

Strategy:

7

Enhance biodiversity systems and open space experience

Initiatives aimed at strategically connecting areas of valuable biodiversity, achieving a better distribution of green public open spaces, and improving the accessibility to open space by way of recreational walking and cycling tracks

This strategy includes the following findings and proposed initiatives:

- Connecting biodiversity systems through the introduction of biodiversity nodes
- A strategy to ensure that more people live within walking distance of good quality green open space
- Connecting and improving recreational cycleways and tracks



BIODIVERSITY SYSTEMS AND OPEN SPACE EXPERIENCE

It is important to realise that development within the urban area of Picton can have effects on the natural areas beyond Picton's boundaries. For example:

- Providing for Picton's water supply;
- Management of stormwater and run-off (effects on water quality);
- Treatment and disposal of wastewater;
- Demand for/ use of recreational facilities in the wider area.

The emphasis under this strategy however is on nature that exists within the town:

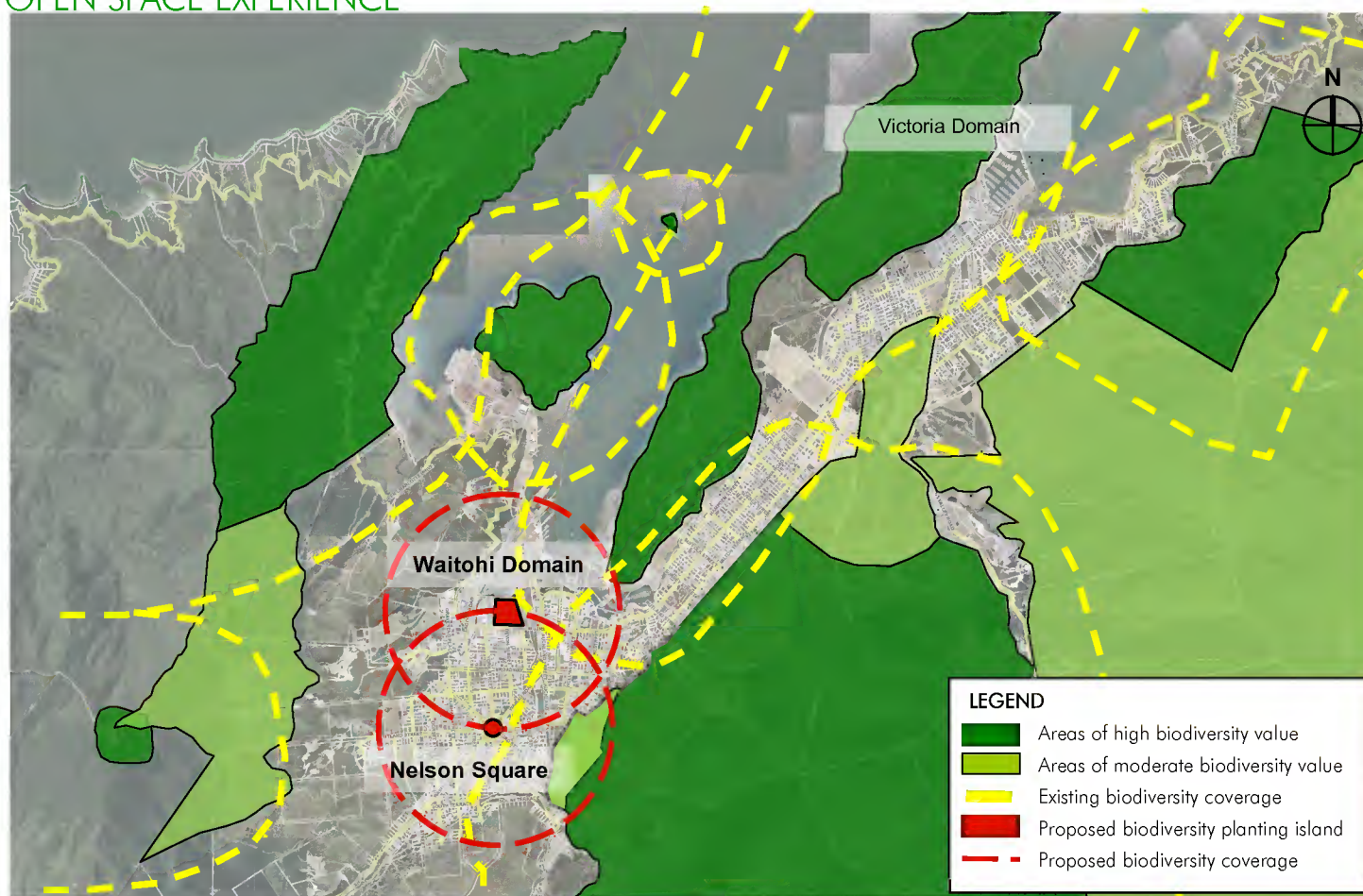
- Sympathetic planting in existing parks and open spaces;
- Creation of "green corridors" and "stepping stones", e.g. along the Waikawa and Waitohi Streams. The concept of "green infrastructure";
- Green corridors can also act as paths for people to get into the hills;
- Enhance experience through signage and interpretation.

