



Styx Esplanade Reserve

Community Planning for the Future

November 2004



CHRISTCHURCH
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The purpose of this brochure is to outline plans for the Styx River Esplanade Reserve adjacent to Redwood Springs residential development and to provide you with an opportunity to comment.

BACKGROUND

The Styx River Esplanade Reserve is an area of 8.8784 hectares. The Styx River forms the Reserve's boundary to the north, with Willow View Drive and the new residential development of Redwood Springs determining its southern boundary. A designated motorway borders the east and the main north-south railway line forms the western boundary of the Reserve.

A number of springs along the river's edge are a feature of this stretch of the Styx River, as are the associated land forms and the 5 metre high terraces through which the river flows.

The higher land adjoining the Styx River was until recently used for dairying and horticultural purposes.

The Reserve forms part of a much larger green corridor associated with the Styx River extending from its source to the sea. Therefore any development of this Reserve also needs to be considered in conjunction with the long-term objectives and aspirations of the overall plan.







View of Reserve from railway line

Springs near railway line

Walnut trees and concrete foundations with Styx River in distance



-  Styx River
-  location of Reserve highlighted in yellow
-  motorway designation
-  railway line



Objectives of Development Plan

In developing the plan consideration was given to meeting the following objectives:

- protect and enhance the ecological values associated with the Reserve, the Styx River and the greater Styx corridor
- incorporate walkway linkages, not only as part of the Source to Sea walkway (Styx Vision No. 2), but to other community centres and focuses
- provide a wilderness experience that contrasts with the adjacent urban areas
- provide built structures that complement and enhance the Styx River experience and tell the stories of the land
- recognise the name of the adjacent residential development through making a special feature of the springs located near the railway line
- provide community and children's play areas
- provide public access to the water's edge
- minimise long term maintenance costs

LEGISLATIVE CONTEXT

The Resource Management Act (1991) defines the purpose of "Esplanade Reserves" as areas that:

- Contribute to the protection of conservation values
- Enable public access to or along a river
- Enable public recreation where that use is compatible with conservation values

Legislation that is relative to the management of this Reserve is contained in the Christchurch City Plan, the Long Term Council Community plan, the Resource Management Act and the Waterways and Wetlands Asset Management Strategy adopted by the Christchurch City Council in October 2000.

It is important also to realise that any planning and development of this Esplanade Reserve must comply with the "40 year Vision for the Styx" developed as a result of extensive consultation and involvement by the community.





"The nation behaves well if it treats the natural resources as assets which it must turn over to the next generation increased, and not impaired, in value."

*Theodore Roosevelt (1858-1919)
26th President of the United States*

www.thestyx.org.nz



All photographs courtesy of Tanya Cathel-Black
except for Silvereye and Fantail images by Andrew Crossland



FEATURES OF THE SITE

This stretch of the Styx River features two distinct aquatic habitats; the main river which possesses deep strong flows and the adjacent springheads with gentle shallow waters flowing from them. The presence of substantial springs within the Reserve is a rare and interesting feature. With this diversity of aquatic habitats it can be expected that aquatic biodiversity will be high.

The main river stream contains both the longfin and shortfin eels, along with large common bullies, and the deeper water, with a variation of holes, makes this a suitable location for brown trout. The shallow spring-flow is home to a number of native snails and crustaceans.

Native plants currently present include ferns, sedges, rushes, pohuehue vine and cabbage trees. Two locally rare species, a fern (*Blechnum chambersii*) and a carex (*Carex maorica*), are also found in this area. Weeds include old man's beard, grey willow, gorse and blackberry.

The River and surrounding riparian zone forms a natural corridor for bird life. A survey completed in October 1997 indicated 34 different bird species could be living and breeding in this area. Over half of these species are native to New Zealand and include the South Island fantail, NZ scaup, the pukeko and the white faced heron. Sixteen types of wetland birds were also identified and these include the welcome swallow, NZ shoveler and the paradise shelduck.

Retention basins and a swale have been constructed within the Reserve to treat and manage storm water arising from the adjacent Redwood Springs residential development. Although the swale has been regraded, water continues to stagnate and has caused concerns within the local community.

Landscape values associated with a new residential development and those of a conservation reserve have the potential to differ. Therefore, careful management of the interface between the two areas will be required to ensure that there is a transition zone between the areas needing to be highly maintained and those areas that are managed more for their wilderness and wildlife values.

Although it is anticipated that the construction of the designated motorway to the east is still some time away, it is important that any proposed development recognises the impact that a motorway will have on the Reserve and that any adverse effects that may arise are minimised, for example, noise.

