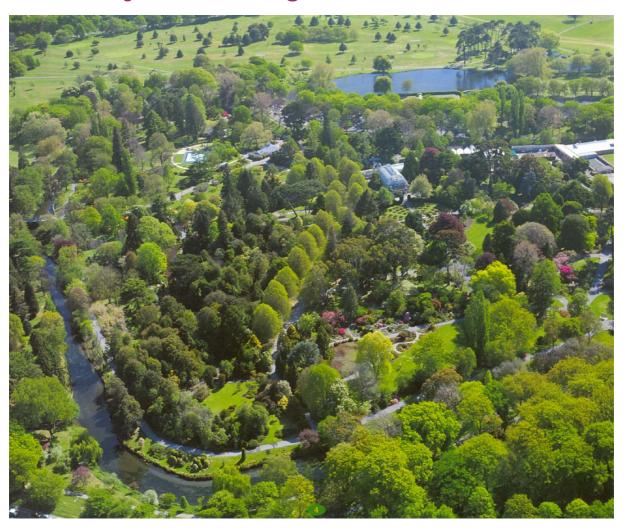
HAGLEY PARK / BOTANIC GARDENS MASTER PLAN 2007

Park Benefits	The project will benefit the City by increasing the capacity of the trunk sewer system to reduce wet weather sewer overflows into the Avon River, and allow for growth in the west and southwest of the City.
	There are no specific benefits to Hagley Park users. There are potentially impacts to the Park environment and its use. These would be temporary and managed to minimize any impact.
2006 Public Consultation	19 out of a total of 597 submitters responded on this project, which is a below average submitter response compared to that for the other master plan projects. All of these, bar one just commenting, expressed support.
Project Contact	Capital Programme Team CWW, Capital Development.
Information Links	Major sewer upgrade project web page link: http://www.ccc.govt.nz/WasteWater/MajorSewerUpgrade/





Projects Affecting The Botanic Gardens



... Botanic Gardens operational facilities

Location	Within the Christchurch Botanic Gardens.
Garden Context	Operational facilities for the Botanic Gardens will continue to be located in the Gardens area.
Description/ Action Required	It has been identified that the staff and other operational facilities in the Botanic Gardens are old, outdated and now inadequate for the purpose. New such facilities are required and three site concept options, including remaining on the existing site or integrating on the existing site, or at a new site, with a new visitor/information centre, were put forward during the public consultation in 2006 for public comment. Along with that for Project 31 (Botanic Gardens/Hagley Park
	visitor/information centre), the submission response had about half of those referring to this project supporting it, with a clear majority of those submitters who indicated a choice of site selecting the existing Botanic Gardens work and nursery site. See below for more detail on the outcome from the 2006 public consultation. Council accepted the Hagley Park/Botanic Gardens Hearings Subcommittee's recommendations to investigate this site further for the proposed development.
	Implications to take into account with the redevelopment include:
	• What to do with vacated buildings - options include utilising for other purposes, such as education or storage, or removal.
	• What it means for the other Gardens facilities, such as the conservatories.
	• Resulting change to the overall Gardens layout and circulation, and requirement for new facilities, such as bridges.
Status	Detailed investigation by the investigation project team, in conjunction with Projects 31 (Botanic Gardens/Hagley Park visitor/information centre), 6 (Landscape and Circulation), 18 (Armagh Street Entrance Improvements), 41 (Rehousing the Bonsai Collection – Botanic Gardens) and 44 (Retailing, Information Centre and Catering Needs).
Timeframe	Design and costings to be raised for final decision by 2008, with development completed by 2010.
Benefits to the Gardens	New facilities to replace inadequate ones. Opportunity to provide a high standard of facilities for the Botanical Services Operations Team.
2006 Public Consultation	The submitter response to this project (65 submitters) was 1.5 times the average response for all the projects. Over half of these supported the project. Also, similar to the response to the proposed visitor/information centre, most of the submitters made a choice using the Quick Response section of the consultation brochure – a clear majority of these selected the Concept 1 option (the existing works and nursery site in the Botanic Gardens) for the siting of the operational facilities.
Project Contact	Investigation project team; Botanical Services Operations Team, Transport and Greenspace Unit (City Environment Group).
Information Links	http://www.ccc.govt.nz/Parks/

Plan 30: Existing Gardens Visitor/Information and Operational Facilities





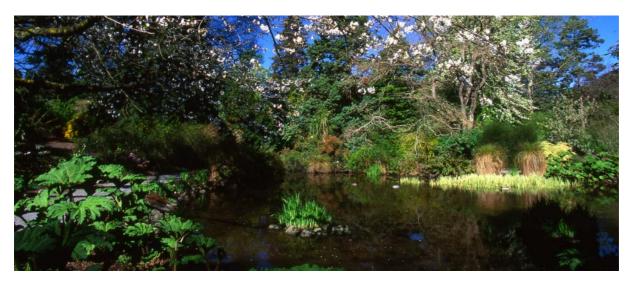
31 ... Botanic Gardens/Hagley Park visitor/information centre