Biodiversity system

The existing biodiversity system of Picton and Waikawa is mapped in Figure 5-46. It should be noted that the urban area is relatively small, and that there are large areas of public conservation land (reserves) close by. The 'areas of influence' in many cases overlap each other, which is good for the connectivity for bird and insect life.

It is proposed that two additional areas will be developed as 'biodiversity planting islands' within the urban area:

- Planting in Nelson Square as part of a strategy to enhance the open space experience (refer to the open space sections on the following pages)
- A wetland in Waitohi Domain, which is explained overleaf in more detail.



ABOVE FIG. 5-46: Biodiversity -Existing & Proposed

There is additional scope to enhance inner Picton biodiversity, but the two proposed areas are of a significant scale to offer opportunities as a stepping stone.

Protection of the surrounding hillsides

A large amount of the hills surrounding Picton are conservation land. For those and the not formally protected areas it should be noted that they form part of the backdrop to Picton and are part of the "Picton experience". The management of that landscape is therefore important.

They are not all necessarily "accessible", and in some cases the "experience" for those who get here – or who view them from a distance – could be enhanced.

BIODIVERSITY SYSTEMS AND OPEN SPACE EXPERIENCE

Waitohi Domain

A wetland around the Waitohi Stream in Waitohi Domain is proposed. The proposed project comprises one tidal pool (refer to Fig. 5-47 and cross section AA' in Fig. 5-48), that receives water only during high tide, twice a day with an island and native planting for habitat. This tidal pool also acts as storm water retention during high rainfall periods.

The second part of the project as show in cross section BB' suggests that the western portion of the stream bank could get "laid back" to create a less steep bank edge allowing for wetland planting while making it easier for people to walk down to the water's edge and engage with the stream.

The proposed wetland has the following values:

- It sits mid valley and forms an important cross valley ecological connection.
- It has additional ecological values because it is a tidal riparian habitat.
- The design integrates walking trails and education (ecological and historical) opportunities.



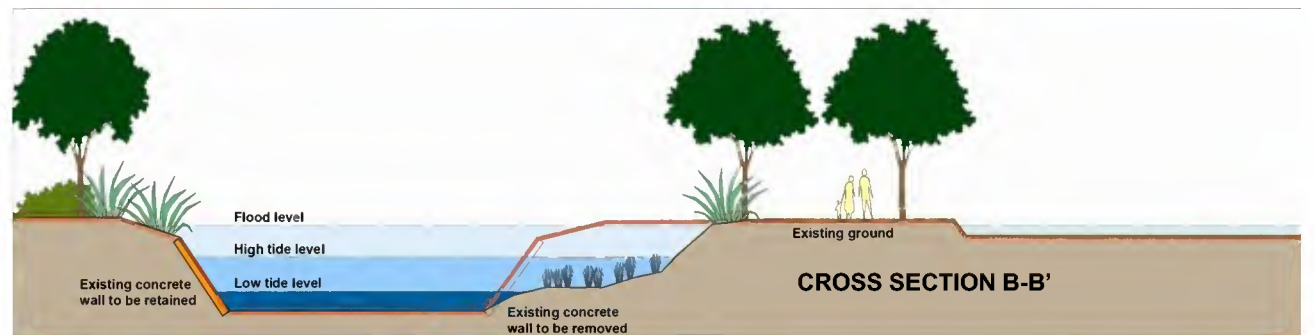
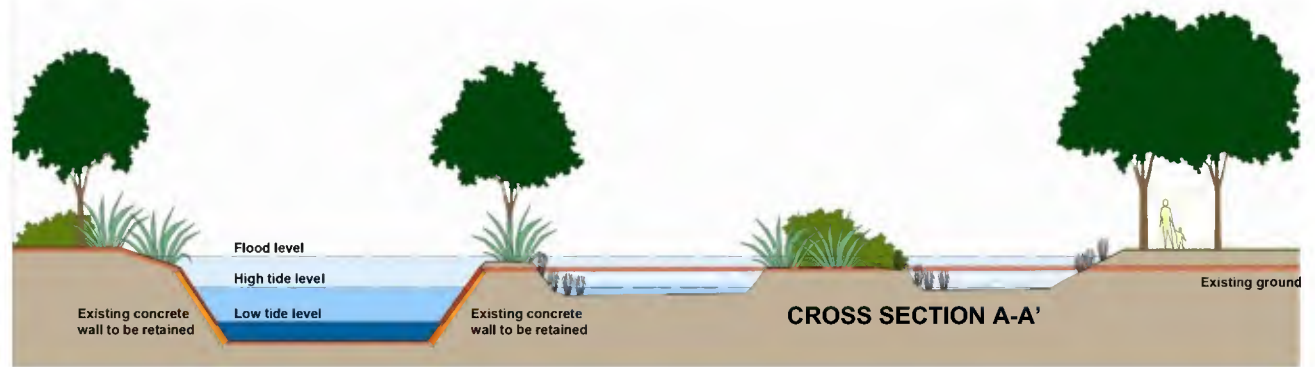
ABOVE FIG. 5-47: Proposed wetland in the Waitohi Damain

