Adopted Report
of the
Sustainable City Future Committee Meeting
held
Tuesday, 13 July 2010
at
02:00 pm
G6 Committee Room
Nerang Administration Centre
Nerang Southport Road Nerang

Our positioning statement
Working for our future - today

Our city vision
Defined by our spectacular beaches, hinterland ranges, forests and waterways, the Gold Coast is an outstanding city which celebrates nature and connects distinct communities with the common goal of sustainability, choice and wellbeing for all.

Our mission
Leading the way towards a bold future that can sustain growth and economic development while retaining a lifestyle that is uniquely ‘Gold Coast’.
<table>
<thead>
<tr>
<th>Item</th>
<th>Direct.</th>
<th>File</th>
<th>Page</th>
<th>Subject</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>CMS</td>
<td>CE196/281/11(P1)</td>
<td>4</td>
<td>FINAL MANAGEMENT PLAN FOR BURLEIGH GREEN SPACE CONSERVATION RESERVES</td>
</tr>
<tr>
<td>2</td>
<td>EDMP</td>
<td>TT1173/46/01/01(P6)</td>
<td>128</td>
<td>DESIGN PRINCIPLES FOR NEW VEGETATION FOR GOLD COAST CITY COUNCIL RETURNED WORKS WITHIN THE GOLD COAST RAPID TRANSIT CORRIDOR</td>
</tr>
<tr>
<td>3</td>
<td>PET</td>
<td>PD98/1132/02/03(P1)</td>
<td>163</td>
<td>PLANNING SCHEME REVIEW PROGRAM COMMUNITY AND STAKEHOLDER ENGAGEMENT PLAN</td>
</tr>
<tr>
<td>4</td>
<td>PET</td>
<td>PN136359/123/DA1(P12)</td>
<td>176</td>
<td>THE INCLUSION OF LOT 18 W3168 AND LOT 26 RP170765 AT 52 AND 110 WAVELEY DRIVE, WILLOW VALE IN THE SOUTH EAST QUEENSLAND REGIONAL PLAN URBAN FOOTPRINT</td>
</tr>
<tr>
<td>5</td>
<td>PET</td>
<td>CE116/60/24(P1)</td>
<td>179</td>
<td>GOLD COAST LOCAL HERITAGE REGISTER ADOPTIONS JULY 2010</td>
</tr>
</tbody>
</table>

Closed Session

<table>
<thead>
<tr>
<th>Item</th>
<th>Direct.</th>
<th>File</th>
<th>Page</th>
<th>Subject</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>PET</td>
<td>PD113/452/04/2009(P3)</td>
<td>193</td>
<td>INTERNATIONAL URBAN DESIGN CONFERENCE SERIES - UPDATE</td>
</tr>
<tr>
<td>7</td>
<td>PET</td>
<td>PD113/106/10/13(P1)</td>
<td>194</td>
<td>INFRASTRUCTURE CHARGES SUBSIDY ECONOMIC STIMULUS INITIATIVE ASSESSMENT REPORT</td>
</tr>
</tbody>
</table>

General Business

KEY:

CEO - Chief Executive Officer
CG - City Governance
CMS - Community Services
EDMP - Economic Development & Major Projects
ES - Engineering Services
GCW - Gold Coast Water
OS - Organisational Services
PET - Planning Environment & Transport
ATTENDANCE

Cr P J Young Chairperson
Cr G Betts
Cr G Pforr (arrived at meeting 2.05pm) (left the meeting at 2.30pm)
Cr C Robbins
Cr E L Shepherd
Cr J Wayne

Mr M Hulse Acting Director Planning Environment & Transport
Mr R Grose Manager Transport Planning
Mr D Hood Executive Coordinator City Plan Unit
Mr N Tzannes Executive Coordinator Regional Infrastructure Planning & Urban Design

APOLOGIES

ADOPTION BY COUNCIL 19 JULY 2010

RESOLUTION G10.0719.017 moved Cr Betts seconded Cr Robbins

That the Report of the Sustainable City Future Committee Meeting held on Tuesday, 13 July 2010, covered by Recommendations numbered SC10.0713.001 to SC10.0713.007 be received.

CARRIED

RESOLUTION G10.0719.019 moved Cr Betts seconded Cr Shepherd

That the Report of the Sustainable City Future Committee’s Recommendations of Tuesday 13 July 2010, numbered SC10.0713.001 to SC10.0713.007, be adopted with the exception of:-

Recommendation Number SC10.0713.007 which was specifically resolved.

CARRIED
ITEM 1 COMMUNITY SERVICES

FINAL MANAGEMENT PLAN FOR BURLEIGH GREEN SPACE CONSERVATION RESERVES
CE196/281/11(P1)

Refer 109 page attachment

1 BASIS FOR CONFIDENTIALITY

Not Applicable.

2 EXECUTIVE SUMMARY

Not Applicable.

3 PURPOSE OF REPORT

The purpose of this report is to present the final Burleigh Green Space Conservation Reserves Management Plan and Burleigh Green Space Conservation Reserves Community Consultation Report and request that these reports be adopted by Council.

The Conservation Management Plan provides the strategic framework that governs the development and delivery of management programs and day-to-day operations and uses within Burleigh Green Space Conservation Reserves, including conservation and restoration programs, pest management, fire management, access and recreation opportunities.

The Community Consultation Report summarises the methodology used and findings of public consultation carried out during development of the Conservation Management Plan.

4 PREVIOUS RESOLUTIONS

Ex Minute CS04.1202.013 refers:

“1 That Council adopt the document titled “Management Guidelines for sites acquired with funds from the Open Space Preservation Levy” for use on a permanent basis for sites purchased through both the Phase 1 and Phase 2 Acquisition Programs.

2 That funding for the ongoing implementation of the Management guidelines be considered in 2005/2006 budget deliberations.”

Ex Minute HC06.0817.010 refers:

“1 That Council endorses the implementation of the Community Consultation Policy during the management planning of Conservation Areas acquired via Phase 1 and 2 of the OSPL through the process as outlined in the report.”

Ex Minute SC09.1201.002

“1 That Council approve the draft Burleigh Green Space Conservation Reserves Management Plan in its current form and place the plan on public display for a period of six weeks.”
5 DISCUSSION

Burleigh Green Space Conservation Reserves are located at the southern end of the Gold Coast, covering 103 hectares of a vegetated ridgeline and slopes extending west along Tallebudgera Creek from Burleigh Head to the Pacific Motorway. The main parks within the planning area are Burleigh Ridge Park, Ocean Parade Bush Parklands, Herbert Park, Ron Mason Park and Skyline Terrace Reserve, which form a network of small vegetated remnants and native regrowth within a residential matrix.

Burleigh Green Space Conservation Reserves are part of one of the most significant urban conservation networks in the city. Together with Burleigh Head National Park and Tallebudgera Creek Conservation Park, Burleigh Green Space forms the eastern end of the Burleigh-Springbrook bioregional wildlife corridor, linking the World Heritage rainforests of Springbrook with coastal ecosystems and the Pacific Ocean. As well as providing opportunities for wildlife movement and genetic exchange, the reserves provide habitat for 325 native plants, including five rare or threatened species and over 100 animals, including two threatened species.

Historically, the rich natural resources made the area popular for food gathering amongst traditional owners and today the reserves contribute significantly to the health and lifestyle of nearby residents, offering a green refuge, space for daily exercise and visual benefits afforded by the presence of vegetation.

The intent of the management plan is to maximise the connectivity and ecological viability of the reserves by providing strategies for flora and fauna protection, vegetation and habitat restoration, fire management, pest management, landscape and catchment protection and protection of indigenous cultural heritage.

Visitor use of the planning area will be managed to maintain a high-quality, low impact, nature-based recreational experience that is consistent with the conservation objectives outlined in the plan. There are significant opportunities to enhance recreational access through repairing a selection of heavily used tracks connecting adjacent reserves while closing and rehabilitating degraded tracks that lack connectivity and are impacting on ecological values. Through judicious use of signage, the track network will be developed to showcase ongoing restoration activities, promote understanding and appreciation on native wildlife and encourage responsible public attitudes towards reserve management.

Public consultation on the Management Plan has been conducted using a two-stage process detailed in the attached Burleigh Green Space Conservation Reserves Community Consultation Report. External stakeholders were contacted initially via a flyer mailed to residents of the planning area and invited to provide preliminary input into the plan. All comments made were considered during the development of the plan, and the draft plan was then placed on public display for a further six weeks public consultation period. Further details on public consultation are provided under headings 12 and 13 below.
6 ALIGNMENT TO BOLD FUTURE VISION, CORPORATE PLAN, OPERATIONAL PLAN

Key focus areas and actions from Council’s Corporate Plan 2009-14 that are relevant to the Burleigh Green Space Reserves Conservation Management Plan include:

Key Focus Area: 1
A city leading by example

Outcome 1.1:
There are strong foundations for a sustainable city.

1.1.5 Encourage the uptake of Local, State and Federal programs which support sustainable practices

Outcome 1.2:
The community is actively involved in the city.

1.2.1 Actively involve Gold Coast citizens in shaping the decisions and actions which will impact on the city now and in the future.

Key Focus Area: 2
A city loved for its green, gold and blue

Outcome 2.1:
Parks and open green spaces are connected, safe and accessible for all members of the community.