There are a number of potential linkages to and from the Reserve. These may include:

- A cycleway along the railway line taking people to and away from the City centre
- A walkway along the Styx River including links to the Styx Mill Conservation Reserve
- A walkway/cycleway adjacent to Curtis Stream and the railway line to link to the Supa Centre
- Walkway/cycleway along the proposed northern motorway.

The Reserve previously contained a farmhouse and dairy buildings. Some of these structures have been retained as they have the potential to be adapted for other activities within the Reserve and to provide clues as to the history of the site.



**Information about the Styx Vision 2000 – 2040
is now available at www.thestyx.org.nz**

Invitation to become a Partner in the Process

The level of involvement by the community in the development of the Vision for the Styx 2000 – 2040 has been significant. As the Styx River Esplanade Reserve forms part of the overall planning for the Catchment, in the spirit of true 'partnership' (Vision 5), you are again invited to share in the development and implementation of this Plan.

Closing date for submissions is Friday 17 December

Enclosed with this brochure is a Response Form. If you would like to contribute, your written comments and suggestion are welcomed. More response forms can be obtained by telephoning the Greenspace Unit (Tel 941 8872) and these will be forwarded to you.

Water Quality Monitoring

A community based water quality - monitoring program is active throughout the Styx catchment and there is an opportunity for local residents to take part in the regular monitoring of water quality within the Styx River adjacent to the Reserve.

If you would like to be involved in this program please contact:

Victor Brown
Volunteer Coordinator
Styx Living Laboratory Trust
021 116 9133 victorbrown@paradise.net.nz
or
Stephanie Humphries
Secretary
Styx Living Laboratory Trust
342 9513
stephaniek@clear.net.nz

Further copies of this brochure can be obtained from either:

Greenspace Unit
Christchurch City Council
163 – 173 Tuam Street
Christchurch

Papanui Service Centre
Corner Restall St and Langdons Rd
Christchurch

Any enquiries should be referred to:

Kirsty Patton
Parks & Waterways Area Advocate
Greenspace Unit
Christchurch City Council
Tel (03) 941 6702
kirsty.patten@ccc.govt.nz

Issues raised through the consultation process will be referred to the Shirley Papanui Community Board for comment, guidance and/or acceptance.