Location	Within the Christchurch Botanic Gardens.
Park/Garden Context	The existing works and nursery site in the Botanic Gardens.
Description/ Action Required	Following the public consultation on possible site options, including in Hagley Park, for a new visitor/information centre, the existing works and nursery site in the Botanic Gardens was selected to be investigated in detail for the proposed centre.
Status	See Project 30.
Timeframe	See Project 30.
Benefits to Hagley Park and the Gardens	There is the opportunity to raise the profile of both the Botanic Gardens and Hagley Park with a state of the art visitor/information centre and provide a high standard facility for staff and user groups. This will replace the now inadequate facility in the Gardens. A visitor centre in the Botanic Gardens that also provides information and services pertinent to the Park will be of direct benefit to the users of both the Botanic Gardens and the Park. There is also an opportunity for multiple use of the proposed facility, which could result in the future reduction of the number of buildings and structures on the Park.
2006 Public Consultation	This is just one of three master plan projects that received more than 4.5 times the submitter response than the average for all the projects (the other two being the Riccarton Avenue "Park road" and Hagley Oval fence proposals) - 191 submitters responded on this project. The majority of these supported the proposed development, although a significant number did not as well. Over three-quarters of all submitters to the public consultation made a
	choice in the Quick Response section of the consultation brochure, and the vast majority of these selected the Concept 1 option in the draft master plan 2006 (at the existing works and nursery site in the Botanic Gardens) for the site of a new visitor/information centre. Also, a third of the supporting written submissions indicated the Concept 1 site option was the preferred site for a new building.
Project Contact	Investigation project team; Botanical Services Operations Team, Transport and Greenspace Unit (City Environment Group).
Information Links	http://www.ccc.govt.nz/Parks/
Other Information	Refer to Plan 30 (previous page) for location of the existing Botanic Gardens Information Centre and operational facilities sites.



... Botanic Gardens biosecurity policy

Location/ Context	Primarily the Botanic Gardens and, secondarily, Hagley Park.
Description/ Action Required	Biosecurity, is an important issue for New Zealand. This includes surveillance and control of pests and ensuring 'nuisance' plants are not spread. A biosecurity policy for the Botanic Gardens would include:
	A pest surveillance detection regime set up in conjunction with MAF Biosecurity.
	Elimination of high risk invasive species from collections (unless under strict containment) and monitoring of lesser risk species.
	 Reduction of nuisance species of plants and animals to a low level and ongoing monitoring.
	Strict adoption of general guidelines regarding sale and distribution of plants with weedy potential.
	Inclusion of biosecurity issues in education and interpretation.
	The policy would also cover consideration of a quarantine glasshouse and facilities for physical isolation of infected and diseased plants, spraying and other pest removal techniques.
Status	Not yet initiated as a policy, although elements are practiced in part.
Timeframe	To develop by 2011.
Benefits to the Park and the Gardens	Botanic gardens, in particular, and garden areas, generally, are often regarded as starting points for invasion by undesirable exotic species. By adopting a rigorous policy, the Council can ensure it does not contribute to new invasions or foster species with invasive potential that are already in New Zealand. The Botanic Gardens would also provide a 'good practice' example for the community.
2006 Public Consultation	29 out of a total of 597 submitters responded on this project. This equates to a below average submitter response for this project compared to that for the other master plan projects, but nearly all of these supported addressing biodiversity issues in, and developing policy for, the Botanic Gardens and Hagley Park.
Project Contact	City Environment Group.



33 ... Children's Garden

Location/ Context	The Botanic Gardens.
Description/ Action Required	Public submissions for a garden specifically dedicated to children have been received. This will be additional to, and located alongside, the present playground in the Botanic Gardens and be an area where children can connect with and discover something of the world of plants. It will require careful and specific design along the lines of similar gardens in other botanic gardens around the world.
Status	To be initiated.
Timeframe	To establish by 2010.
Benefits to the Gardens	The absence of a children's garden is a considerable gap in the facilities offered by the Botanic Gardens, especially considering the significant number of children and families that come into the Gardens. Children are the adults of tomorrow and connecting them with nature, such as through experiences gained in a botanical garden, is an important beneficial outcome to be achieved.
2006 Public Consultation	45 out of a total of 597 submitters responded on this project. This is just over the average submitter response for all the master plan projects. Nearly all of these submitters supported.
Project Contact	City Environment Group; Events Production Team, Marketing Unit.