- It increases storm water holding capacities of the stream.
- Visuals soften the existing concrete storm water walls.
- The concrete walls remain mainly intact with very little changes to reduce project cost.

Implementation

The proposed design of the tidal pools retains the existing concrete walls but excavates a shallow tidal pond back into the landscape area close to the existing rugby fields. The excavated material would be used within the landscape. The tidal pool would be connected to the

existing stream by a shallow channel that would only catch water during high tide flows and storm events. The planting within the tidal pool would self seed and the edge above the high tide mark would be planted. Changing the river bank profile along the western edge would be done with an excavator with minimal work and the excavated material would stay on site to create mounds which would act as informal elevated viewing platforms and play opportunities. The stream edge excavation would create a more natural river edge, habitat and increase stormwater storage capacity.



ABOVE FIG. 5-48: Cross sections for the proposed wetland in the Waitohi Domain

BIODIVERSITY SYSTEMS AND OPEN SPACE EXPERIENCE

Existing open space network in Picton's urban area

One of the Council's objectives is to make green public open space part of the day-to-day experience and increase opportunities for recreation. For this two key factors are relevant:

1. Accessibility and
2. Experience.

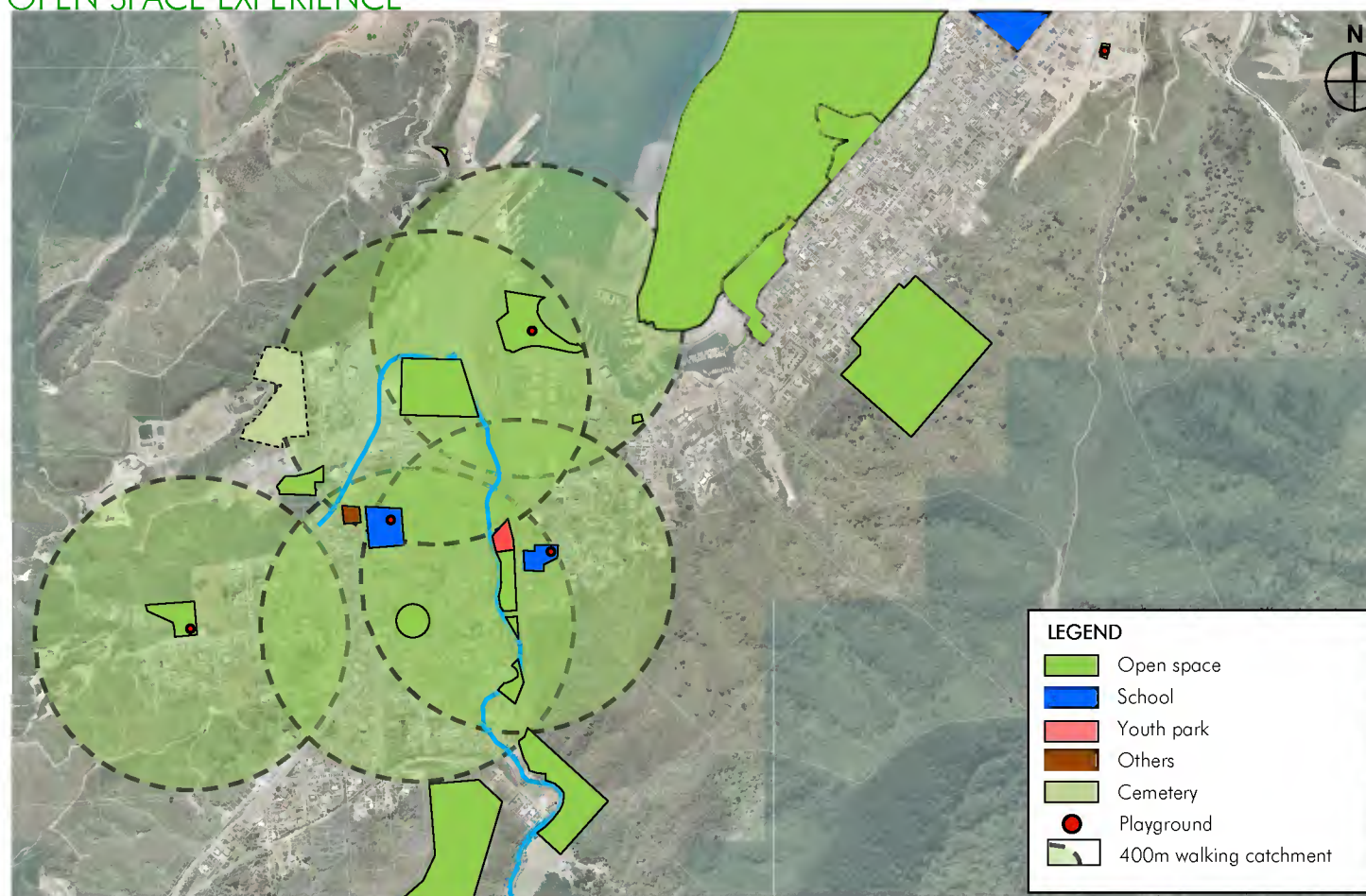
Open space accessibility Picton

In order to analyse the accessibility of the open space network, all public open space was mapped and circles with a 400m radius were overlaid, showing the theoretical / as-the-crow-flies 'walkable catchment' of each of the larger open spaces. The result of this analysis is shown in Figure 5-49.

School grounds generally serve an open space purpose as well. However, these grounds are not always available or accessible and are therefore not included in the catchment assessment.

From this analysis one can conclude that Picton is reasonably well covered with public open space.

An exception to this is the area immediately east of the town centre.



ABOVE FIG. 5-49: Existing Open Space in Picton with 400m 'walkable catchments'.

BIODIVERSITY SYSTEMS AND OPEN SPACE EXPERIENCE

Open space experience Picton