Outcome 2.2:
Biodiversity is protected.

Outcome 2.3:
Wildlife corridors are well managed and connected.

Outcome 2.4:
The city’s beaches and coastline are protected to sustain their amenity and biodiversity.

Outcome 2.5:
Water and waterways across the city are protected and enhanced

Key Focus Area: 3
A city connecting people and places

Outcome 3.2:
Public transport and other environmentally-friendly modes of travel are attractive and desirable options for people to use.

3.2.3 Build bridges (“green bridges”) where appropriate, over waterways to connect existing gaps in pedestrian and cycle routes to encourage environmentally friendly modes of travel.

Outcome 3.5:
The community takes pride in its heritage and diversity.

Key Focus Area: 4
A safe city where everyone belongs

Outcome 4.1:
Our active and healthy community embraces recreation, leisure and social interaction.
Key Focus Area: 5
A city with a thriving economy

Outcome 5.4:
The lifestyle and opportunities are seen as advantages.

5.4.1 Promote the city globally as a destination recognised for its business opportunities, lifestyle, liveability, sustainability and its natural and built environment.

The plan will deliver on the following Council corporate strategies:

- Nature Conservation Strategy 2009-2019
- Our Natural Playground – A Parks and Recreation Plan for the Gold Coast.

7 FUNDING AND RESOURCING REQUIREMENTS

Indicative costs for major works proposed over the ten year life of the draft management plan are provided below. These costs have been estimated based on costs of previous similar projects and, in some cases, may be subject to change following more detailed feasibility assessments. While the proposed works can be partly funded through the OSPL, additional funding will be required. Council has been successful in obtaining funds for restorations and fire management projects through federal government initiatives including Caring for Country and the Bushfire Mitigation Program and Officers will continue to pursue alternative sources of funding for projects that are unable to be fully funded by Council.

The cost estimate for major restoration works totals $1,213,989; the estimate for major operational works is $620,000 and the estimate for bushfire management is $330,000. Over the ten year life of the plan, this equates to a total expenditure of around $216,000 per year.

The resources required to implement other ongoing management guidelines and actions identified in the draft Burleigh Green Space Conservation Reserves Management Plan will be calculated, prioritised and included into the annual budget for the management of natural areas subject to Council funding.

Major restoration projects

<table>
<thead>
<tr>
<th>Action Item*</th>
<th>Action</th>
<th>Cost over 10 year life of plan</th>
<th>Cost breakdown where applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>A3.6</td>
<td>Support Council’s environmental planning officers in the development of private landholder conservation initiatives such as an Urban Biodiversity Program to increase resident participation in protection of native vegetation, eg through weed control and planting of local native species in private gardens.</td>
<td>$80,000</td>
<td></td>
</tr>
<tr>
<td>A6.1</td>
<td>Continue with ongoing restoration works in accordance with detailed restoration plan developed for Burleigh Ridge Park.</td>
<td>$573,190</td>
<td>Primary works: $173,471 + maintenance up to 10 years: $399,719</td>
</tr>
<tr>
<td>A6.1</td>
<td>Continue with ongoing restoration works in accordance with detailed restoration plan developed for Herbert Park.</td>
<td>$463,356</td>
<td>Primary works: $104,045 + maintenance up to 10 years: $359,311</td>
</tr>
</tbody>
</table>
**Comprehensive Plan for Burleigh Green Space Conservation Reserves**

**CE196/281/11(P1)**

<table>
<thead>
<tr>
<th>Action Item*</th>
<th>Action</th>
<th>Cost over 10 year life of plan</th>
<th>Cost breakdown where applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>A6.1</td>
<td>Continue with ongoing restoration works in accordance with detailed restoration plan developed for lot 13 RP114420.</td>
<td>$97,443</td>
<td>Primary works: $16,211+ maintenance up to 10 years: $81,232</td>
</tr>
<tr>
<td>A9.2</td>
<td>Investigate opportunities for extension of Burleigh Head - David Fleay Wildlife Park linkage south of David Fleay Park, via a footbridge over Oyster Creek and track upgrade through lot 36 RP228768 (track 6). Investigations should include flood studies to identify any risks of upstream flooding associated with a bridge.</td>
<td>$450,000</td>
<td>Flood investigations &amp; Installation of bridge $360,000; Upgrade of track 6 including culvert &amp; fencing $90,000</td>
</tr>
<tr>
<td>A9.5</td>
<td>Install pedestrian counters along track 8 through Herbert Park to determine an appropriate level of sustainable management for pedestrian access.</td>
<td>$20,000</td>
<td></td>
</tr>
<tr>
<td>A9.7</td>
<td>Close and rehabilitate degraded informal tracks, ramps, jumps and un-used management tracks throughout the planning area.</td>
<td>$30,000</td>
<td></td>
</tr>
<tr>
<td>A12.6</td>
<td>Continue Council’s program of educational walks and workshops in the planning area.</td>
<td>$100,000</td>
<td>$10,000/year for 10 years</td>
</tr>
<tr>
<td>A12.10</td>
<td>Implement a good neighbour program tailored towards neighbouring residences. This program should address issues such as: planting of suitable native species, responsible disposal of household and garden waste, responsible pet ownership, a coordinated approach to pest plant and animal control, and bushfire hazard reduction strategies.</td>
<td>$20,000</td>
<td></td>
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</table>

Total cost over ten years: $1,213,989

*Refer to Table 9 in Burleigh Green Space Management Plan

**Major operational projects**

<table>
<thead>
<tr>
<th>Action Item*</th>
<th>Action</th>
<th>Cost over 10 year life of plan</th>
<th>Cost breakdown where applicable</th>
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<tbody>
<tr>
<td>A9.2</td>
<td>Investigate opportunities for extension of Burleigh Head - David Fleay Wildlife Park linkage south of David Fleay Park, via a footbridge over Oyster Creek and track upgrade through lot 36 RP228768 (track 6). Investigations should include flood studies to identify any risks of upstream flooding associated with a bridge.</td>
<td>$450,000</td>
<td>Flood investigations &amp; Installation of bridge $360,000; Upgrade of track 6 including culvert &amp; fencing $90,000</td>
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<tr>
<td>A9.5</td>
<td>Install pedestrian counters along track 8 through Herbert Park to determine an appropriate level of sustainable management for pedestrian access.</td>
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<tr>
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<td>Close and rehabilitate degraded informal tracks, ramps, jumps and un-used management tracks throughout the planning area.</td>
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<tr>
<td>A12.6</td>
<td>Continue Council’s program of educational walks and workshops in the planning area.</td>
<td>$100,000</td>
<td>$10,000/year for 10 years</td>
</tr>
<tr>
<td>A12.10</td>
<td>Implement a good neighbour program tailored towards neighbouring residences. This program should address issues such as: planting of suitable native species, responsible disposal of household and garden waste, responsible pet ownership, a coordinated approach to pest plant and animal control, and bushfire hazard reduction strategies.</td>
<td>$20,000</td>
<td></td>
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</table>

Total cost over ten years: $620,000

*Refer to Table 9 in Burleigh Green Space Management Plan

**Major bush fire management projects**

<table>
<thead>
<tr>
<th>Action Item*</th>
<th>Action</th>
<th>Cost over 10 year life of plan</th>
<th>Cost breakdown where applicable</th>
</tr>
</thead>
</table>
| A5.1 | Review the Bushfire Management Plan every five years, in consultation with relevant stakeholders. Confine these reviews to amendments associated with:  
  - pertinent new research findings and information  
  - the results of monitoring programs, where they indicate the need for changes in management  
  - where existing management strategies are not achieving stated objectives | $30,000 | $15,000 every 5 years |
ITEM 1 (Continued)

**FINAL MANAGEMENT PLAN FOR BURLEIGH GREEN SPACE CONSERVATION RESERVES**

**CE196/281/11(P1)**

<table>
<thead>
<tr>
<th>Action Item*</th>
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<th>Cost breakdown where applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>A9.6</td>
<td>Develop a shared fire management/walking/cycling linkage connecting Ron Mason Park with Ladds Ridge Road Skyline Terrace and Reedy Creek Road (tracks 12-14) and investigate opportunities for connectivity with West Burleigh Rd and Bermuda St.</td>
<td>$250,000</td>
<td></td>
</tr>
<tr>
<td>A10.2</td>
<td>Monitor condition of maintenance tracks and repair where necessary to provide ongoing safe, all weather vehicle access for operations and fire management.</td>
<td>$50,000</td>
<td>$5,000/year</td>
</tr>
</tbody>
</table>