34 ... Collection revitalisation for the Botanic Gardens

Location/ Context	Primarily, the Botanic Gardens and adjacent parts of Hagley Park, and secondarily, other Christchurch green spaces.
Description/ Action Required	Some collections are in good condition and are well defined (thereby requiring little change), but there is still significant need, in some instances, for revitalization. This may vary from propagating and replanting to shifting and consolidating collections. In some cases, there is need to obtain additional species or cultivars. In other cases, the area occupied by collections is insufficient for accommodating mature specimens or additions.
	In conjunction with revitalization, there is the option of taking some collections away from the Botanic Gardens and growing them (or at least all but a representative group of specimens) in a different site where there is a more congenial environment for them. Examples include coastal plants and frost-tender species, such as many members of the South African flora.
	Alongside a general collections strategy, there will be development of specific collection management policies as each collection is revitalized. Collection revitalization will need to proceed in an orderly and sequential manner. The first collections to be looked at will be New Zealand native plants and ferns.
Status	Initiated.
Timeframe	Ongoing.
Benefits for the Gardens	Revitalisation is necessary from time to time as collections mature and age. It is a management tool that allows better long term planning for collections, especially the propagation and planting of new specimens. It also results in greater visitor satisfaction as people appreciate the greater tidiness and better interpretation of collections. The process will be tracked on a proposed new collections database (see
2006 Public Consultation	35. Development of a relational database for collections (Page 83)). 30 out of a total of 597 submitters responded on this project, which was a below average submitter response compared to that for the master plan projects as a whole. Nearly all of these submitters, though, supported collection revitalisation in the Botanic Gardens.
Project Contact	City Environment Group.

35 ... Development of a relational database for plant collections

Location/ Context	Primarily, the whole of the Botanic Gardens; secondarily, for Hagley Park (as well as other Christchurch green space areas).
Description/ Action Required	A multi-use relational database, designed for botanical garden use, that primarily provides an integrated source of information on plant collections, but is used for a range of other outputs, such as assessing conservation status and providing information for identification keys, publications and brochure preparation. The database will have a high level of integration with existing Christchurch City Council databases and key external plant databases.
Status	Initiated.
Timeframe	Complete by 2009.
Benefits	Records are maintained on an interim Microsoft Excel based spreadsheet system, which results in severe limitations such as the inability to fully integrate and monitor management of plant assets. Not all records are on this interim system so it is not possible to assess the size and taxonomic nature of collections or interrogate collections data to answer queries, such as requests related to biosecurity issues. A full relational database would allow wide interrogation, monitoring and tracking of collections data and plant management. Systems such as BGBase [©] allow integration with a wide range of parallel linked databases, including membership lists (such as of the Friends of the Christchurch Botanic Gardens and volunteers), literature references, the electronic transfer of global conservation information, flowering and fruiting records, and horticultural treatments and funding information. Such a system has potential, in time, to include botanical records from
	elsewhere in Christchurch and to become a wider City Environment Group database (including, for example, data on street plantings, botanical areas and riparian plantings).
2006 Public Consultation	27 out of a total of 597 submitters responded on this project - a below average submitter response to this project compared to that for the other master plan projects. Most of these submitters support a multi-use relational database for plant collections being developed.
Project Contact	City Environment Group; Information Management and Communication Technology Unit.



... Enhancement of an education programme for the Botanic Gardens

Location/ Context	The Botanic Gardens.
Description/ Action Required	The Botanic Gardens provides a limited range of education programmes and educational visits, but there is considerable scope for expansion, especially in relation to people learning to appreciate their relationship with the world of plants and learning about biological conservation. It is important to ensure the programme is linked both to other Christchurch City Council education initiatives and to the Ministry of Education curriculum. An education programme is generally assumed to be an important function for major botanic gardens such as the Christchurch Botanic Gardens, not only for Christchurch residents and visitors but also for Gardens staff in the form of professional training. There is also an increasing call for the botanic gardens of developed countries to provide opportunities for training and equipping of staff from the botanic gardens of developing and transition countries, such as those in Oceania. Current issues include: • Lack of space, resources and staff. • Possibilities for external funding and revenue creation. • Partnerships; for example, with the Canterbury Horticultural Society. • Informal learning experiences to enhance visitor experience.
Status	Initiated in part.
Timeframe	Ongoing.
Benefits to the Gardens	Greater use of the Botanic Gardens as a teaching and training tool and as a living laboratory. This will link the Gardens closer to schools and other education initiatives and also help guide management of collections and their interpretation. Its availability for an overseas training programme appropriate to the resources and purpose of the Botanic Gardens will be a contribution to New Zealand's international obligations, such as under the United Nations Convention on Biological Diversity.
2006 Public Consultation	38 out of a total of 597 submitters responded on this project. This is a submitters' response just under the average for all the master plan projects. Most of these submitters were supportive.
Project Contact	City Environment Group.



