

## 15

## Safety

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*Low lighting provides visibility and safe access alongside the Avon River/Ōtākaro*

## 15.1 Introduction

It is important to consider both personal safety and neighbourhood security when planning, designing, and managing waterways and wetlands.

Christchurch Safer Community Council (1996) outlines some of the key principles for creating safer urban environments and preventing crime. This document states that every resident is responsible not only for their own safety, but also for the safety of their family, neighbourhood, and community.

Appropriate planning and design can help create environments that foster a sense of 'neighbourhood'. This will also encourage a wide range of people to interact and share responsibility for an area.

This chapter provides a list of safety criteria, but they are not designed as a definitive list. Therefore seek further safety information appropriate to the particular design project.

## 15.2 Safety Criteria

The following criteria should be incorporated in all waterway and wetland projects. The criteria are not definitive; refer to the Christchurch Safer Community Council (1996) for further details.

### Provide for Informal Surveillance

- Study the character of the place and design safety principles accordingly.
- Provide for informal surveillance through good design. This may mean maintaining open vistas so that residents are aware of what is happening in their specific area.
- Avoid solid fencing such as concrete, corrugated iron, or wooden boards (Figure 15-1).
- Should a fence be required, use a low, and/or see-through fence to generate better visibility and communication, and to create spaces where people feel safe (Figure 15-1). Refer to Christchurch City Council (2000) and *Chapter 13.9: Waterway Fences*, for fence designs.



Figure 15-1: Solid fencing reduces visibility and can encourage unwanted behaviour (top). Where fencing is a necessity, the use of low, see-through open fences between waterways and private property create a safer environment, with greater visibility and communication (above). Increased communication can also help foster a sense of neighbourhood.

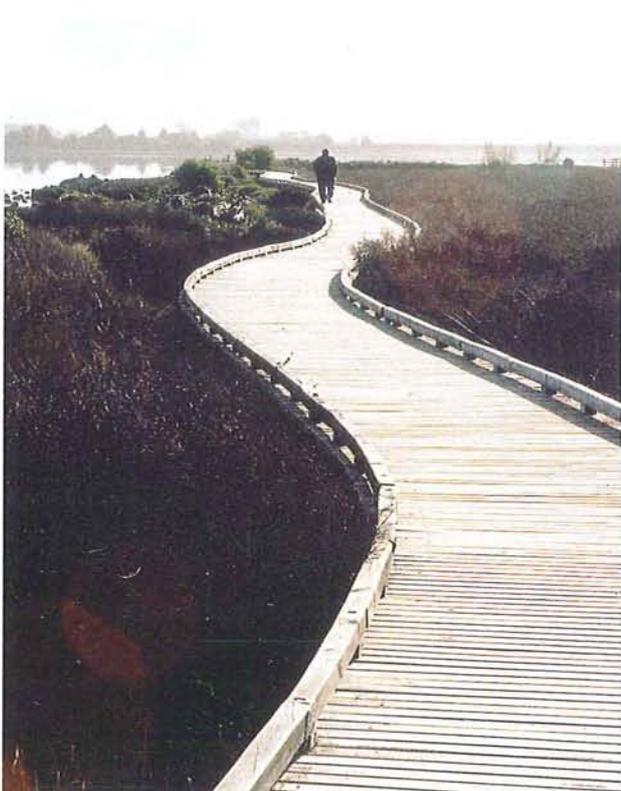


Figure 15-2: The creation of a raised walkway has provided the public with safe access to a once inaccessible area. The raised walkway creates a well defined path that is difficult to deviate from, which increases safety and helps to protect the wetland vegetation. Jubilee Walkway, Avon-Heathcote Estuary/Ihūtai.



Figure 15-3: Ensure walkways through tall vegetation have high visibility along the walkway length by co-ordinating lighting and tree planting to create good sight lines. Walkway at Farnley Reserve, Heathcote River/Ōpāwaho.

#### Consider the Safety of Drainage Structures

- A safety criterion for existing drainage structures (derived from the regulations in the Building Act 1991) is whether or not personal injury is likely to result from a fall of one metre or more.
- If the answer is 'yes', then consider removing, isolating, or mitigating against the hazard by fencing or other means. Fencing may be necessary, for example, where drains present a safety hazard.
- Planning for new structures will also need to incorporate safety principles.

#### Increase the Presence of People Along Waterways and Wetlands and in Neighbourhoods

- Make public areas along waterways and wetlands more accessible by providing good tracks, paths, or raised walkways (Figure 15-2), within context of planning for their future carrying capacity.
- Encourage people to use these areas by placing seating strategically, creating pleasant viewing areas, and providing safe access to water.
- Place seating for both views and visibility of any people approaching.

#### Promote a Sense of Ownership

- Encourage a sense of ownership of a waterway or wetland by involving the community in planning, design, and management.
- Plan celebrations and parties, planting days, events to clean up rubbish, picnics, recreational activities, guided walks, and children's play events.

#### Establish Positive Links and Communication

- Help develop groups with a common interest, such as stream care groups, guardians of waterways or wetlands, community and residents' groups, etc.
- Newsletters about a waterway or wetland and organised events will help engender positive channels of communication. This will lead to a greater sense of 'neighbourhood' and ultimately improved security and protection.

#### Install Lighting and Signage Along Walkways, where Appropriate

- Provide high visibility along the walkway length (Figure 15-3). Co-ordinate the lighting and tree planting to ensure good sight-lines and to prevent obstruction of lighting.
- Consider installing a well lit (i.e. no shadows) "recommended/preferred route" sign along a popular walkway.
- Direct people through positive, safe areas with

good location and direction signs, and information about walkway distance.

- In areas that are seldom used at night, or that may have potential hiding spots, discourage their use after dark and do not provide lighting.

#### Plant Strategically Along Walkways

- Good planting design allows for regeneration of habitat, and also caters for the safety of people walking beside and through planted areas. It is often appropriate to place a highly visible walkway near a road or well-used area in order to increase surveillance.
- Extensive dense vegetation within five metres of a track should be limbed up to eye level (1.2 m).
- Avoid planting species too close to a path that may cause a person to trip.
- In seating or viewing areas, maintain an open site with low or see-through vegetation. Tussocks, low shrubs, and trees such as kowhai or ribbonwood have foliage that is easier to see through.

#### Access to Water

- Design safe, well-defined access points to water such as steps (Figure 15-4), jetties (Figure 15-5), and pathways. Clearly define these areas for people to use and create good sight-lines for visibility.

#### 15.2.1 Health and Safety in Employment Considerations

The principal aim of the Health and Safety in Employment Act 1992, is to prevent any harm to employees at work. To do this it imposes duties on employers, employees, principals, and others, and also helps to promote excellent health and safety management by employers.

Employers have a general duty to take all practical steps to ensure the safety of employees at work as well as contractors, sub-contractors, members of the public, or visitors to the place of work, including construction sites.

Contractors and others must be informed of any hazards that they would not know about or expect to encounter.

Where activities involve participation of members of the public, such as community planting days, a health and safety checklist may be obtained from the Parks and Waterways Unit.

## 15.3 References

Christchurch City Council 2000. Thinking About Fencing. Information package. Christchurch City Council, Christchurch.

Christchurch Safer Community Council 1996. The Garden City, a Safe City. Reducing Crime through Environmental Planning and Design. Christchurch Safer Community Council, Christchurch.



Figure 15-4: Access to this pond is well defined by a pathway leading to a set of low steps. Heathcote River/ Ōpāwaho at King Edward V Reserve.



Figure 15-5: Access to this pond is defined by a circular jetty. Janet Stewart Reserve.