**Total cost over ten years** $330,000

8 RISK MANAGEMENT

Corporate risks

<table>
<thead>
<tr>
<th>Risk</th>
<th>Mitigation</th>
<th>Management Plan Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO0000446: Inadequate management of medium-high bushfire hazard areas in prioritised Council owned/managed natural areas potentially resulting in loss of human life, property and negative impact on the environment (this could occur even in a non extreme bushfire event).</td>
<td>CM000364: Bushfire Management Plans for Council’s natural area estate</td>
<td>Guideline 5.1 Undertake bushfire management in accordance with the BMP for Burleigh Green Space Reserves (AECOM 2009).</td>
</tr>
<tr>
<td>CM000365: Ecological restoration plans</td>
<td>Action 6.1 Continue with current restoration works at Burleigh Ridge, Herbert Park and lot 13 RP114420, ensuring that adequate resources are provided for follow up management and current works are self-sustaining prior to implementation of new programs.</td>
<td></td>
</tr>
<tr>
<td>Action 6.2 Where resources allow, implement existing restoration plan for Ron Mason Park and develop and implement restoration plans for other reserves within the planning area (Skyline Terrace Reserve, Ocean Parade Bush Parklands, lots 208 W311480, 36 RP228768 and 3 RP864252). Investigate alternative sources (eg. federal grants, carbon offsets) for funding of restoration projects where necessary.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Action 6.4 Following prescribed burns or wildfires, assess weed recolonisation and undertake follow-up weed control to facilitate regeneration of naturally occurring species. Control Ochna serrulata prior to implementation of prescribed burns.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CO0000447: Adverse impact on the environment through inadequate and/or ineffective management of declared pest plants and animals</td>
<td>CM000366: Pest plants &amp; animals programs</td>
<td>Guideline 6.1 In cooperation with Council’s pest management officers, natural areas management officers will coordinate all pest plant control programs within the planning area, including management of declared species, to ensure an integrated and controlled program of ecological restoration. Neighbouring residents should be discouraged from carrying out inappropriate and potentially unsafe weed removal or revegetation works adjacent to their properties, where these works do not form part of a Council-coordinated restoration strategy.</td>
</tr>
<tr>
<td></td>
<td>Guideline 6.2 Ensure that all pest plant priorities, planning, and management are integrated and aligned with the intent and objectives of all relevant Commonwealth, State and Council guidelines, strategies, policies and legislation.</td>
<td></td>
</tr>
</tbody>
</table>
**Risk** | **Mitigation** | **Management Plan Reference**
--- | --- | ---

**Action 6.1** Continue with current restoration works at Burleigh Ridge, Herbert Park and lot 13 RP114420, ensuring that adequate resources are provided for follow up management and current works are self-sustaining prior to implementation of new programs.

**Action 6.2** Where resources allow, implement existing restoration plan for Ron Mason Park and develop and implement restoration plans for other reserves within the planning area (Skyline Terrace Reserve, Ocean Parade Bush Parklands, lots 208 W311480, 36 RP228768 and 3 RP864252). Investigate alternative sources (eg. federal grants, carbon offsets) for funding of restoration projects where necessary.

**Action 6.4** Following prescribed burns or wildfires, assess weed recolonisation and undertake follow-up weed control to facilitate regeneration of naturally occurring species. Control *Ochna serrulata* prior to implementation of prescribed burns.

**Action 6.6** Install interpretive signage at visible points adjacent to restoration areas to educate park visitors about the restoration process, impact of restoration on ecological values, and how individual neighbours can help.

**Action 6.7** Participate in the development and implementation of coordinated regional pest plant control initiatives with neighbours, community groups, and other land management agencies. Specifically: liaise with QPWS to facilitate collaborative pest plant management on adjacent Council and State managed reserves.

**Guideline 7.4** Continue to support Council’s animal management officers in undertaking existing programs for the control of pest animals within the planning area. Ensure that adequate notice is provided to natural areas operations officers prior to all pest animal control activities to enable closure of all or part of the planning area where required.

**Action 7.1** Develop and implement a Pest Animal Control Plan (PACP) for the planning area that identifies pest animals present and recommends and prioritises control and monitoring programs. This plan should include:

- triggers for initiating control strategies
- a set of criteria to establish priorities for non-native animal management
- control strategies that include multiple control methods, target multiple species and form part of an ecological restoration program
- integration with relevant Commonwealth Threat Abatement Plans
- strategies for community and landholder involvement/cooperation
- monitoring techniques and regimes to help identify priority areas for feral animal control and to measure the effectiveness of control methodologies
- reporting protocols
- assignment of responsibility for tasks and activities

**Action 7.3** Work with QPWS to develop and implement a coordinated approach to the management of pest animals within the planning area and adjacent state managed reserves.
ITEM 1 (Continued)

FINAL MANAGEMENT PLAN FOR BURLEIGH GREEN SPACE CONSERVATION RESERVES
CE196/281/11(P1)

<table>
<thead>
<tr>
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<th>Mitigation</th>
<th>Management Plan Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Action 7.4</td>
<td>Continue to record locations of pest animal dens, routes, trap sites and bait locations on Council’s natural areas incidental records database. New information pertaining to pest animal species should be regularly shared with Council’s animal management officers and uploaded to Council’s GIS database.</td>
</tr>
<tr>
<td>CM000367: Private property programs</td>
<td>Action 6.5</td>
<td>Educate neighbouring residents about the threat posed by ‘garden escapes’ on ecological values within the reserves through interpretive signage, Council’s website, local media, Council workshops, Council’s Urban Biodiversity Program (refer to Section 4.12), patrols by natural areas operational staff and the development and distribution of educational material regarding problematic garden species and suitable native garden alternatives. Identify priority streets adjacent to the reserves for targeted action (door knocks and letterbox drops).</td>
</tr>
<tr>
<td></td>
<td>Action 6.7</td>
<td>Participate in the development and implementation of coordinated regional pest plant control initiatives with neighbours, community groups, and other land management agencies. Specifically: liaise with QPWS to facilitate collaborative pest plant management on adjacent Council and State managed reserves.</td>
</tr>
<tr>
<td></td>
<td>Action 7.6</td>
<td>Promote responsible pet ownership and community understanding of the impacts of domestic animals on native fauna through interpretive signage (refer to Section 4.12), Council’s website, local media, Council’s Good Neighbour Program, and during operational patrols.</td>
</tr>
</tbody>
</table>

Directorate risks

No relevant risks were identified on the Community Services Directorate Risk Register.

9  STATUTORY MATTERS

Council has obligations under state and federal legislation to appropriately manage areas of ecological and cultural significance. Key legislation includes:

- Environmental Protection and Biodiversity Act 1999 (Cth)
- Nature Conservation Act 1992 (Qld)
- Environmental Protection Act 1994 (Qld)
- Vegetation Management Act 1999 (Qld)
- Lands Act 1994 (Qld)
- Land Protection (Pest and Stock Route Management) Act 2002 (Qld)
- Cultural Heritage Act 2003 (Qld)
- Fire and Rescue Services Act 1990 (Qld)

10  COUNCIL POLICIES

A number of local planning initiatives have been implemented to ensure the protection of Council’s natural assets and have requirements for the development of management plans. These include:

- Our Living City – Gold Coast Planning Scheme
- Gold Coast Nature Conservation Strategy 2009-2019
- Open Space Preservation Levy Acquisition Program Policy
The Gold Coast Planning Scheme designates the majority of Burleigh Green Space reserves as Environmental Public Open Space within the Burleigh Ridge Local Area Plan (LAP) and the two lots that comprise the small reserve to the south of David Fleay Wildlife Park and Oyster Creek (lot 3 RP864252 and lot 36 RP228768 Tallebudgera Creek Road) as the Tallebudgera Creek and Environs precinct occur in the West Burleigh LAP.

Lot 13 RP114420 West Burleigh Rd is currently designated as community facilities under the Burleigh Ridge LAP. The Community Facilities precinct includes parcels of land in which existing community uses should be maintained. However this site does not have an existing community use and lacks infrastructure for such purposes. Native vegetation communities at the site have recently been restored and it is an important link in the Burleigh-Springbrook Bioregional Wildlife Corridor. Amendment of the current precinct designation to the Environmental Open Space designation, in order to give this lot the same level of protection as surrounding reserves, is currently being assessed as part of Amendment 7 to Council's town planning scheme.

11 DELEGATIONS
Not applicable.

12 COORDINATION & CONSULTATION
Preliminary internal stakeholder workshops were held with staff from NAMU Operations and Restorations Teams. Comments made during these workshops were considered during development of the plan. Other internal stakeholders consulted on relevant issues during development of the plan included the local Councillor and staff from the following Council sections: Environmental Planning and Conservation, Legal Services (Aboriginal Cultural Heritage), City Property, Pest Management, Infrastructure Planning, Recreational Planning, Social Infrastructure Planning, Gold Coast Water, Engineering Assets and Planning and Implementation and Assessment.

The draft management plan was been sent to internal Council stakeholders (summarised below) for their comments, which have been considered and, where appropriate, incorporated into the draft plan for public display. Managers/team leaders were asked to forward the plan to their staff where relevant.