37 ... Gondwana Garden

Location/	The Botanic Gardens.
Context	
Description/ Action Required	The basic concept is for a garden made up of a number of discrete collections and plantscape areas that collectively demonstrate the evolution of the Southern Hemisphere flora, with an emphasis on New Zealand flora. The garden would be sited at the northwest corner of the Gardens and feature the contribution of the Southern Hemisphere flora to horticulture. The values and purposes behind collections and landscape sites proposed to be placed in the Gondwana Garden include:
	• A 'dinosaur' forest featuring ancient plant groups, including Australia's Wollemi Pine.
	• Evolution of <i>Hebe</i> , and possibly other New Zealand genera, that demonstrate adaptive radiation.
	• Endemic plant taxa that have developed on distinctive soil types such as limestone, serpentine and dolomite.
	• Representation of the Southern Hemisphere relationships between different plant species' families, including <i>Proteaceae</i> , <i>Araucariaceae</i> , <i>Nothofagaceae</i> and <i>Cupressaceae</i> .
	Informing about island endemism and why oceanic islands have so many rare plants, concentrating on the Chatham Islands.
	Evolutionary relationships in the Asteraceae (daisies).
	• Relating the role of Scott's South Pole expedition in discovering Gondwana fossils, and the links between the Antarctic heritage of Christchurch and the Gondwana story, through the display of relevant plant species.
Status	Preliminary planning and some development funding.
Timeframe	Not indicated.
Benefits to the Gardens	The development of a highly educational and well interpreted garden, which has an innovative arrangement of collections that provide a powerful teaching area. The Gondwana Garden would summarise the major features that led to New Zealand having 80% of its native plant species found nowhere else and inform on how these plant species got here, survived and evolved.
2006 Public Consultation	49 out of a total of 597 submitters responded on this project. The submitter response for this project was over the average submitter response for all the master plan projects. Nearly all the submitters were in support of the development of a Gondwana Garden.
Project Contact	City Environment Group.

38 ... New collections for the Botanic Gardens

Location/ Context	Primarily, the Botanic Gardens and adjacent parts of Hagley Park and, secondarily, other Christchurch green spaces.
Description/ Action Required	Analysis of collections held by the Botanic Gardens, public submissions and survey comments indicate there is a demand for new collections and aggregates of collections. These include:
	Plants of the eastern South Island and the Chatham Islands.
	• The genus <i>Hebe</i> (koromiko), including segregate genera, as part of a national collection of New Zealand's largest plant genus.
	The family Asteraceae (the daisies).
	Ancient plants of the New Zealand region, including Gondwana plants.
	New Zealand legumes (pea family) and grasses (including sedges).
	Heritage collections, including Maori and early settler crops.
	The iconic plants of New Zealand.
	Canterbury horticulture – showcasing new cultivars.
	Several of these collections, along with parts of existing collections, can be incorporated in what has been termed the 'Gondwana garden'. This has been worked through the concept stages and some start up finance is available.
Status	Initiated, in terms of planning.
Timeframe	Ongoing.
Benefits for the Gardens	Although the Botanic Gardens has extensive collections and probably, overall, has the largest array of plant species in New Zealand (and possibly Australasia) few of these holdings are arranged in discrete and obvious collections so as to inspire and inform the public.
	The new collections suggested above would redress some present imbalances, such as the absence of a relationship between the Botanic Gardens and the Canterbury horticultural industry and the poor featuring of Canterbury native plants and threatened plants. It would also allow considerably more profile for iconic New Zealand plants, such as the genus Hebe and the grasses (including rushes and sedges).
2006 Public Consultation	33 out of a total of 597 submitters responded on this project. This is a little below the average submitter response for all the master plan projects. Nearly all of these were in support of new collections for the Botanic Gardens.
Project Contact	City Environment Group.



... New Conservatory complex

Location/ Context	The Botanic Gardens.
Description/ Action Required	The existing conservatories in the Botanic Gardens are generally small, inefficient, provide less than desirable growing conditions for plants and have poor flow patterns for the public. There is very limited opportunity for interpretation of displays. Much display material is inaccessible to the public, especially related to arid land plants, such as cacti, succulents and alpine plants and bulbs).
	The conservatories do not compare favourably with those of comparable botanic gardens, especially overseas, such as in Australia. Cuningham House is a heritage building and so there is no intention to remove or make significant changes to this. However, a new complex of interconnected conservatories might be envisaged to cover the following:
	• Enlarged display house for seasonal displays, for example, tuberous begonias.
	Tropical and subtropical orchid and carnivorous plant house.
	• Arid climate house, principally for succulents and cacti but also featuring other arid land plants, including some from New Zealand. This would allow segmentation of displays into those of plants from several contrasting world regions.
	• Alpine/Sub Antarctic house, possibly in collaboration with a similar project at the Royal Tasmanian Botanic Garden.
	Cool temperate climate fern and moss house.
	The 1950s glasshouses should be assessed for heritage significance before demolition is considered as an option.
Status	Detailed investigation is required of the needs, costs and benefits of a possible new conservatory complex, including how this is tied in with the proposed visitor/information and operational facilities redevelopment nearby, as well as consideration of possible alternatives.
Timeframe	Not indicated, but potentially the same as that for the investigation for the proposed operational facilities redevelopment (see Project 30 (Page 77)).
Benefits to the Gardens	Greater efficiency in growing existing and future collections. The opportunity to send powerful messages to the public about conservation, ecology and peoples' relationships with plants. Increased public enjoyment of collections, especially during the winter months.
2006 Public Consultation	27 out of a total of 597 submitters responded on this project. This is a below average submitter response for this project compared to that for the other projects. Two-thirds of these submitters supported the project.
Project Contact	City Environment Group.