In addition to the amount of public open space also the quality of this open space was analysed. Figure 5-50 shows the results of this evaluation.

Findings are as follows:

1. Victoria Domain

- Excellent walking /cycle network
- Views over Picton and the Sounds
- Good native bush experience
- Fairly good signage and connections
- Weeds infestation (southern area (yellow))
- Possible fire risk in dry season

2. Shelley Beach

- High use beach area and picnic spot
- Yacht club / club room
- Slips risk
- Toilet needs upgrading
- Beach erosion
- Weeds on banks

3. Picton foreshore

- Better playground needed
- The wall forms a barrier with the town centre
- Disability access needs improving
- Potential for water play feature

- Linkages through to CBD and Victoria Domain need improving

4. Waitohi Domain

- Only accessible as sports grounds
- Will be made redundant as relocation takes place
- Important reserve, as there is very little reserve space in the surrounding area
- Worthwhile to retain at least a portion of the area as public open space

5. Cemetery

- Good trees, good park
- Important for its history and heritage
- Potential to create a walkway

6. Broadway Reserve

- Limited due to its topography
- Has potential for biodiversity planting
- Potential to create a walking track

7. Scotland Reserve

- Good playground
- Limited due to its topography
- Potential for biodiversity planting
- Potential for a walking track

8. Nelson Square

- Potential playground/ rest area/ toilet/ picnic area
- Some heritage value (existing interpretation)
- Very important and visible location
- Infrastructure constraints
- Potential gateway to DoC reserves

9. Heather Place Esplanade Reserve

- Under-utilised
- Potential for biodiversity planting
- Dissected by Waitohi Stream
- Provide off-road connection into CBD

10. Picton Youth Park

- Skate park needs upgrading
- Plans for tennis/netball/basketball area
- BMX track not well used
- Good park facilities
- On the main road with car parking

11. Seymour Street Reserve

- Limited due to its topography
- Scope for biodiversity planting

12. Memorial Park

- Proposed enhancement of stream planting and walkway
- Consider retaining an area for open space/ playground

13. Victoria Domain Garden/ Play area

- Under-utilised open space
- Very limited play equipment
- Toilet required
- Good potential for open space upgrade (flat)

