

20.0 Utilities

20.1 Introduction

Utilities form an essential part of community infrastructure. Utilities must be maintained and developed in order to contribute to the health and safety, and social, cultural and economic wellbeing of the community. Most communities are unsustainable without the provision of water supply, drainage, sewage disposal, energy and communications. Reticulated provision of essential utilities enhances the efficiency of use of natural and physical resources, and enables consistent management of adverse environmental effects of human settlement. While providing utilities there is still a need to avoid, remedy or mitigate adverse effects.

Utilities include:

- Energy, electricity lines, cables, pylons, receivers, transmitters, substations;
- Telecommunication and radio communication, lines, cables, masts, antennas, dishes, aerials, microwave towers, telephone booths;
- Water collection and distribution structures, water supply catchments, water pipes, open drains, irrigation channels, stock water races, reservoirs, treatment plants;
- Stormwater collection and removal facilities, pipes, pumping stations, treatment plants, ponds;
- Sewage, collection structures, pipes, pumping stations, treatment plants, ponds;
- Air, land and water navigation aids and beacons;
- Meteorological networks;
- Trig stations and survey marks;
- Street lighting structures and traffic direction and control devices;
- Roads; and
- Rail lines.

20.2 Issue

Adverse environmental effects resulting from the establishment, maintenance and operation of utility networks necessary to sustain communities.

There are three main reasons why particular provision is being made for utilities. These reasons are:

- Utility networks provide services, such as water and electricity, that are essential to the health and safety of the community;
- Reticulated and integrated utility provision is essential to avoid cumulative adverse effects of settlements on the environment; and
- Utility networks require an integrated and comprehensive infrastructure which treats them as whole units rather than addressing their individual parts.

The maintenance and development of utility networks can have adverse land stability, water quality and visual effects. Some utility network structures, such as transmitters and masts, need to be sited in prominent positions in the landscape in order to fulfill their function. The essential nature of utility services, the specificity of site suitability, and the adverse effects of their prominence all need to be taken into consideration.

Adverse visual effects tend to be the most obvious and persistent while land disturbance and adverse water quality effects are generally related to construction and maintenance and tend to be short-term. Other adverse effects can include noise, electro-magnetic radiation and interference between similar electrical and telecommunication equipment.

20.3 Objectives and Policies

Objective 1	The continued operation, maintenance and development of essential utility networks necessary to sustain people and communities in the Plan area.
Policy 1.1	Enable utility operators to maintain and develop reticulated utility networks throughout the Plan area.
Policy 1.2	Enable individuals to contribute to or provide their own utility needs in appropriate areas.
Policy 1.3	Ensure that utility infrastructure is programmed to have capacity to accommodate future developments of serviced settlements.
Policy 1.4	Ensure Plan provision for sustainable management of utilities and planning certainty for utility operators.
Policy 1.5	Enable buildings, structures and equipment necessary or ancillary to utility networks to be established throughout the Plan area.
Policy 1.6	Provide a fair and reasonable means of financing extension of community utility networks without placing an unfair burden on the general community, which may include total funding by the developer.
Policy 1.7	Assess proposals for new utilities by acknowledging the necessary roles, and the locational and operational constraints they experience.
Objective 2	Establishment and operation of utility networks in a way that avoids, remedies and mitigates the adverse effects of those networks on the environment.
Policy 2.1	Require use of construction and maintenance practices, associated with utility management, which avoid, remedy and mitigate land disturbance, including disturbance of archeological sites.
Policy 2.2	Ensure that utility network construction, maintenance and operation avoids adverse effects on water quality.

Policy 2.3	Enable the provision of individual water supplies and electricity generation where appropriate to supplement services to rural households.
Policy 2.4	Maintain visual amenity by avoiding or mitigating the potential adverse visual effects of utility network structures.
Policy 2.5	Where appropriate, require utility networks to be placed underground in urban areas and areas of identified landscape significance.
Policy 2.6	Promote the establishment of utilities in locations in such a way as to not adversely affect any known natural hazard; and to minimise the risk of damage to the utility network from any natural hazard.
Policy 2.7	Co-locate structures and ancillary equipment where practicable.

As settlement continues to develop in the Sounds there is continued demand for utilities. The provision of utilities as networks avoids cumulative effects of individual settlements providing their own services. To enable the sustainable management of utility networks as a resource, operators of those networks require consideration of the demands for and provision of services at the earliest possible time. These policies seek to ensure early consideration and provision of utilities and thereby avoid cumulative effects of provision of similar services by individual communities.

The establishment of utility networks can have adverse effects on resources and amenities, and defined areas of special interest. Policies seek to ensure that the construction and maintenance of utility networks will not have adverse effects on identified areas prone to natural hazards, or areas with ecological or landscape value.

20.4 Methods of Implementation

Rules	Rules provide for utility networks as Permitted Activities, subject to standards and terms where there are minor adverse environmental effects. The placement of equipment underground and in or alongside road carriageways reduces likely disruption from natural hazards and long-term visual effects, and minimises land disturbance. Plan rules require special consideration for the location and construction of utilities in areas of identified special interest including natural hazard prone, and ecological and landscape value areas.
Other Statutory Documents	The Annual Plan provides a vehicle for setting priorities for provision of Council operated utility networks.
Information/ Codes of Practice	Most Utility Operators conduct their operations according to industry-based codes of practice. Landscape and screening guidelines are often included in these codes.

	The Marlborough Code of Practice for Subdivision and Land Development establishes a means of complying with the Plan's requirements.
Designation Process	The Plan recognises and provides for designations established by Utility Operators.
Liaison	The Council will liaise with Utility Operators to ensure continued provision of utility network services throughout the Marlborough Sounds area.
Monitoring	The Council monitoring of compliance with resource consent conditions and the results of State of Environment Monitoring will provide feedback on the adverse effects of utilities. Provisions built into industry-based codes of practices for Utility Operators specify monitoring requirements. The incidence of public health issues relating to utility networks will indicate the effectiveness of the management.
Information/ Advocacy	Energy and water conservation devices and systems will be promoted.
Other Legislation	The Council will continue to administer the requirements of the Building Act 1991 relating to aspects of utility provision including water supply, drainage, waste disposal and electricity.

Plan rules enable utility operators to sustainably manage their structures, buildings and facilities provided adverse effects are avoided, remedied or mitigated. The health and safety, and wellbeing of the community is dependant on the services provided by utility networks. However, the provision of these services should avoid, remedy or mitigate adverse effects on amenity values or the environment.

There is a continuing need for consultation and exchange on information relating to the operation and maintenance of utility networks. Utility Operators, customers and the Council all need to remain aware of the many statutes, controls and guidelines relating to the provision of utility services.

20.5 Anticipated Environmental Results

Implementation of the policies and methods for the management of utilities will result in:

- Sustainable utility networks which operate without significant adverse environmental effects; and
- Small settlements with sustainably managed community-based utility services.