... Redevelopment of the Botanic Gardens / Museum interface

Location/ Context	The Botanic Gardens.
Description/ Action Required	The Canterbury Museum has been planning a major redevelopment programme, including the former Robert McDougall Art Gallery building. The former gallery site, which is adjacent to the present Museum building, is at a major entry point into the Botanic Gardens. In the event redevelopment is undertaken the site should be restored with high quality botanical plantings. Ultimately there should be seamless management across the interface. There are issues with the setting of the museum, the entrance gates to the
	Gardens and the relationship of these to the William Rolleston Statue on Rolleston Avenue. This area is a prime heritage site.
Status	Not initiated.
Timeframe	Not finalized, but dependent on the Museum revitalisation timetable.
Benefits to the Gardens	Enhancement of the site will improve its appearance and ensure that it is an exciting and anticipatory entrance area to the interior of the Botanic Gardens. This recognises that the exit from the former gallery will itself be a significant entrance point into the Botanic Gardens. There is opportunity to ensure the design and plant collections enhance the heritage value of the former art gallery building as well as relate to the Museum's overall theme.
2006 Public Consultation	19 out of a total of 597 submitters responded on this project. This a below average submitter response to this project. Over three-quarters of the submitters responding to this project supported it and under a quarter did not.
Project Contact	City Environment Group, Canterbury Museum.



41 ... Rehousing the bonsai collection - Botanic Gardens

Location/ Context	The Botanic Gardens.
Description/ Action Required	The Christchurch Botanic Gardens has the only significant, publicly accessible, collection of bonsai trees in New Zealand. Housing of the collection is inadequate and does not meet acceptable public safety and security standards. As part of the proposed facilities development in the Botanic Gardens, it is proposed the collection be housed at a new site where it can be displayed in more appropriate and secure surroundings. In conjunction with the rehousing, the Botanic Gardens needs to ensure there is either in-house, or contracted, expertise for maintenance of the collection.
Status	Not initiated.
Timeframe	Not determined, but urgent.
Benefits to the Gardens	Collection status would be given the recognition it deserves, security would be enhanced and the generosity of the original gift acknowledged. As a major New Zealand collection, this would be given greater prominence. Redevelopment would encourage future gifting of bonsai specimens to the collection. The cultural importance of the collection should also be noted.
2006 Public Consultation	22 out of a total of 597 submitters responded on this project. This is just over half the average submitter response that there was for all the master plan projects. Nearly all of these supported this project.
Project Contact	City Environment Group.













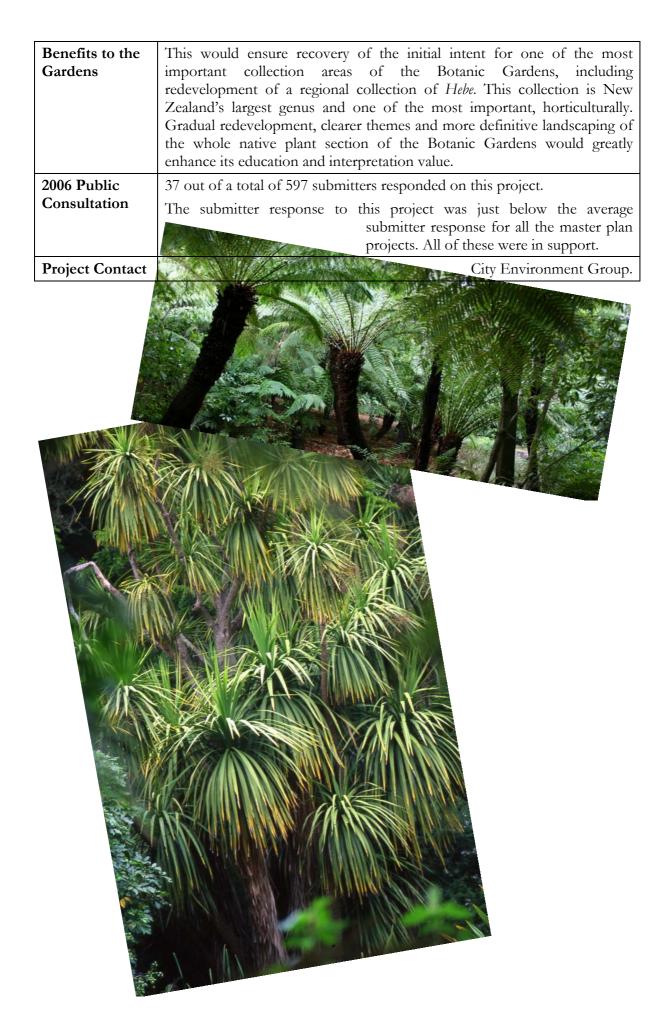
... Restoration and conservation of the Magnetic Observatory workshop