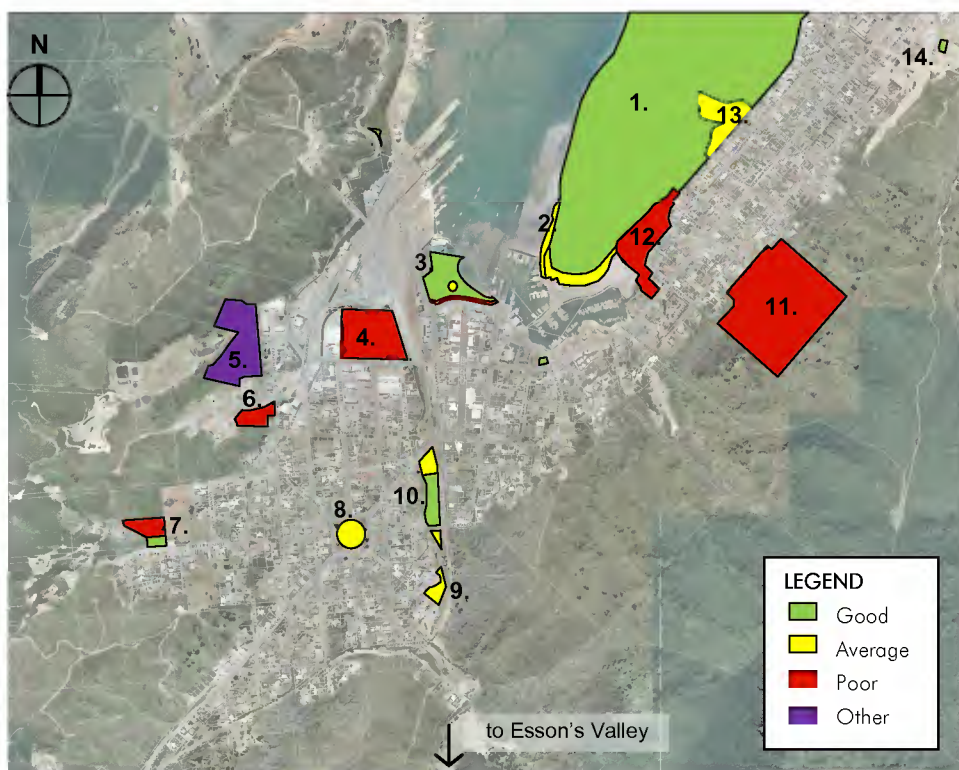
14. Parklands Reserve

- Good playground

Not on the map:

Essons Valley (York Street)

- Popular walking tracks in natural setting, relatively close to the town
- Opportunities for enhancement of the system of tracks
- Good biodiversity value



ABOVE FIG. 5-50: Evaluation of public open space in Picton

It is recommended that this analysis will provide input in the Council's open space upgrade programme. A selection of key initiatives are proposed on the following page.

BIODIVERSITY SYSTEMS AND OPEN SPACE EXPERIENCE

Proposed open space initiatives in Picton

Resulting from the above analysis of the accessibility to and experience of open space in Picton, several open space initiatives for Picton are proposed (Fig. 5-51).

Proposed additional open space Newgate Street

To improve the open space accessibility on the eastern side of the town centre, an additional open space on the former hospital site in Newgate Street should be investigated (refer to Figure 5-51). This should include the opportunity to improve the accessibility from Waikawa Road, relative to the steep slope of the site and the position of the current derelict building.

Advantages of this site, in addition to its location in the open space network, are:

- Northfacing slope
- Sea views
- Frontage to possibly two roads, which potentially makes it highly visible and accessible