<table>
<thead>
<tr>
<th>Name and Title of the Stakeholder Consulted</th>
<th>Directorate or Organisation</th>
<th>Is the Stakeholder Satisfied With Content of Report and Recommendations (Yes/No) (comment as appropriate)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All staff in Natural Areas Management Unit</td>
<td>CS</td>
<td>Comments received and incorporated into plan</td>
</tr>
<tr>
<td>ROWE Warren</td>
<td>PET</td>
<td>Yes</td>
</tr>
<tr>
<td>CORKILL David</td>
<td>PET</td>
<td>Yes</td>
</tr>
<tr>
<td>ROBB Louise</td>
<td>PET</td>
<td>Yes</td>
</tr>
<tr>
<td>GARDINER Sarah</td>
<td>PET</td>
<td>Yes</td>
</tr>
<tr>
<td>SEARLE Jason</td>
<td>PET</td>
<td>Yes</td>
</tr>
<tr>
<td>PEACOCK Carmel</td>
<td>PET</td>
<td>Yes</td>
</tr>
<tr>
<td>OWEN Peter</td>
<td>I&amp;A</td>
<td>Yes</td>
</tr>
<tr>
<td>WENT Dick</td>
<td>GCW</td>
<td>Yes</td>
</tr>
<tr>
<td>WALTHAM Nathan</td>
<td>CS</td>
<td>Yes, comments received and incorporated into plan</td>
</tr>
<tr>
<td>JACOBS Ron</td>
<td>CS</td>
<td>Comments received and incorporated into plan</td>
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<tr>
<td>GREENWOOD Ross</td>
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</table>
ITEM 1 (Continued)  
COMMUNITY SERVICES  
FINAL MANAGEMENT PLAN FOR BURLEIGH GREEN SPACE CONSERVATION RESERVES  
CE196/281/11(P1)

<table>
<thead>
<tr>
<th>Name and Title of the Stakeholder Consulted</th>
<th>Directorate or Organisation</th>
<th>Is the Stakeholder Satisfied With Content of Report and Recommendations (Yes/No) (comment as appropriate)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PASCOE Richard</td>
<td>CS</td>
<td>Yes</td>
</tr>
<tr>
<td>ALLAWAY Dave</td>
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</tr>
<tr>
<td>WILLIAMS Rick</td>
<td>CS</td>
<td>Yes</td>
</tr>
<tr>
<td>COHEN John</td>
<td>CS</td>
<td>Yes</td>
</tr>
<tr>
<td>SHEWELL John</td>
<td>CS</td>
<td>Yes</td>
</tr>
<tr>
<td>ASH Mark</td>
<td>ES</td>
<td>Yes</td>
</tr>
<tr>
<td>MCGRATH John</td>
<td>ES</td>
<td>Yes, comments received and incorporated into plan</td>
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<tr>
<td>KILPATRICK Nikki</td>
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<td>HUNT Shannon</td>
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<td>Yes</td>
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<tr>
<td>PEASE Mark</td>
<td>ES</td>
<td>Yes</td>
</tr>
<tr>
<td>STEPHENS Chris</td>
<td>ES</td>
<td>Yes</td>
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<tr>
<td>VANT HOF Nikolaas</td>
<td>ES</td>
<td>Yes</td>
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<tr>
<td>SCOTT Darren</td>
<td>EDMP</td>
<td>Yes</td>
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<tr>
<td>RUSSO Colin</td>
<td>CG</td>
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<tr>
<td>BEST Hague</td>
<td>CG</td>
<td>Yes, comments received and incorporated into plan</td>
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<tr>
<td>STINSON Kiri</td>
<td>CG</td>
<td>Yes</td>
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<td>MADDEN Brendan</td>
<td>OS</td>
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<tr>
<td>Councillor G. Betts</td>
<td></td>
<td>Yes, comments received and incorporated into plan</td>
</tr>
<tr>
<td>Councillor J. Grew</td>
<td></td>
<td>Yes</td>
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</tbody>
</table>

A flyer inviting preliminary community input into the plan was sent to residents of the planning area in November 2007 and also made available via Council’s website and advertisements in the local press. Forty-three public submissions were received and have been considered during the development of this plan. Respondents were generally supportive of Councils intent to develop a management plan for the reserves and there was strong support for protection and enhancement of the reserve network, both for its ecological function as a wildlife corridor, its importance for community health and wellbeing and for future generations.

Other issues raised included management of pest plants and animals, maintenance of a walking track network, creek bank erosion, illegal activities and use of adjacent QPWS conservation parks by vagrants, the need to provide better connectivity between reserves and the importance of coordinated management with Queensland Parks and Wildlife Service. Further detail is provided in the Burleigh Green Space Conservation Reserves Community Consultation Report (Appendix 2).

Other external stakeholders consulted during the development of the plan include Queensland Parks and Wildlife Service, Queensland Fire and Rescue Service, managers of David Fleay Wildlife Park, the Richmond Birdwing Recovery Network, local Aboriginal groups (through Council’s Cultural Heritage Liaison Officer) and Wildcare.
13 STAKEHOLDER IMPACTS

External / community stakeholder Impacts

NAMU Conservation Management Plans are developed using a two-phase community stakeholder consultation process, which gives external stakeholders the opportunity to have input into the development of the management plan as well as comment on the draft plan when this becomes available. During the first phase, a flyer is sent to all residents in the planning area, and is advertised on Council’s website and in the local press. External stakeholders are invited to make suggestions regarding what they consider important in the planning area and what issues the management plan should seek to address, and these suggestions are considered during development of the plan. All contact details are recorded so that those who make submissions can be advised when the draft plan is available for public comment. During the second phase, the draft plan is put on public display (via Council’s website, libraries and service centres) and comments on the draft plan are invited. All comments are considered during finalisation of the management plan.

For the Burleigh Green Space Conservation Management Plan and other conservation management plans developed using this process, external stakeholders have generally been very supportive of the two-phase consultation process because it enables public input from the start of the planning process and provides the community with two opportunities to raise any issues they have regarding potential detrimental impacts, which can then be addressed during finalisation of the management plan.

All comments made during both consultation phases are addressed in the management plan (see Burleigh Green Space Conservation Reserves Community Consultation Report – Appendix 2), therefore it is not anticipated that further subsequent impacts from the plan will arise.

Internal (Organisational) Stakeholder Impacts

Issues raised by internal stakeholders during preliminary stakeholder workshops and through comments on the draft plan, have been considered and addressed in the management plan. Key issues raised and the section of the plan in which they are addressed are listed in the table below.

<table>
<thead>
<tr>
<th>Issue</th>
<th>Stakeholder</th>
<th>Management Response/Plan Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impact of plan on Tallebudgera Ck Foreshore Stabilisation Project</td>
<td>IDG</td>
<td>N/A as this project occurs in State managed conservation park outside plan area</td>
</tr>
<tr>
<td>Impact of management plan on proposed stormwater upgrades within</td>
<td>EAP</td>
<td>Planned stormwater upgrades within lifetime of plan (10 years) will not impact on parks in planning</td>
</tr>
<tr>
<td>proposed stormwater upgrades within planning area &amp; coordinated</td>
<td></td>
<td>area. Dept. of Main Roads have no plans for flood mitigation works at Tsipura Drive within lifetime of plan.</td>
</tr>
<tr>
<td>management with other relevant Council land/asset managers.</td>
<td></td>
<td>However, the plan proposes ongoing liaison with relevant Council departments to ensure coordinated actions to protect the conservation values of the planning area, where future infrastructure is proposed within or immediately adjacent to the planning area:</td>
</tr>
</tbody>
</table>
### Action 1.4: Liaise with Council’s implementation and assessment, recreational planning and engineering services officers to ensure that future developments complement the natural character of the area, and protect significant scenic and landscape features adjoining, or in proximity to, the planning area.

### Action 2.8: Liaise with Council’s implementation and assessment, recreational planning and engineering services officers to ensure that development or land use proposals within or adjacent to the reserves of the planning area do not result in significant alterations to natural flow regimes and aquatic ecosystems and support the rehabilitation of the Burleigh-Springbrook Corridor.

#### Impact of proposed footbridge over Oyster Creek on upstream flood risk

<table>
<thead>
<tr>
<th>Issue</th>
<th>Stakeholder</th>
<th>Management Response/Plan Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flood study required prior to development of bridge. This requirement is specifically identified in <strong>Action 9.2: Investigate opportunities for extension of Burleigh Head - David Fleay Wildlife Park linkage south of David Fleay Park, via a footbridge over Oyster Creek and track upgrade through lot 36 RP228768 (track 6). Investigations should include flood studies to identify any risks of upstream flooding associated with a bridge.</strong></td>
<td>EAP</td>
<td></td>
</tr>
</tbody>
</table>

Other relevant guidelines include:

**Guideline 2.2** Ensure that feasibility assessments are conducted where infrastructure is proposed within flood affected areas and to determine appropriate setbacks of planned infrastructure to waterways and ephemeral flow paths.

**Guideline 9.2** Where new infrastructure or embellishments are proposed, conduct a feasibility assessment to assess site constraints, costs, environmental and cultural impacts, community demand, compliance with Local and State environmental legislation and consistency with other objectives of this plan.