Location/ Context	The Botanic Gardens.
Description/ Action Required	An important reason for Captain Robert Scott visiting Christchurch enroute to the Antarctic was the presence in the Botanic Gardens of a magnetic observatory, which was, at that time, one of the few in the Southern Hemisphere. The site includes a seismograph, a gravity base station and a geodetic survey mark. Until the 1960s, the Department of Scientific and Industrial Research's (DSIR's) Geophysics office in Christchurch was based in the Botanic Gardens. The present magnetic hut is the only relic of that important period of research and scientific monitoring within the Botanic Gardens. The site is still used by visiting Antarctic expeditions and instrument calibration purposes. A small fund of money is dedicated to use on this site to help restore the hut with authentic furniture and equipment and GNS Science (the Institute of Geological and Nuclear Sciences Ltd), the successor of DSIR Geophysics, has helped source appropriate equipment. Interpretation and limited public access is also envisaged. The hut is of high heritage significance and should be conserved/restored in accordance with best practice heritage conservation principles.
Status	Initiated, in terms of initial funding and the accessing of historic items for use in a hut display.
Timeframe	By 2009.
Benefits to Christchurch	Gives a greater profile to, and is an appropriate use of, the Botanic Gardens to demonstrate an important link between the Gardens and the relationship Christchurch has to the Antarctic. It also serves to provide an authentic interpretation, linked to the interpretation already provided by the Canterbury Museum, the Antarctic Centre and the Christchurch Heritage Antarctic Walk.
2006 Public Consultation	22 out of a total of 597 submitters responded on this project. This is just over half the average submitter response that there was for all the master plan projects. Nearly all of these supported this project.
Project Contact	City Environment Group, Strategic Support Unit, GNS Science.



$43 \dots$ Restoration of the Cockayne Garden and redevelopment of the associated New Zealand section

Location/ Context	The Botanic Gardens.
Description/ Action Required	The Cockayne Garden was established as a memorial to Dr Leonard Cockayne, generally regarded as one of New Zealand's foremost scientists and one of the world's first ecologists. The Garden was formally opened in November 1938, but the ideas for its genesis go back to 1911 and an article published by Leonard Cockayne in the "Lyttelton Times". In this, he referred to the teaching role of the native section of the Botanic Gardens as envisaged by John Armstrong in the 19th century, and especially to the authoritative collections of the genus <i>Hebe</i> (koromiko) assembled in the Botanic Gardens by Armstrong.
	The stated aim of the Cockayne Garden is to provide material for the study of variation and evolution in New Zealand plants, with a focus on the genus <i>Hebe</i> , and also to provide a garden where alpine conditions are closely simulated.
	The Cockayne Garden requires considerable reorganisation and replanting to recapture its original intent and to be an adequate memorial to one of New Zealand's most eminent biologists. Preliminary scoping suggests the need for redevelopment of the Hebe beds, along with the display of native shrub and tree legumes, and redevelopment of the 'alpine' section as a simulated sub alpine glade habitat.
	This would be the first stage in what would be an extensive redevelopment of the native plant section of the Botanic Gardens, which would probably include:
	• Enhanced use of water features within the 'forest' areas.
	• A boardwalk associated with the native plant pond and use of New Zealand native water plants in this pond.
	A redeveloped and enlarged threatened plant section.
	• An outdoor fern section towards the northeastern part of the existing 'forest' area.
	A new section featuring Canterbury plants and flora.
	• Improved entrances into the native section and better boundary definition.
	More deliberate theming of various parts of the native 'forest'.
Status	Initiated.
Timeframe	Initial redevelopment of the Cockayne Garden to be completed by November 2008 (which is the 70 th anniversary of its opening), with sequential redevelopment of the native section of the Botanic Gardens to follow.



44 ... Retailing, information centre and catering needs

Location/	Primarily, the Botanic Gardens.
Context	
Description/ Action Required	There is no adequate consolidation of the public interface of the Botanic Gardens and, to a lesser extent, Hagley Park. When people visit botanic gardens there is a general expectation of specific facilities. These include availability of information, a retail outlet specializing in plant-related themes and catering and casual food outlets. At the Gardens these functions are dislocated and separated (in the case of catering). There is little space for either information or retailing at a level that might be expected, especially when comparison is made with comparable overseas botanic gardens. There is certainly no room for expansion.
	Associated with the provision of information, it is generally expected that botanic gardens have exhibition and lecturing space. This is true of gardens that are far smaller and less comprehensive than Christchurch. Current visitor numbers to the Botanic Gardens are about 1.2 million, with projections that suggest an increase to about two million within ten years. This represents a visit at least once every year by 75% of Christchurch residents and a visit by 60% of international visitors to Christchurch. It indicates that the Christchurch Botanic Gardens is a major destination for visitors and residents alike. Current facilities are inadequate to deal with this level of demand, let alone future increases. This project is directly linked with Project 31 (Botanic Gardens/Hagley Park visitor/information centre) and the identified objectives for improved focus of visitor facilities in the Botanic Gardens will be considered as part of visitor/information facilities under Project 31.
Status	Initiated - in planning stages.
Timeframe	To indicate.
Benefits to the Gardens	Resiting, consolidation and integrated design of these functions, along with the efficient operation of facilities, will markedly improve the public interface and contribute to a high quality interaction of visitors with the Botanic Gardens. It will bring the Botanic Gardens in line with public expectations, especially from international visitors, and will contribute to greater levels of satisfaction and quality of service overall.
2006 Public Consultation	39 out of a total of 597 submitters responded on this project. The number of submitters responding to this project is just under the master plan project submitter response average. Forty-one percent of thee submitters supported these retailing, information centre and catering needs for the Botanic Gardens. Another forty-six percent simply commented on the levels of service provided without expressing and particular support or non-support for further development. A further thirteen percent did indicate no support. The submitter response to this project may have been limited or skewed somewhat due to submitters making responses on retailing, information centre and catering needs for the Botanic Gardens as part of their response to Project 31 (Botanic Gardens/Hagley Park visitor/information
Project Contact	City Environment Croup
Project Contact	City Environment Group.

