

The Hutt River Floodplain Management Plan Strategies and Broad Options

The four strategies to be used to achieve the Hutt River Floodplain Management Plan are:

- Modifying flooding
- Reducing the potential for flood losses and disruption
- Modifying the impacts of flooding
- Preserving or enhancing the natural and cultural resources of the floodplains

Modifying Flooding

This management strategy uses structural means to alter the flood itself. The options are:

- Upgraded, raised, relocated and new stopbanks
- Widened river channels to increase flood capacity
- River channel edge protection to prevent erosion
- Storm water management, pumping, retention and detention
- Raised and/or widened bridges to increase their waterway area and reduce upstream water levels.
- Traps to keep debris out of the floodway. Debris build-up on bridges and channel protection works can lead to increased water levels, erosion and bank washouts
- Flood detention reservoirs which store floodwaters resulting in lower flood levels downstream
- High flow diversions or storage areas which decrease the chances of floods overtopping stopbanks

Reducing the potential for flood losses and disruption

This is the floodplain management strategy of avoiding dangerous, uneconomic, undesirable or unwise use of the floodplain. The options are:

- Identifying in the District Plan areas prone to flooding. Associated land use restrictions may be appropriate
- Setting Minimum Floor Levels for new buildings in areas liable to flooding. These areas would be specified in the District Plan
- Ensuring that services are located to minimise impact on flood protection measures
- Adopting land use policies for the upper catchment which minimise runoff and soil loss
- Adopting land use controls in urban sub-catchments to maintain peak runoff at acceptable levels
- Purchasing land (e.g. within the river corridor)
- Raising, relocating and flood-proofing existing houses and other buildings

Modifying the impacts of flooding

Despite efforts to control flooding and reduce susceptibility to it, flood “control” systems can fail or their capacity can be exceeded. This can have adverse consequences on individuals and communities. This residual risk must be recognised. A strategy for mitigating floodplain losses helps individuals and communities prepare for and recover from floods. The tools are:

- Information and education
- Community awareness and preparation
- Flood forecasting and warning
- Disaster assistance
- Post event recovery planning
- Flood insurance

Preserving or enhancing the natural and cultural resources of the floodplain

The best way to protect the natural and cultural resources of the floodplain is to avoid development within the floodplain. However, the Hutt Valley floodplain is already well developed. The tools for restoration and enhancement are:

- Land use controls to ensure identified features are protected
- Practices that will sustain and/or enhance the natural and cultural values of the river corridor
- Riparian management (at or near to the edge of the channel) to minimise effects on river ecosystems
- The use of trees and other plants for the protection of the channel edge
- A partnership approach between councils and the community for the management of the river corridor
- Maintaining a cleaner environment in the river corridor (e.g. discourage dumping of rubbish, and collect rubbish regularly, develop a “green” ethic in the community)