points need to be provided by linking streets, reserves, car parking areas and shopping centres.

16.4.6 *To ensure that the subdivision, use and development of land is served by safe and adequate access from the roading network.*

The roading network provides access to a wide range of activities. It is important to ensure that connections to the network are located, designed and maintained so as to provide for the safety of all road users.

16.5	Methods
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16.5.1 District Plan provisions consisting of the following:

1. Provision for the operation of utilities by designations and rules.
2. Designations for State Highways and railways.
3. Management of the location of traffic generating uses through zoning rules and the resource consents process to avoid, remedy or mitigate adverse effects on the safety and efficiency of the transport system.
4. Performance standards to avoid, remedy or mitigate any adverse effects on the environment associated with the provision and operation of the City's infrastructure.
5. The consideration of viable alternatives for new designations.
6. Provision of appropriate infrastructure at the time of subdivision.
7. Financial contributions for the upgrading or extension of public infrastructure, or the avoidance, remedying, or mitigation of any adverse effects on public infrastructure.
8. Identification of designations on the Planning Maps and the inclusion of their details in Chapter 36.

16.5.2 Planning for the efficient development of infrastructure by liaison and consultation with requiring authorities.

16.5.3 Council provision and maintenance of transportation infrastructure through its Annual and Strategic Plans and the strategies of roading infrastructure providers.

16.5.4 The Code of Practice for Civil Engineering Works.

16.5.5 Efficient management of Council's works and utilities. This would include Council demonstrating a leadership role in the sustainable management and use of its infrastructure.

16.6	Anticipated environmental results and monitoring
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The following results are expected to be achieved by the objective, policies and methods in this Chapter. The means of monitoring whether this Plan achieves the anticipated environmental results are also set out below.

Anticipated environmental results	Monitoring indicators	Data source
The sustainable management of utilities throughout the City	Complaints and enforcement procedures	Council complaints register
	Types of utility development	Council records
	System failures	
	Consultation with regional and national organisations to ensure utilities management is co-ordinated and consistent	
The avoidance, remedying, or mitigation of the adverse effects of developing and maintaining the City's utilities	Complaints and enforcement procedures	Council complaints register
	Assessment of the effectiveness of selected methods in implementing policies relating to utilities	Council resource consent records