#### Plan should support existing recreational access to Tallebudgera Creek

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>Management Response/Plan Reference</th>
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</thead>
<tbody>
<tr>
<td>Desired Outcome 4.2.2: Sustainable waterway access is maintained. <strong>Guideline 2.3</strong> Facilitate waterway access at designated, formalised access points only. <strong>A2.3</strong> Liaise with Council’s catchment management officers to review condition and level of use of formal and informal waterway access points within the planning area and repair/formalise access where necessary to reduce damage to riparian communities.</td>
<td>EAP</td>
</tr>
</tbody>
</table>

### Reference to fauna values associated with Tallebudgera Creek

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>Management Response/Plan Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relevant information added to <strong>Section 4.4.1</strong> of plan. Aquatic fauna management addressed in <strong>Guideline 4.1</strong> Undertake all management operations in such a way as to minimise disturbance to indigenous native aquatic and terrestrial fauna at all times.</td>
<td>EAP</td>
</tr>
</tbody>
</table>

### Clarify management actions relating to aquatic weeds

<table>
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<tr>
<th>Stakeholder</th>
<th>Management Response/Plan Reference</th>
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<tbody>
<tr>
<td><strong>Guideline 6.3</strong> Where practical and resources permit, Council restorations officers will be responsible for undertaking an assessment of the condition and degree of infestation within all reserves. New information on declared species, or new incidences of declared species, including aquatic weeds, should be regularly shared with Council’s pest management officers.</td>
<td>EAP</td>
</tr>
</tbody>
</table>
## Final Management Plan for Burleigh Green Space Conservation Reserves

### CE196/281/11(P1)

<table>
<thead>
<tr>
<th>Issue</th>
<th>Stakeholder</th>
<th>Management Response/Plan Reference</th>
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</table>
| Reference to management of mosquitoes and midges in planning area   | EAP                              | The following text added to Section 4.7.1:  
Mosquitoes and midges are not considered to be a major issue within the planning area. However, Council’s pest management officers periodically conduct fogging in the vicinity of the reserves in direct response to community complaints.                                                                 |
| Reference to aquatic recreation occurring in Tallebudgera Creek, adjacent to the planning area, and potential use of parks within the planning area to access Tallebudgera Creek. | EAP                              | Section 4.9.1.5: Water-based activities, added to plan.  
Use of reserves to access Tallebudgera Creek also noted in Section 4.11.1.                                                                                     |
| Correct referencing of local aboriginal groups within planning area  | Legal Services                   | Plan amended accordingly                                                                                                                                                                                                                                                                                                                                              |
| Liaison with Council’s Indigenous Cultural Heritage Officer and Yugambeh Museum to ensure accuracy of stories where these are used in interpretive material or guided walks. | Legal Service                    | Guideline 8.1 Consult Aboriginal people with traditional affiliations to the planning area, Council’s indigenous cultural heritage officer, and relevant State and Commonwealth Aboriginal heritage authorities, in decisions regarding the management of Aboriginal cultural heritage, including identification of sites, and actions to protect objects, sites and landscape features.  
Guideline 8.4 Seek agreement and verification from local Aboriginal communities before providing interpretive information on the location of any Aboriginal sites and places, or before referring to Aboriginal stories in media or education programs.  
Guideline 8.5 Ensure that Council staff working within the planning area undertake Council’s cultural heritage awareness training when this becomes available.                                                                                                                                 |
| Pedestrian connectivity through David Fleay Wildlife Park (boardwalk) and across Oyster Creek. | Councillor Betts NAMU operations | Action 9.1 Liaise with QPWS regarding the repair and maintenance of the track through David Fleay Wildlife Park and lot 206 W311480 (track 4) and to ensure coordinated nature-based recreation planning throughout the Burleigh linkage.  
Action 9.2 Investigate opportunities for extension of Burleigh Head - David Fleay Wildlife Park linkage south of David Fleay Park, via a footbridge over Oyster Creek and track upgrade through lot 36 RP228768 (track 6). Investigations should include flood studies to identify any risks of upstream flooding associated with a bridge.                                                                                                                                 |
| Pedestrian connectivity from Skyline Terrace to Reedy Creek Road via Ron Mason Park. | Councillor Betts                 | Action 9.6 Develop a shared fire management/walking/cycling linkage connecting Ron Mason Park with Ladds Ridge Road, Skyline Terrace and Reedy Creek Road (tracks 11-13).                                                                                                                                                                                                 |
| Environmental protection during landslip remediation                 | NAMU operations                   | Guideline 1.7 Fence unstable slopes where necessary (e.g. where there are risks to human safety, soil erosion, or sensitive vegetation communities).  
Guideline 1.10 Where construction/remediation works (e.g. associated with landslip) are required in a reserve, works should be conducted in accordance with conditions outlined in the Application for Use of Council Controlled Parkland, with conditions put in place by natural areas officers where necessary to ensure protection of the environmental values of the reserve. |
ITEM 1 (Continued)  COMMUNITY SERVICES

FINAL MANAGEMENT PLAN FOR BURLEIGH GREEN SPACE CONSERVATION RESERVES
CE196/281/11(P1)

<table>
<thead>
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</tr>
</thead>
</table>
| Recording and collating of incidental flora and fauna records | NAMU Operations | Action 3.2 Forward the results of all new floristic studies and incidental flora records to Council’s environmental planning officers to be updated to the Gold Coast City Nature Conservation Strategy Database.  
Action 4.7 Forward the results of all new fauna studies and incidental records to Council’s environmental planning officers to be added to the Gold Coast City Nature Conservation Strategy Database. |
| Provision of connectivity for mountain bike riders through Herbert Park and Ron Mason Reserve | NAMU Operations | Action 9.6 Develop a shared fire management/walking/cycling linkage connecting Ron Mason Park with Ladds Ridge Road, Skyline Terrace and Reedy Creek Road (tracks 11-13), and investigate opportunities for connectivity with West Burleigh Road and Bermuda Street. |
| Use of track counters to determine level of track use and appropriate management response | NAMU Operations | Action 9.5 Install pedestrian counters along track 8 through Herbert Park to determine an appropriate level of sustainable management to provide ongoing pedestrian access and showcase recent restoration and upgrade track accordingly. |
| Land acquisition to improve connectivity along Burleigh to Springbrook wildlife corridor | EP&C | Action 1.3 Support the acquisition of vegetated and visually prominent properties along the Burleigh ridge line through Council’s Open Space Preservation Levy. |

14 TIMING

Subject to Council adoption, the Burleigh Green Space Conservation Reserves Management Plan will be printed and copies of the plan sent to key internal and external stakeholders. Council’s Have Your Say website will be updated to show the final management plan and Burleigh Green Space Community Consultation Report. A link to the management plan will also be provided from Council’s Gold Coast Parks website. It is anticipated that printing and website display can occur within three weeks of Council’s approval of the plan.

The Burleigh Green Space Conservation Reserves Management Plan will come into effect immediately once adopted and will serve as the document that provides the strategic framework that governs the development and delivery of management programs and day-to-day operations and uses within Burleigh Green Space Conservation Reserves over the next ten years.

15 CONCLUSION

The Burleigh Green Space Conservation Reserves Management Plan is an important document that will ensure the ongoing protection of the significant natural values of the planning area. It will achieve this outcome by guiding land management through the provision of key management objectives, guidelines and actions. The plan provides management strategies for protection of flora, fauna, landscape and heritage values, management of bushfire, pest plants, pest animals, visitors and infrastructure, and identifies strategic opportunities for public access, nature-based recreation and access and community education.
The importance of the planning area within the context of adjacent National Parks and Conservation Parks and the Burleigh-Springbrook bioregional wildlife corridor is identified and, consequently, coordinated management with neighbouring land management agencies is a priority.

The plan has been developed in consultation with relevant Council stakeholders, neighbouring land managers and the Gold Coast community. Community submissions received support the development of the management plan and the key objectives of the plan to conserve and enhance natural values and provide sustainable access and recreation opportunities through the reserves.

16 RECOMMENDATION

It is recommended that Council resolves as follows:

1 That Council adopt the Burleigh Green Space Conservation Reserves Management Plan and approve the publication and release of the plan for the city’s residents and visitors.

2 That Council adopt the Burleigh Green Space Conservation Reserve Community Consultation Report and approve the display of this report on Council’s Have Your Say website.

Author: Liz Caddick
Authorised by: Colette McCool
Conservation Management Planner Director Community Services
28 June 2010

COMMITTEE RECOMMENDATION SC10.0713.001
moved Cr Betts seconded Cr Robbins

1 That Council adopt the Burleigh Green Space Conservation Reserves Management Plan and approve the publication and release of the plan for the city’s residents and visitors.

2 That Council adopt the Burleigh Green Space Conservation Reserve Community Consultation Report and approve the display of this report on Council’s Have Your Say website.