VISION

Styx Esplanade Reserve

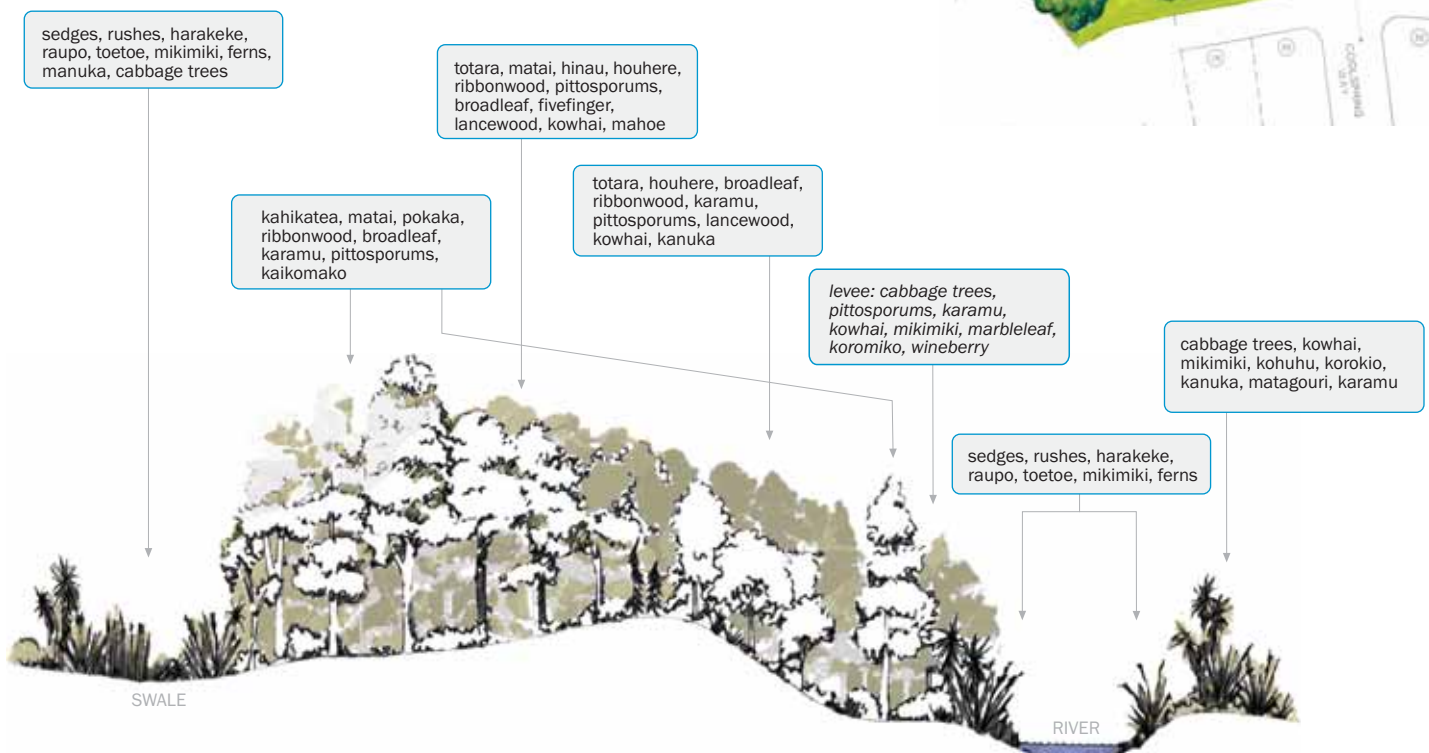
adjacent to Redwood Springs Development

1. Habitat Restoration

The development proposal recognises the existing wildlife values associated with the Reserve and aims, not only to enhance those values, but also people's enjoyment of them. Some habitat restoration has occurred at the western end of the Reserve where willow trees were removed and the banks and adjacent areas planted out in locally sourced native plants. Following expressions of concern it is now proposed that future habitat restoration will involve managing weed species, infill plantings, and a more gradual rate of removal of willow trees. The rate of removal will be dependent on the rate of growth of both infill and new plantings within the Reserve. Ongoing management will encourage the processes of decay and regeneration, through retaining trees stumps, debris, hollows and the limited, careful use of chemical sprays.

Sensitive consideration will be given to the needs of the bush and wetland birds in deciding the location of paths and public access to the River.

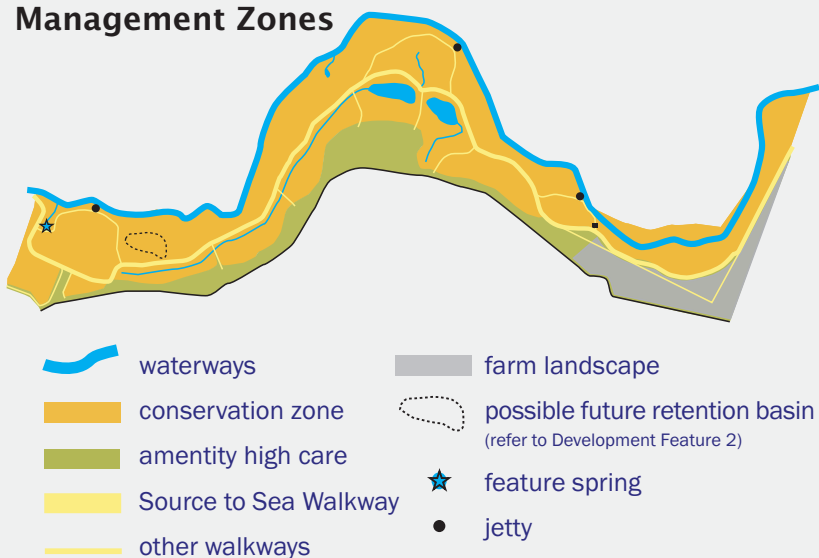
Plant species in the Conservation Zone will be based on the following model that has been developed for the Styx Catchment.





Redwood Springs Residential Development

Management Zones



KEY TO MAPS

- 1 jetty
- 2 feature spring
- 3 viewing platform
- 4 pergola
- 5 children's rope climbing frame
- 6 children's obstacle course
- 7 children's water play
- 8 artworks
- 9 picnic tables
- 10 dairy sheds
- 11 orchard eg. plum trees, chestnuts





Implementation

The size of the Reserve means that the proposed development will need to be staged.

Initially, conservation plantings will focus on the grassed areas with a weed control programme along the willowed river margins. Infill planting will occur once the majority of weeds are eradicated from within the river margins.

Paths will be grassed and their development will occur at the same time as the adjacent plantings.