Nelson Square

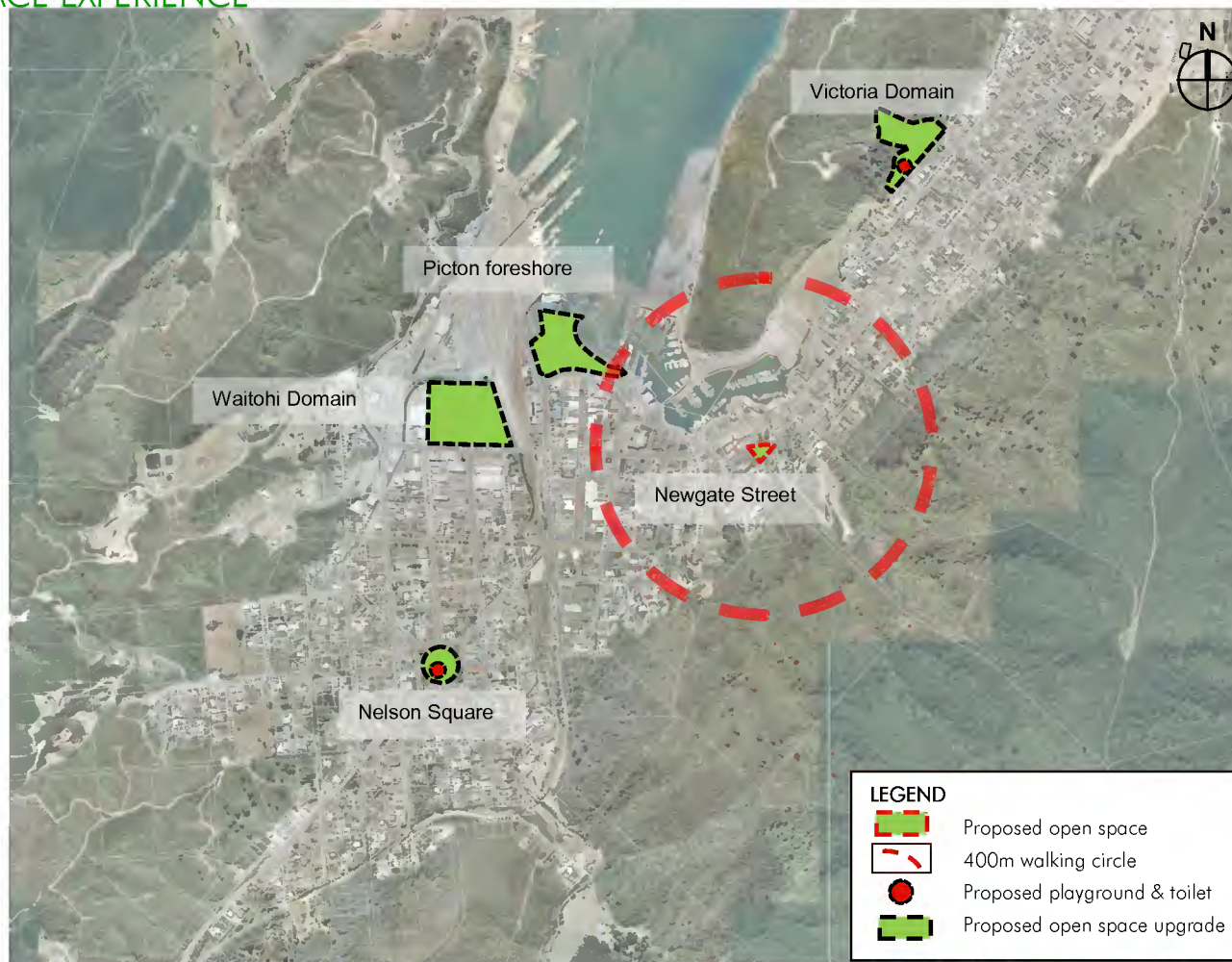
In Nelson Square there is the potential to construct a playground, picnic area and public toilets. This facility has the potential to be highly visible from State Highway 1 and will serve a purpose for visitors and travellers. However, since the area southwest of Nelson Square is not well provided with open space, this will serve a local function as well. Biodiversity planting should be part of this upgrade. Infrastructure constraints will require further investigation.

Victoria Domain Garden/ Play area

This part of Victoria Domain is directly accessible from the street, but is under-utilised. This flat area can serve as one of the entrance areas for the Victoria Domain.

Other open space initiatives in Picton

- An upgrade of the Picton foreshore area is proposed as part of Strategy 1: Port to Picton
- A wetland with biodiversity planting is proposed for Waitohi Domain under the Biodiversity paragraph as part of this strategy.



ABOVE FIG. 5-51: Proposed open space initiatives Picton

BIODIVERSITY SYSTEMS AND OPEN SPACE EXPERIENCE

Recreational movement in Picton

The Picton area contains several good quality off-street walking and mountain biking tracks for recreational purposes.

Figure 5-52 shows this recreational movement network.