45 ... Review of governance and audit processes

Location/ Context	The Botanic Gardens, primarily, and Hagley Park, possibly.
Description/ Action Required	Since 1946, the administration of Hagley Park and the Botanic Gardens has been with the Christchurch City Council. At the present time, this is by the Council's City Environment Group, through the Botanical Services Operations Team. From time to time there is informal advice taken, especially through public surveys, interest group meetings, the Friends of the Christchurch Botanic Gardens and submission processes. However, there is no formal external review process, advisory process or sharing of governance. Public submissions have called for a change of governance, or at least a formally recognised advisory process. A number of models could be considered. Administration of the Botanic Gardens and Hagley Park is unlikely to be transferred in the future from the Christchurch City Council (such a move would require consent by the Minister of Conservation and/or involve legislative change). However, there may be advantage, as demonstrated in numerous overseas instances and parallel examples within New Zealand, in recognising and formalising external expert advice on the direction and operation of the Gardens. The elected members of the Christchurch City Council have resolved, through adoption of this project as part of the adopted Hagley Park/Botanic Gardens Master Plan, to proceed with consideration of governance and audit processes for the Botanic Gardens and Hagley Park. With respect to the Botanic Gardens, this entails consideration of a shared professorial position with the University of Canterbury to fill the role of curator. It has been raised that consultation is undertaken with the respective Directors of the Wuhan Botanical Garden in China and the University of Washington Botanic Gardens in Seattle on the skills required for such a role. It is anticipated that the position is advertised by 2007/2008. Further, that the governance of Hagley Park and the Botanic Gardens be enhanced through the establishment of an advisory group to advise on the care of these places.
Status	Initiated.
Timeframe	Over 2007/2008.
Benefits to the Gardens and the Park	A review of governance and advice would be likely to enhance the direction and operation of the Botanic Gardens, and possibly Hagley Park, providing there was a clear separation of governance and advisory roles. It would potentially create greater synergies between the Council and major stakeholders.
2006 Public Consultation	23 out of a total of 597 submitters responded on this project. Just over half of the average number of submitters responses for all the master plan projects made up the submitter response for this project. Of these, just over half were in support of the project and the remainder made comments. None expressed non-support.
Project Contact	City Environment Group, Corporate Support Unit.

46 ... Satellite gardens and 'the extended Botanic Gardens

Location/ Context	Primarily, the Botanic Gardens and, secondarily, Christchurch green spaces generally.
Description/ Action Required	The Botanic Gardens holds at the present time 8,500 to 10,000 species and cultivars of plants, and approximately 40,000 accessions overall. This places it on a par with such major botanic gardens as those at Melbourne, Sydney and Edinburgh.
	The Gardens is crowded and has limited ability to display its present collections, let alone develop new displays. It has already significantly expanded into adjacent parts of Hagley Park. The current site of the Gardens places severe constraints on the growing of many groups of plants, for instance those from coastal environments and the 'Mediterranean' regions of the world.
	Two proposals are advanced. The first is that, as part of ongoing development and management of many of the parks across Christchurch, there is a process of enriching the botanical content of a selection of these parks. This would not involve a substantial change in character or the conversion of such parks into botanic gardens, but would be to ensure that an increased range of the plants used had significant botanical value as well as amenity and landscaping value.
	A second proposal would be to formally recognise one or more satellite botanic gardens that have contrasting environments (including differences in microclimate, soils and aspect) to the present Botanic Gardens, where a range of plants could be grown that cannot at present be satisfactorily grown on the present site.
Status	Not initiated.
Timeframe	Not indicated.
Benefits to the Gardens	Proceeding in the ways indicated would relieve pressure on the present Botanic Gardens site, while also enhancing the value of other green space areas in Christchurch as well as the 'garden' image of the city.
2006 Public Consultation	32 out of a total of 597 submitters responded on this project. The submission response on this project was a little below the average submitter response for all the master plan projects. Nearly all supported the concept for the extension of the Botanic Gardens through satellite gardens.
Project Contact	City Environment Group.