CARRIED
Burleigh Green Space Conservation Reserves

Management Plan

28 June 2010
Burleigh Green Space Conservation
Reserves
Management Plan

Gold Coast City Council
Natural Areas Management Unit
June 2010

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Acknowledgements

This plan has been developed with the support and assistance of staff in Council’s Natural Areas Management Unit. Council officers from the following departments also provided help: Environmental Planning and Conservation Unit, Parks and Recreational Services, Catchment Management, Pest Management, Animal Management, the Office of City Architect and Heritage, and Legal Services. The Queensland Fire and Rescue Service has also provided valuable input.
# Table of contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executive summary</td>
<td>25</td>
</tr>
<tr>
<td>Acronyms used in this management plan</td>
<td>27</td>
</tr>
<tr>
<td>1 Introduction</td>
<td>28</td>
</tr>
<tr>
<td>1.1 Management vision</td>
<td>28</td>
</tr>
<tr>
<td>1.2 Plan Development and implementation</td>
<td>28</td>
</tr>
<tr>
<td>1.2.1 Methodology and overview</td>
<td>28</td>
</tr>
<tr>
<td>1.2.2 Implementation</td>
<td>29</td>
</tr>
<tr>
<td>2 Background</td>
<td>29</td>
</tr>
<tr>
<td>2.1 Location and planning area</td>
<td>29</td>
</tr>
<tr>
<td>2.2 Regional context</td>
<td>32</td>
</tr>
<tr>
<td>2.3 Significance of the planning area</td>
<td>33</td>
</tr>
<tr>
<td>2.3.1 Natural values</td>
<td>33</td>
</tr>
<tr>
<td>2.3.2 Cultural heritage values</td>
<td>36</td>
</tr>
<tr>
<td>2.3.3 Recreation values</td>
<td>37</td>
</tr>
<tr>
<td>2.3.4 Scientific and education values</td>
<td>37</td>
</tr>
<tr>
<td>2.3.5 Social and economic values</td>
<td>37</td>
</tr>
<tr>
<td>2.4 Climate change</td>
<td>38</td>
</tr>
<tr>
<td>3 Management framework</td>
<td>39</td>
</tr>
<tr>
<td>3.1 Legislative and policy framework</td>
<td>39</td>
</tr>
<tr>
<td>3.1.1 Gold Coast Planning Scheme and other GCCC policies and guidelines</td>
<td>39</td>
</tr>
<tr>
<td>3.1.1.1 Domains and Local Area Plans</td>
<td>39</td>
</tr>
<tr>
<td>3.1.1.2 Planning Strategy</td>
<td>40</td>
</tr>
<tr>
<td>3.1.1.3 Priority Infrastructure Plan</td>
<td>41</td>
</tr>
<tr>
<td>3.1.1.4 Other GCCC policies and guidelines</td>
<td>41</td>
</tr>
<tr>
<td>3.1.3 Other relevant legislation</td>
<td>42</td>
</tr>
<tr>
<td>4 Management strategies for Burleigh Green Space Reserves</td>
<td>45</td>
</tr>
<tr>
<td>4.1 Landscape protection</td>
<td>45</td>
</tr>
<tr>
<td>4.1.1 Current management situation</td>
<td>45</td>
</tr>
<tr>
<td>4.1.2 Desired outcomes</td>
<td>46</td>
</tr>
<tr>
<td>4.1.3 Management strategy</td>
<td>46</td>
</tr>
<tr>
<td>4.1.3.1 Guidelines</td>
<td>46</td>
</tr>
<tr>
<td>4.1.3.2 Actions</td>
<td>47</td>
</tr>
<tr>
<td>4.1.4 Key monitoring priorities</td>
<td>47</td>
</tr>
<tr>
<td>4.2 Catchment management</td>
<td>47</td>
</tr>
<tr>
<td>4.2.1 Current management situation</td>
<td>47</td>
</tr>
<tr>
<td>4.2.2 Desired outcomes</td>
<td>49</td>
</tr>
<tr>
<td>4.2.3 Management strategy</td>
<td>49</td>
</tr>
<tr>
<td>4.2.3.1 Guidelines</td>
<td>49</td>
</tr>
<tr>
<td>4.2.3.2 Actions</td>
<td>49</td>
</tr>
<tr>
<td>4.2.4 Key monitoring priorities</td>
<td>50</td>
</tr>
<tr>
<td>4.3 Native flora</td>
<td>51</td>
</tr>
<tr>
<td>4.3.1 Current management situation</td>
<td>51</td>
</tr>
<tr>
<td>4.3.2 Desired outcomes</td>
<td>52</td>
</tr>
<tr>
<td>4.3.3 Management strategy</td>
<td>52</td>
</tr>
<tr>
<td>4.3.3.1 Guidelines</td>
<td>52</td>
</tr>
<tr>
<td>4.3.3.2 Actions</td>
<td>53</td>
</tr>
<tr>
<td>4.3.4 Key monitoring priorities</td>
<td>53</td>
</tr>
</tbody>
</table>
4.4 Native fauna ........................................................................................................................................54
  4.4.1 Current management situation .................................................................................................54
  4.4.2 Desired outcomes .......................................................................................................................56
  4.4.3 Management strategy ................................................................................................................56
    4.4.3.1 Guidelines...........................................................................................................................56
    4.4.3.2 Actions ...............................................................................................................................56
  4.4.4 Key monitoring priorities ...........................................................................................................58

4.5 Bushfire ...........................................................................................................................................58
  4.5.1 Current management situation .................................................................................................58
  4.5.2 Desired outcomes .......................................................................................................................62
  4.5.3 Management strategy ................................................................................................................62
    4.5.3.1 Guidelines...........................................................................................................................62
    4.5.3.2 Actions ...............................................................................................................................63
  4.5.4 Key monitoring priorities ...........................................................................................................64

4.6 Pest plants and ecological restoration .............................................................................................64
  4.6.1 Current management situation .................................................................................................64
  4.6.2 Desired outcomes .......................................................................................................................65
  4.6.3 Management strategy ................................................................................................................66
    4.6.3.1 Guidelines...........................................................................................................................66
    4.6.3.2 Actions ...............................................................................................................................67
  4.6.4 Key monitoring priorities ...........................................................................................................67

4.7 Pest animals ....................................................................................................................................68
  4.7.1 Current management situation .................................................................................................68
  4.7.2 Desired outcomes .......................................................................................................................69
  4.7.3 Management strategy ................................................................................................................69
    4.7.3.1 Guidelines...........................................................................................................................69
    4.7.3.2 Actions ...............................................................................................................................69
  4.7.4 Key monitoring priorities ...........................................................................................................70

4.8 Aboriginal and European cultural heritage ......................................................................................71
  4.8.1 Current management situation .................................................................................................71
  4.8.2 Desired outcomes .......................................................................................................................71
  4.8.3 Management strategy ................................................................................................................72
    4.8.3.1 Guidelines...........................................................................................................................72
    4.8.3.2 Actions ...............................................................................................................................72
  4.8.4 Key monitoring priorities ...........................................................................................................72

4.9 Recreation opportunities ..................................................................................................................73
  4.9.1 Current management situation .................................................................................................73
    4.9.1.1 Bushwalking .......................................................................................................................73
    4.9.1.2 Day use and nature appreciation ..........................................................................................77
    4.9.1.3 Horse riding .........................................................................................................................78
    4.9.1.4 Mountain biking ...................................................................................................................78
    4.9.1.5 Water-based activities ........................................................................................................78
  4.9.2 Desired outcomes .......................................................................................................................79
  4.9.3 Management strategy ................................................................................................................79
    4.9.3.1 Guidelines...........................................................................................................................79
    4.9.3.2 Actions ...............................................................................................................................80
  4.9.4 Key monitoring priorities ...........................................................................................................81

4.10 Infrastructure and Access ...............................................................................................................81
  4.10.1 Current management situation .................................................................................................81
  4.10.2 Desired outcomes .......................................................................................................................84
  4.10.3 Management strategy ................................................................................................................84
    4.10.3.1 Guidelines...........................................................................................................................84
    4.10.3.2 Actions ...............................................................................................................................85
  4.10.4 Key monitoring priorities ...........................................................................................................86
4.11 Commercial activities ........................................................................................................86
  4.11.1 Current management situation ...................................................................................86
  4.11.2 Desired outcomes .......................................................................................................86
  4.11.3 Management strategy ................................................................................................87
      4.11.3.1 Guidelines ........................................................................................................87
      4.11.3.2 Actions .............................................................................................................87
  4.11.4 Key monitoring priorities .........................................................................................87

4.12 Community involvement, education and interpretation .................................................88
  4.12.1 Current management situation ..................................................................................88
  4.12.2 Desired outcomes ......................................................................................................89
  4.12.3 Management strategy ...............................................................................................89
      4.12.3.1 Guidelines ........................................................................................................89
      4.12.3.2 Actions .............................................................................................................89
  4.12.4 Key monitoring priorities .........................................................................................90

4.13 Research and monitoring ..............................................................................................90
  4.13.1 Current management situation ..................................................................................90
  4.13.2 Desired outcomes ......................................................................................................91
  4.13.3 Management strategy ...............................................................................................92
      4.13.3.1 Guidelines ........................................................................................................92
      4.13.3.2 Actions .............................................................................................................93
  4.13.4 Key monitoring priorities .........................................................................................93

4.14 Strategic planning and estate consolidation ..................................................................94
  4.14.1 Current management situation ..................................................................................94
  4.14.2 Desired outcomes ......................................................................................................95
  4.14.3 Management strategy ...............................................................................................95
      4.14.3.1 Guidelines ........................................................................................................95
      4.14.3.2 Actions .............................................................................................................95
  4.14.4 Key monitoring priorities .........................................................................................95

4.15 Coordinated reserve management ..............................................................................96
  4.15.1 Current management situation ..................................................................................96
  4.15.2 Desired outcomes ......................................................................................................96
  4.15.3 Management strategy ...............................................................................................96
      4.15.3.1 Guidelines ........................................................................................................96
      4.15.3.2 Actions .............................................................................................................96
  4.15.4 Key monitoring priorities .........................................................................................96

4.16 Naming of reserves within the planning area ..............................................................96
  4.16.1 Current management situation ..................................................................................96
  4.16.2 Desired outcomes ......................................................................................................97
  4.16.3 Management strategy ...............................................................................................97
      4.16.3.1 Guidelines ........................................................................................................97
      4.16.3.2 Actions .............................................................................................................97

5 Summary of management priorities and timeframes .........................................................98
6 References .........................................................................................................................109
Executive summary

This management plan provides the strategic framework that governs the development and delivery of all management programs and actions affecting Burleigh Green Space Conservation Reserves. All future management activities and uses (whether temporary or permanent) to be permitted within the planning area are listed. The plan will take effect from the date it is adopted by Council, for a period of ten years.