For safety reasons the viewing platform and the spring feature will be developed first. This will be followed by the children's play area.

Picnic seating



sedge - flax - raupo
swamp

swamp forest

moist forest

moist-dry forest

floodplain
forest

channel banks
& riparian
vegetation

levee

Refer to 'Vegetation & Landscape Potential' in the Documents section of the Styx website for more information: <http://www.thestyx.org.nz>



2. Swale & Retention Basins

Stagnant water within the swale and the retention ponds within the Reserve has caused concern. Although the swale was regraded by the developer during the last stage of the residential development, the low gradient means that there is minimal fall to drain the storm water away.

Historically the large wetlands to the south drained towards the Avon River via the waterway we know today as Shirley Stream. Residential development during the 1970's that occurred to the south of Farquhars Road resulted in the headwaters of the Shirley Stream being redirected towards the Styx Rivers via a 27 inch (69 cm) pipe.

Investigations have shown that there is an opportunity to utilise this large amount of water by diverting it through the swale, rather than discharging it directly into the Styx River as currently occurs.

Options are outlined below and community views are being sought.

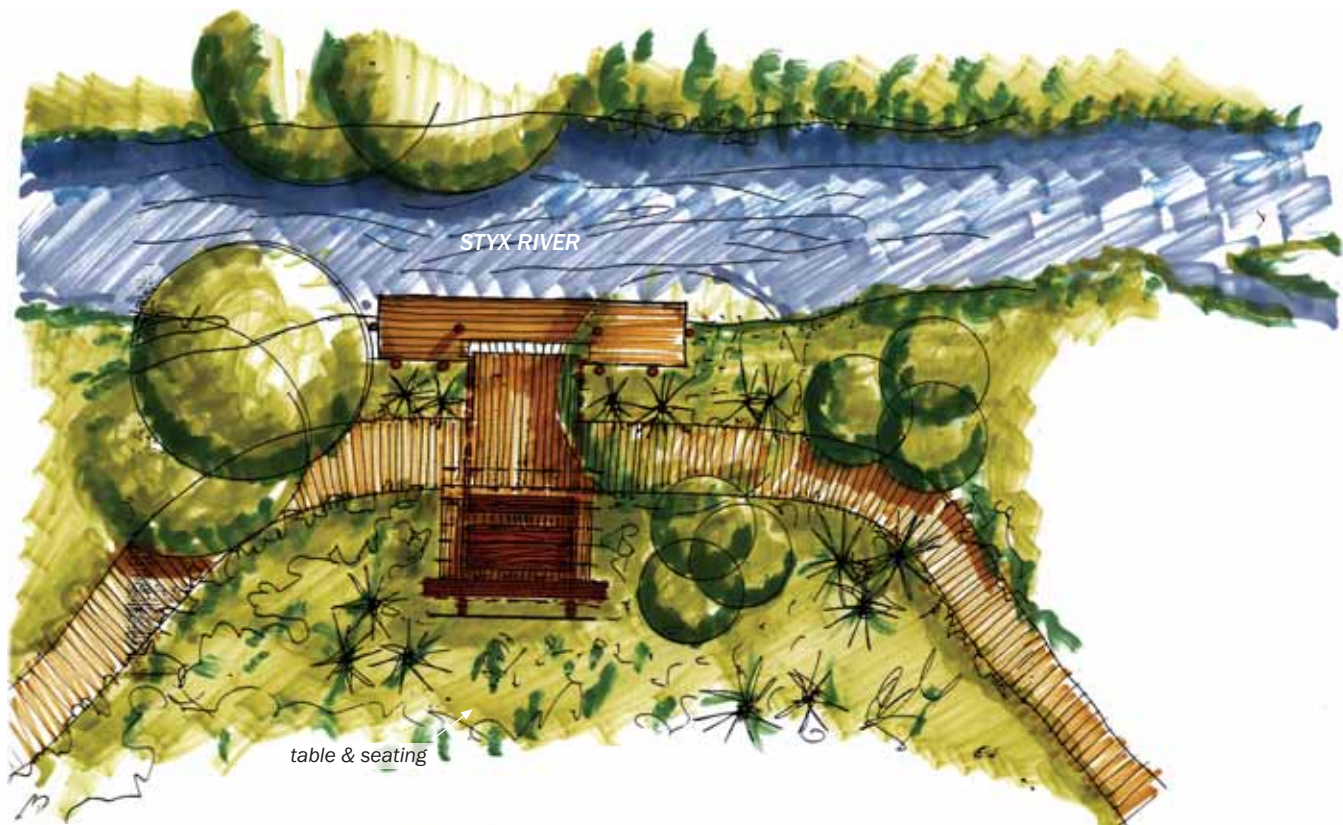
OPTION	ACTION	OUTCOME
One	Status quo	Stagnant water remains
Two	Increase maintenance of the swale	Damp mud bottom within swale
Three	Introduce water into the swale by pumping water from the existing large pipe underneath the Reserve	Continuous flow of water within swale
Four	Introduce water into the swale and treat storm water from the catchment through the construction of another retention basin near the existing large pipe	Continuous flow of water within swale PLUS improved quality of water entering the Styx River during storm events