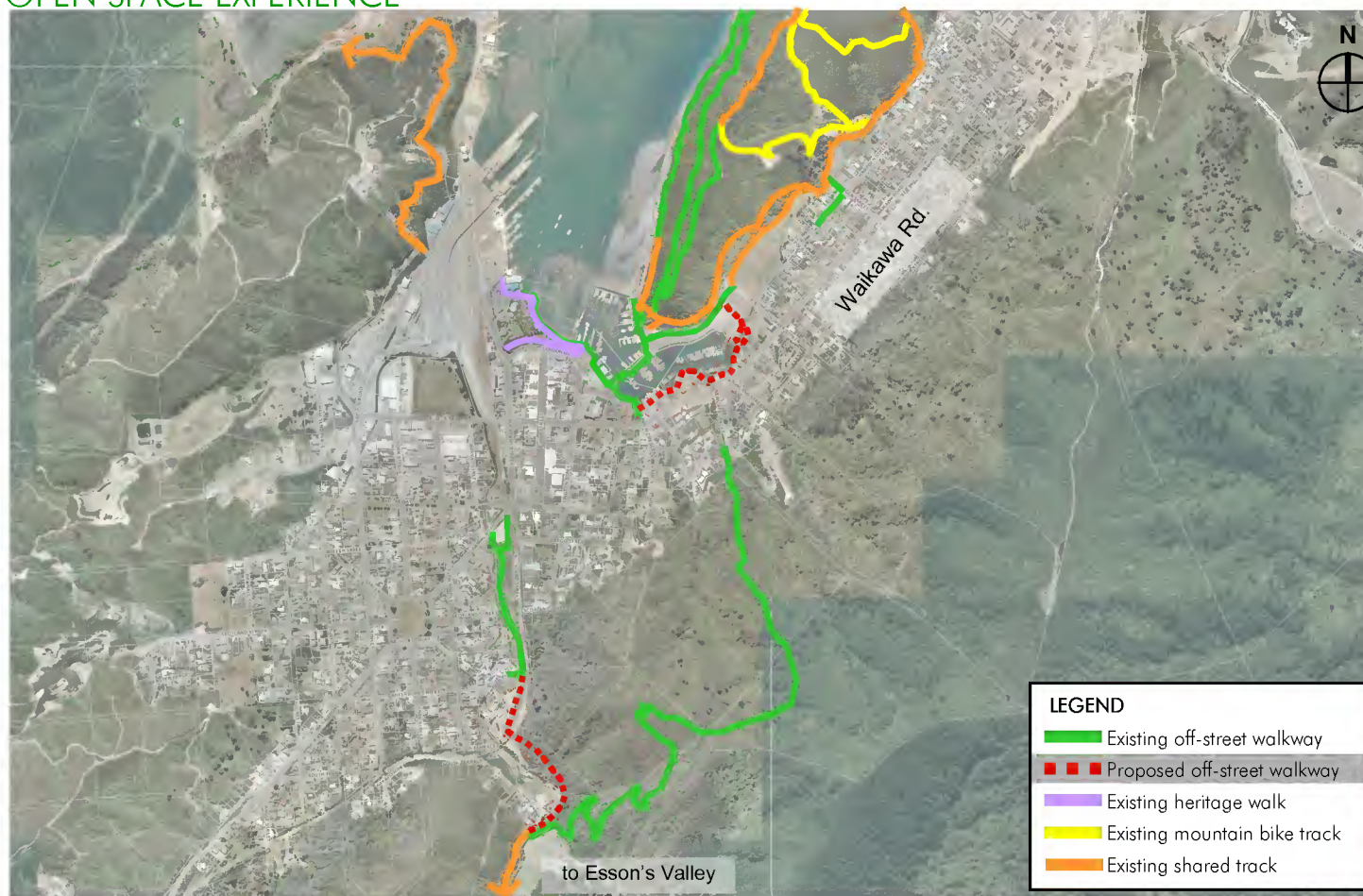
Key elements include:

- A comprehensive network exists in Victoria Domain, also providing several connections with Waikawa.
- This network is also linked with walkways along the foreshore via the Coat Hanger Bridge.
- The shared track along Queen Charlotte Drive forms part of the Link Track, linking Havelock, Anakiwa (and the Queen Charlotte Track) with Picton (some parts are still to be completed).
- The walkway from Newgate Street provides access to the Conservation land to the south-east of Central Picton.

Proposed additional linkages

To improve the functionality of this network the following key linkages are proposed:

- Providing a waterfront walkway along the southern edge of the eastern marina area. This will provide a circuitous walking route and enhance the water edge experience in Picton. This is potentially also an easy route into the town centre alleviating the pressure on Waikawa Road.
- Providing a link between the walkway along the Waitohi Stream (south of Scotland Street) and the track from Newgate Street. This will form a loop and will greatly enhance the recreational opportunities and the experience of the conservation land surrounding Picton.



ABOVE FIG. 5-52: off-road walking and cycling

On-street connectivity

It should be noted that good connections with the on-street movement network are crucial. These will be focussed on under *Strategy 8: Improve the Traffic Network*.

BIODIVERSITY SYSTEMS AND OPEN SPACE EXPERIENCE

Open space accessibility and experience Waikawa

Figure 5-53 shows the existing public open space network for Waikawa Bay. An evaluation ranging from good to moderate is given for each of the spaces.