Halswell Quarry Park

47 ... Science and research facility/programme

Location	The Botanic Gardens and Hagley Park.
Description/ Action Required	A science role for the Botanic Gardens is noted in the Christchurch Botanic Gardens Management Plan. The Gardens has a specialist library, small herbarium and laboratory, but research has received only minimal support. A key performance indicator that research goals are being achieved is included in this master plan (see Page 8). Development of a significant research role would require the following:
	• Expansion of the library and herbarium, including meeting requirements for containment of the herbarium under the Hazardous Substances and New Organisms Act 1996.
	Development of a seed bank (that could possibly include cryopreservation of germplasm) and support facilities.
	Bench space for researchers - including those on exchange, outside researchers working on Gardens projects and staff members and associates.
	Discussions held with research institutions and universities suggests there is considerable potential for the encouragement of student projects in the Botanic Gardens, and for the Gardens to be a venue for large research projects, especially those in urban ecology. A draft agenda of research topics has been drawn up as a precursor to a research strategy. The international Millennium Seed bank based at the Royal Botanic Gardens, Kew, England, is interested in facilitating development of one or more New Zealand germplasm banks and staff training.
	The direction supported by the elected Council is for there to be work with university and research institutes in Canterbury, including Landcare Research, the University of Canterbury, Lincoln University and Crop and Field Research, to appropriately develop research capability in the Botanic Gardens without un-necessary duplication.
Status	Discussion and concepts initiated.
Timeframe	Not stated.
Benefits to the Gardens and the Park	The Botanic Gardens is a shop window for biodiversity. A recognized research function for the Gardens would support this purpose, which is stated in the city's Biodiversity Strategy. It would also emphasise Hagley Park and the Gardens as highly significant central city green space areas for wildlife and raise the profile of the Gardens internationally. Recognition of an appropriate research and conservation function for the Gardens would bring it in line with major botanical gardens and facilitate staff exchanges and collaborative programmes with other botanical gardens.
2006 Public Consultation	51 out of a total of 597 submitters responded on this project - a submitter response that was over the average submitter response for all the master plan projects. Nearly three-quarters of these submitters supported such a role for the Botanic Gardens. The remainder, though, did not agree with the development of any significant research capacity for the Botanic Gardens that competed with research undertaken by other institutions.
Contact	City Environment Group.

... Fencing of helipad for the emergency transfer of patients to Christchurch Hospital

Location	North of the Christchurch Netball Centre netball courts on the south east side of South Hagley Park (see Plan 48).
Park Context	Ambulance access to this area is gained from Hagley Avenue, patients being transferred to the Accident and Emergency Department of the Christchurch Hospital. The landing site is not fenced, being situated adjacent to both winter and summer playing fields.
Description / Action Required	There has been a steady increase in the use of the site in the last 10 years to over 350 missions in the last 12 months. An issue raised is that pilots, with only 180 degree vision of the landing site from their cockpit, have grave concerns over bystander, crew, and patient safety when using the site. The view is that any spectators who come into contact with the aircraft, or debris displaced by rotor wash during landings, could result in injury or even death. In addition, the peak number of landings often coincide with weekend sports use of the grounds adjacent to the helipad, when many people are around. Although \$t\$ John Ambulance contacts the police concerning landings, the latter does not usually have staff available to be in attendance. Consequently, the fencing of the helipad is seen by pilots to be an important public health and safety requirement, with the fence required similar to that used to fence swimming pools, being 30 to 40 metres in diameter around the pad. The view held is that there is room for such a fence to be constructed on the site without affecting the sports field layout. Finally, while there is planning in the medium to long term to provide a helipad in the hospital grounds (Christchurch being the only tertiary centre in New Zealand without one), there is some urgency to remedy the present situation at Hagley Park in the interim. One alternative is for helicopters to land at the helicopter base at Christchurch International Airport, but this means patients will not arrive by road ambulance at hospital before a further 25 minutes has elapsed. This is a concern in the case of acute patients, which make up the bulk of patients transported by the helicopter service. The Hagley Park/Botanic Gardens Hearings Subcommittee, in its consideration of the public submissions received in 2006 on the draft master plan, recommended that the proposed fence be declined and that the Canterbury District Health Board be: 1. Advised of its responsibility to provide personnel to ensure public safety duri
Status	An application for fencing off of the helipad was made just prior to the start of the public consultation in 2006. Notification is required to be made to the Canterbury District Health Board of the Council's decision.

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Timeframe	As this is a public safety issue, it is important that it be addressed as soon as possible.
Park and Other Benefits	Of no benefit to Hagley Park and its users. However, there is benefit to the community, as a whole, in air-transported acute patients being got to hospital as quickly as possible.
2006 Public Consultation	40 out of a total of 597 submitters responded on this project – this was the master plan project submitter response average. Of these submitters, more than half (57.5 percent) did not support a fence being installed, with most of the remainder (40 percent) being in support.
Project Contact	Policy and Leasing Administrator, City Environment Group.

Plan 48