3. Source to Sea Walkway

It is proposed to construct a major walkway running approximately 1,200 metres east west through the Reserve following the course of the Styx River. Seating, views of the river, and explanation/interpretation points will be provided at various places along the path.

Part of the "40 year Vision for the Styx" developed in conjunction with the community, and adopted in 2001 by the City Council, provides for a continuous walkway from the source of the Styx River to the sea. Therefore, at some time in the future, this section of walkway within the Reserve will form part of a much larger walkway extending both east and west along the River.

Points at which pedestrians and cyclists could cross the River are also being considered both in the vicinity of the railway line and the proposed motorway.



4. Access to the River

The southern bank of the River consists of peaty floodplain with vegetation in the area being grass, willow trees, or replanted native plants. This area continues to be an important habitat for bush and wetland birds. The development proposal indicates three locations along this stretch of waterway where people can have direct access to the water's edge by the use of pathways and jetties.



Jetty incorporating seating area

5. Feature Spring

The name of the adjacent residential development, Redwood Springs, derived its two part name firstly from a number of large redwood trees previously in the locality, and secondly because of the many springs along this stretch of the Styx River. At the western end of the Reserve there is a pond with a number of springs continuously bubbling up in it. While all of the rivers of Christchurch are spring-fed, there are few opportunities where the springs are as accessible for viewing as these. The proposed development of this area looks at making a safe feature of these springs.



Seating overlooking feature spring



6. Tribute to Dairying



Walkway looking east to 'Dairy Shed'

Children's climbing frame

'The Dairy Shed' consists of a large flat area at the eastern end of the Reserve where previously a homestead and farm buildings were located. This area also provides excellent views of the Styx River. The proposed development seeks to highlight the history of dairying in this location while at the same time providing places for children to play, public seating and picnic areas and views of the water. A large hedge at the eastern end of the Reserve will provide a visual and noise barrier to the proposed motorway that will eventually occur along the edge of the Reserve.

■ Viewing Platforms

The natural terrace provides a different perspective of the Styx River enabling people to look down on the river and the adjacent flood plain, a favourite area for nesting wetland birds. Foundations of some of the farm sheds located on the edge of the terrace have been retained and it is proposed that these will form the foundation of new viewing platforms.



Viewing platform

■ Retaining and Conveying the stories of the Land

An area on top of the terrace at the eastern end of the Reserve previously contained a farm house and buildings associated with a dairy farm. At one time dairying was the dominant use of land in the Styx Catchment. For many years father and son, Allan and Sam Farquhar, (after who Farquhars Road is named), each farmed on opposite sides of the river. The size of their dairying herds in the 1930's and 40's, normally about 60 milking cows, varies greatly with today's herds of up to 1,000 cows.



Children's water play

With the demise of dairy farming in recent years within the catchment it is proposed to 'tell the stories of the land' by creating features reminiscent of the activities of the past. These include fruit trees, artworks, seating and information/ interpretation.

■ Cow Track

Children in the early years of the 1900's spent many hours challenging themselves to ride their bikes along the narrow paths made as the cows trekked their way twice daily to and from the milking shed. Some of these paths were only 2 feet (60cm) wide and dangerously close to the river.

As part of the proposed walkway through this section of Reserve efforts will be made to replicate the twice daily trek by the dairying herd to the milking shed, although the track will be much wider than the original and the cows will be in the form of artworks rather than living examples.

7. Children's Play

The proposal provides for specific areas adjacent to the 'Dairy Shed' to be developed as children's play areas. In addition to large grassed sections for ball games, an obstacle course and climbing ropes it is planned to include a safe area for water play by utilising an old water pump.

8. Picnic areas

It is proposed to develop picnic areas and seating throughout the Reserve providing places to:

- sit and reflect,
- observe children at play,
- gather with friends and family, or
- play informal community games eg cricket or ball games on long summer evenings