Burleigh Green Space Conservation Reserves are located at the southern end of the Gold Coast, covering 103 hectares of a vegetated ridgeline and slopes extending west along Tallebudgera Creek from Burleigh Head to the Pacific Motorway. The main parks within the planning area are Burleigh Ridge Park, Ocean Parade Bush Parklands, Herbert Park, Ron Mason Park and Skyline Terrace Reserve, which form a network of small vegetated remnants and native regrowth within a residential matrix.

The reserves have been acquired through developer contributions, State Government trusteeship and Council purchases and, together with adjacent Burleigh Head National Park and Tallebudgera Creek Conservation Park, constitute one of the most significant urban conservation networks in the city. This network forms the eastern portion of the Burleigh-Springbrook bioregional wildlife corridor, which links the rainforests of Springbrook, Austinville and Bonogin valleys with coastal remnants and the Pacific Ocean. The reserves largely fall within the Environmental Public Open Space domain of Councils planning scheme and are part of a Major Linkage and Major Ridgeline.

Given their urban context, the reserves provide habitat for a surprisingly high diversity of flora and fauna, including 325 native plants, over 100 vertebrate species and an invertebrate assemblage likely to be in the thousands. Recent surveys have recorded five rare or threatened plant species and two vulnerable animal species. Historically, these rich natural resources made the area a popular food gathering area for traditional owners.

The reserves contribute significantly to the health and lifestyle of nearby residents, offering a green refuge, space for daily exercise, visual benefits afforded by the presence of vegetation, a sense of identity and higher property values. Walking tracks within the reserves provide an extension to the popular walks in Burleigh Head National Park, one of the most highly visited national parks in Queensland, and there are opportunities to further enhance pedestrian connectivity in the planning area.

The main threats to Burleigh Green Space Reserves are those associated with urbanisation and small reserve size, including weed invasion, wildlife disturbance by people and domestic animals, vandalism, limited connectivity and difficulty in maintaining viable population sizes for some species. Development of the Reedy Creek transport interchange, to the west of the planning area, threatens to further compromise connectivity through the Burleigh-Springbrook wildlife corridor.

The intent of this plan of management is to maximise the connectivity and ecological viability of the reserves and their role as part of the Burleigh-Springbrook wildlife corridor. Strategies provided for flora and fauna protection, vegetation and habitat restoration, fire management, pest management, landscape and catchment protection and protection of indigenous cultural heritage aim to maximise ecological functions whilst addressing the significant constraints imposed by surrounding urbanisation.
Visitor use of the planning area will be managed to maintain a high-quality, low impact, nature-based recreational experience that is consistent with the conservation objectives outlined in the plan. There are significant opportunities for enhancing recreational access through repairing a selection of heavily used tracks connecting adjacent reserves while closing and rehabilitating degraded tracks that lack connectivity and are impacting on soil stability and ecological values. Through judicious use of signage, the track network will be developed to showcase ongoing restoration activities, promote understanding and appreciation on native wildlife and encourage responsible public attitudes towards reserve management.

A key element of the plan is its emphasis on coordinated management with neighbouring land managers. Because of the small size of the reserves, management as part of a larger system that includes Burleigh Head National Park, David Fleay Wildlife Park, Tallebudgera Creek Conservation Park, Tallebudgera creek and vegetation on private land, will be critical to maintaining ecological functions and viable wildlife populations as well as a high quality recreational network. Regular liaison with Queensland Parks and Wildlife Service is proposed on a number of management issues, as is the development of community conservation initiatives including good neighbour and urban biodiversity programmes.
Acronyms used in this management plan

BMP: Bushfire Management Plan

CMP: Catchment Management Plan

DERM: Queensland Department of Environmental and Resource Management

EPBC Act: Commonwealth *Environment Protection and Biodiversity Act 1999*

GCCC: Gold Coast City Council

IMP: Interim Management Plan

KHA: Koala Habitat Area

LAP: Local Area Plan

NAMU: Natural Areas Management Unit (Gold Coast City Council)

NCA: Queensland *Nature Conservation Act 1992*

NCWR: Queensland *Nature Conservation (Wildlife) Regulation 2006*

NPWS: New South Wales Parks and Wildlife Service

OSPL: Open Space Preservation Levy

PACP: Pest Animal Control Plan

QFRS: Queensland Fire and Rescue Service

QPWS: Queensland Parks and Wildlife Service

RE: Regional Ecosystem

Note: all names of organisations listed are current at the date of adoption of this plan.
1 Introduction

1.1 Management vision

A resilient reserve network that contributes to the long term functioning of the coast to hinterland ecological corridor and provides habitat for local wildlife and a green refuge for the public.

1.2 Plan Development and implementation

1.2.1 Methodology and overview

This plan of management provides the strategic framework that governs the development and delivery of all management programs and actions affecting Burleigh Green Space reserves (the planning area). The plan lists all future management activities and uses (whether temporary or permanent) to be permitted within the planning area (subject to legislative and planning scheme approvals). Where other uses, activities and/or an increase in the scale of the permitted use are proposed subsequent to this plan, they will require full review and assessment by Council. If the review deems that the proposal will likely result in substantive variation to current management strategies, a formal amendment to the management plan will be required, including public consultation and adoption of the amended plan by Council. Generally uses, activities and increases in scale that are not in accordance with the specific management objectives for the planning area (section 3.2) and the management strategies given in Chapter 4, will not be supported unless an environmental benefit is demonstrated and the proposal will lead to an increase in the community’s understanding and appreciation of the environment.

A process of site assessment, stakeholder consultation and literature review has been used to evaluate existing issues, values and infrastructure within the planning area. Stakeholders include Council staff, relevant state government departments and the residents of Gold Coast City. Community consultation included a preliminary phase of information gathering via a ‘have your say’ flyer and feedback form sent to nearby residents and displayed on Council’s website, prior to plan development (Burleigh Green Space Conservation Reserves Community Consultation Report, Gold Coast City Council in prep.). The second phase of community consultation allows the public to comment on this draft management plan prior to finalisation and adoption by Council.

Background information about the planning area, including the location, regional context and natural, cultural and social values of the reserve network is summarised in Chapter 2. The legislative and policy framework for the management plan, at a local, state and national level, is summarised in 3.1 and underpins the specific management objectives listed in 3.2.

Chapter 4 is subdivided into sixteen themes relating to specific management values (eg. flora, fauna, heritage), issues (eg. fire, pest species, access) and opportunities (eg. restoration, recreation, education and research) within the planning area. For each theme the current management situation is presented, summarising the existing condition, management initiatives, management needs and threats. On the basis of key desired outcomes arising from the current management situation, a detailed management strategy for each theme is presented, comprising specific actions and guidelines required to achieve the desired outcomes. Management guidelines (standard directions) and actions (key operations) are
intended to be sufficiently robust to facilitate sustainable natural resource management over the long term, whilst incorporating enough flexibility to adapt management to meet changing operational demands and advances in scientific understanding as required. Key monitoring priorities to assess the effectiveness of management actions and guidelines are provided, to assist with future review of the management plan.

Chapter 5 provides a prioritised summary of management timeframes for each of the actions listed in Chapter 4. Chapter 5 is intended to function as a stand-alone work plan for natural areas operational staff and lists actions reserve by reserve to facilitate easy incorporation into operational work programmes.

1.2.2 Implementation

Council’s natural areas management officers will undertake day-to-day management of the planning area and will coordinate the implementation of this plan of management. In addition contractors and other Council staff will be responsible for the implementation of some management strategies. Management guidelines and actions detailed in this plan will be carried out within the annual action plan and works program of Council, subject to the availability of funding, staff and regional priorities. It is important that all persons working within the planning area are familiar with the parts of this plan relevant to their responsibilities when working within sensitive natural areas.

For implementation of this management plan to be effective, there must be a regular and reliable flow of resources for ongoing management requirements and to fund new capital works programs. As annual action plans and works programs are developed in more detail and the exact resource requirements are identified, these projects can be resourced accordingly.

For effective delivery of this plan of management, it is important that council staff, councillors and contractors consult regularly to ensure consistency with management objectives and strategies. Community endorsement is also critical in the effective implementation of this plan and public stakeholder input has been and continues to be an important part of plan development. As well as responding to existing public concerns, the plan provides guidelines to facilitate future public involvement and support.

A review of the plan of management will be undertaken by Council within ten years from the date of approval.

2 Background

2.1 Location and planning area

Burleigh Green Space Conservation Reserves (the planning area) are located at the southern end of the Gold Coast, on a vegetated ridgeline extending west along Tallebudgera Creek from Burleigh Headland to the Pacific Motorway (Figure 1). The reserves comprise a network of small vegetated remnants and native regrowth, many of which are on steep, relatively inaccessible blocks within a residential matrix.
The main Council managed parks within Burleigh Green Space are Burleigh Ridge Park, Ocean Parade Bush Parklands, Herbert Park, Ron Mason Park and Skyline Terrace. A summary of all reserves within the planning area is listed in Table 1 below.