Waikawa is well provided in terms of open space. Victoria Domain is of good quality and plays an important role for the area. Several neighbourhood reserves and esplanades along streams are of good to moderate quality and well accessible.

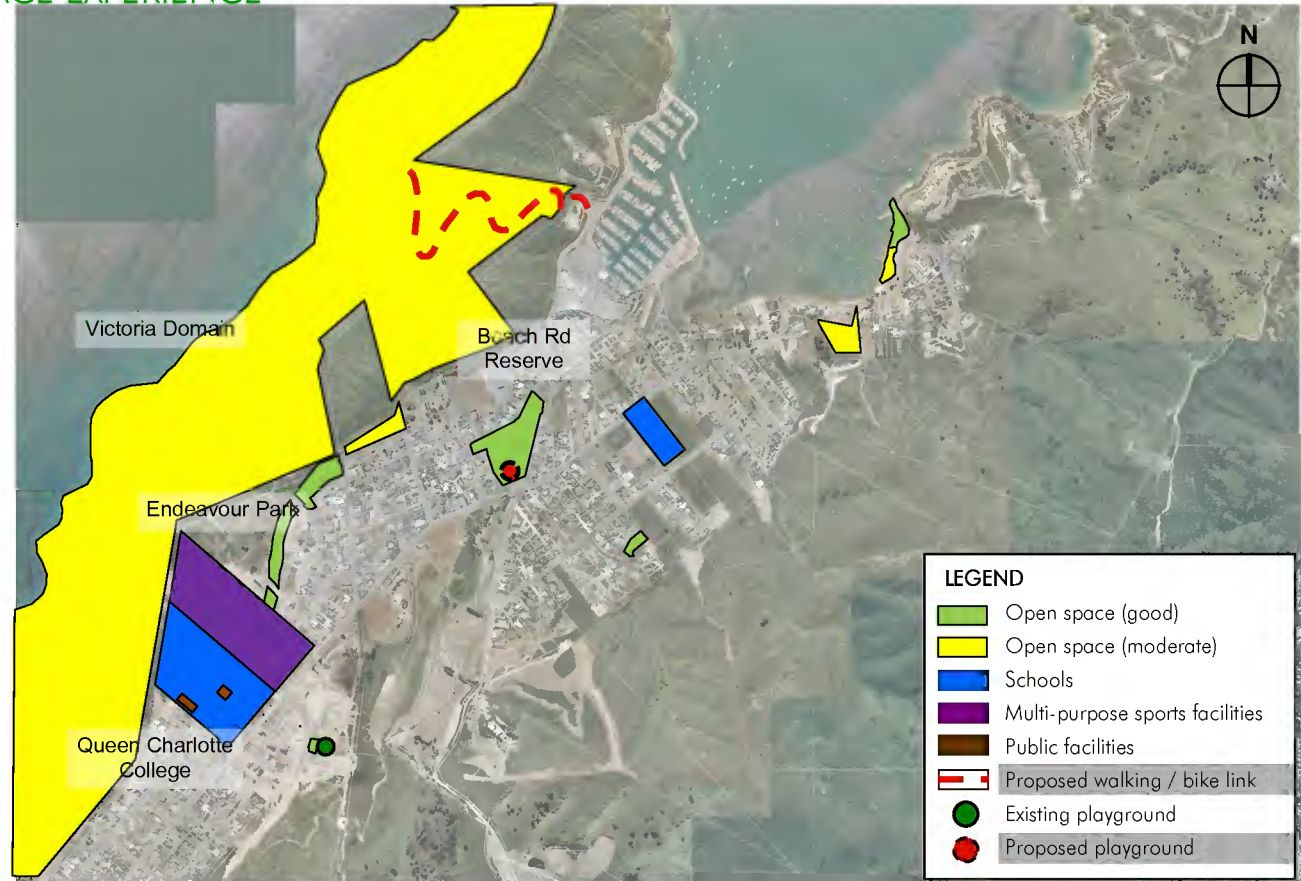
An important facility for Waikawa will be the proposed construction of a multi-purpose sports facility in Endeavour Park. Two schools and their grounds serve as open space for the Waikawa area as well.

In addition to these communal or public open spaces within the urban area are the hills to the south-east of Waikawa.

Proposed open space initiatives

To enhance Waikawa's open space network the following initiatives are proposed (refer to Figure 5-53):

- A new playground in the Beach Road Reserve, which is an important and centrally located neighbourhood reserve.
- A shared walk/ bike track linking the Waikawa marina area with the network of tracks in the northern part of Victoria Domain.



ABOVE FIG. 5-53: public open space in Waikawa –evaluation and proposals