Table 1. Reserves within the Burleigh Green Space Planning Area

<table>
<thead>
<tr>
<th>Park Name</th>
<th>Address</th>
<th>Area Ha</th>
<th>Ownership &amp; Tenure</th>
<th>Principal Manager</th>
<th>Park Category</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Burleigh Ridge Park</strong></td>
<td>143 CP885509 Wairoo St</td>
<td>2.93</td>
<td>Qld Government (GCCC trustee)</td>
<td>NAMU Conservation</td>
<td></td>
</tr>
<tr>
<td>142 CP885509 Wairoo St</td>
<td></td>
<td>1.13</td>
<td>Qld Government (GCCC trustee)</td>
<td>NAMU Conservation</td>
<td></td>
</tr>
<tr>
<td>212 WD6323 West Street</td>
<td></td>
<td>0.69</td>
<td>Qld Government (GCCC trustee)</td>
<td>NAMU Conservation</td>
<td></td>
</tr>
<tr>
<td>141 CP891243 Djerral Ave</td>
<td></td>
<td>17.93</td>
<td>Qld Government (GCCC trustee)</td>
<td>NAMU Conservation</td>
<td></td>
</tr>
<tr>
<td><strong>Ocean Parade Bush Parklands</strong></td>
<td>11 SP102655 Fleay Court</td>
<td>0.81</td>
<td>GCCC</td>
<td>NAMU Conservation</td>
<td></td>
</tr>
<tr>
<td>10 SP102655 Fleay Court</td>
<td></td>
<td>2.12</td>
<td>GCCC</td>
<td>NAMU Conservation</td>
<td></td>
</tr>
<tr>
<td>116 RP837315 Ocean Pde</td>
<td></td>
<td>0.5</td>
<td>GCCC</td>
<td>NAMU Conservation</td>
<td></td>
</tr>
<tr>
<td>113 RP28407 Ocean Pde</td>
<td></td>
<td>0.04</td>
<td>GCCC</td>
<td>NAMU Conservation</td>
<td></td>
</tr>
<tr>
<td>112 RP28407 Ocean Pde</td>
<td></td>
<td>0.04</td>
<td>GCCC</td>
<td>NAMU Conservation</td>
<td></td>
</tr>
<tr>
<td>84 RP28407 Tabilban St</td>
<td></td>
<td>0.04</td>
<td>GCCC</td>
<td>NAMU Conservation</td>
<td></td>
</tr>
<tr>
<td>85 RP28407 Tabilban St</td>
<td></td>
<td>0.04</td>
<td>GCCC</td>
<td>NAMU Conservation</td>
<td></td>
</tr>
<tr>
<td>87 RP837317 Tabilban St</td>
<td></td>
<td>0.08</td>
<td>GCCC</td>
<td>NAMU Conservation</td>
<td></td>
</tr>
<tr>
<td>1 RP28407 Pindari Ave</td>
<td></td>
<td>0.04</td>
<td>GCCC</td>
<td>NAMU Conservation</td>
<td></td>
</tr>
<tr>
<td>2 RP28407 Pindari Ave</td>
<td></td>
<td>0.04</td>
<td>GCCC</td>
<td>NAMU Conservation</td>
<td></td>
</tr>
<tr>
<td>5 RP837317 Pindari Ave</td>
<td></td>
<td>0.21</td>
<td>GCCC</td>
<td>NAMU Conservation</td>
<td></td>
</tr>
<tr>
<td>77 RP837317 Ocean Pde</td>
<td></td>
<td>0.13</td>
<td>GCCC</td>
<td>NAMU Conservation</td>
<td></td>
</tr>
<tr>
<td>134 WD3874 Pindari Ave</td>
<td></td>
<td>0.1</td>
<td>Qld Government (GCCC trustee)</td>
<td>NAMU Conservation</td>
<td></td>
</tr>
<tr>
<td>12 RP837316 Pindari Ave</td>
<td></td>
<td>1.82</td>
<td>GCCC</td>
<td>NAMU Conservation</td>
<td></td>
</tr>
<tr>
<td>43 RP837316 Ocean Pde</td>
<td></td>
<td>0.13</td>
<td>GCCC</td>
<td>NAMU Conservation</td>
<td></td>
</tr>
<tr>
<td>48 RP860170 Ocean Pde</td>
<td></td>
<td>0.18</td>
<td>GCCC</td>
<td>NAMU Conservation</td>
<td></td>
</tr>
<tr>
<td>154 RP28407 Ocean Pde</td>
<td></td>
<td>0.06</td>
<td>GCCC</td>
<td>NAMU Conservation</td>
<td></td>
</tr>
<tr>
<td>191 RP28407 Ocean Pde</td>
<td></td>
<td>0.19</td>
<td>GCCC</td>
<td>NAMU Conservation</td>
<td></td>
</tr>
<tr>
<td><strong>Pindara Avenue Park</strong></td>
<td>180 RP28407 Ocean Pde</td>
<td>0.08</td>
<td>GCCC</td>
<td>NAMU Linkage Park</td>
<td></td>
</tr>
<tr>
<td>135 WD3875 Ocean Pde</td>
<td></td>
<td>0.1</td>
<td>Qld Government (GCCC trustee)</td>
<td>NAMU Drainage Reserve</td>
<td></td>
</tr>
<tr>
<td><strong>Herbert Park</strong></td>
<td>35 RP837310 Skyline Terrace</td>
<td>16.48</td>
<td>GCCC</td>
<td>NAMU Conservation</td>
<td></td>
</tr>
<tr>
<td>176 WD5349 Skyline Terrace</td>
<td></td>
<td>1.14</td>
<td>Qld Government (GCCC trustee)</td>
<td>NAMU Conservation</td>
<td></td>
</tr>
<tr>
<td>90 RP826219 Skyline Terrace</td>
<td></td>
<td>0.13</td>
<td>Qld Government (GCCC trustee)</td>
<td>NAMU Conservation</td>
<td></td>
</tr>
<tr>
<td>158 WD5014 West Burleigh Rd</td>
<td></td>
<td>0.26</td>
<td>Qld Government (GCCC trustee)</td>
<td>NAMU Conservation</td>
<td></td>
</tr>
<tr>
<td><strong>Ron Mason Park</strong></td>
<td>174 SP156739 Reedy Creek Rd</td>
<td>15.1</td>
<td>Qld Government (GCCC trustee)</td>
<td>NAMU Conservation</td>
<td></td>
</tr>
<tr>
<td>14 RP866348 Stevenson Ct</td>
<td></td>
<td>1.8</td>
<td>Qld Government (GCCC trustee)</td>
<td>NAMU Conservation</td>
<td></td>
</tr>
<tr>
<td>20 RP909051 Prosper Cres</td>
<td></td>
<td>0.55</td>
<td>Qld Government (GCCC trustee)</td>
<td>NAMU Conservation</td>
<td></td>
</tr>
<tr>
<td>74 RP904593 Dover Dr</td>
<td></td>
<td>0.52</td>
<td>Qld Government (GCCC trustee)</td>
<td>NAMU Conservation</td>
<td></td>
</tr>
<tr>
<td>75 RP910388 Dover Dr</td>
<td></td>
<td>0.4</td>
<td>Qld Government (GCCC trustee)</td>
<td>NAMU Conservation</td>
<td></td>
</tr>
</tbody>
</table>
The parks within the planning area have been acquired through developer contributions, State Government trusteeship and Council purchases, to preserve ecological, aesthetic and recreational values in this popular part of the Coast. They are visually prominent from much of the southern part of the city and form an important corridor connecting littoral vegetation at Burleigh Head National Park and other remnants along Tallebudgera Creek to higher altitudinal communities in the Gold Coast hinterland.

Although relatively small in size, Burleigh Green Space is one of the largest and most significant conservation networks within the urbanised part of Gold Coast City. In recent decades, the planning area has been heavily fragmented by urban development, resulting in increased edge effects and reduced ecological function. However, the reserves continue to provide a green backdrop to the city and habitat for numerous common native plants and animals, in addition to occasional rare or threatened species. Surrounding residential allotments are still relatively well vegetated, and native trees that have been retained in these lots are now integral to the habitat and connectivity provided by the planning area.

Burleigh Green Space forms part of the Burleigh Heads-Springbrook Ecological Corridor, linking the rainforests of Springbrook, Austinville and Bonogin valleys with the coastal forests of Reedy Creek and Burleigh Heads and the Pacific Ocean. This corridor has been identified as a State Significant Bioregional Corridor by the Department of Environment and Resource Management (DERM) and in the GCCC Nature Conservation Mapping Review (Chenoweth EPLA, 2005) and a Major Linkage by Gold Coast City Council (GCCC) in its Conservation Strategy Plan. Such connectivity is rare not only within Gold Coast City, but within the Southeast Queensland region and the corridor plays a valuable role in maintaining Gold Coast City as one of the most biodiverse in Australia (Chenoweth, 2006a).

However, this corridor is compromised in the Reedy Creek Area, to the west of Burleigh Green Space, by existing development, and has the potential to be further impacted by proposed road and rail infrastructure projects in the area (Chenoweth 2006b).
2.3 Significance of the planning area

2.3.1 Natural values

The ridgeline of Burleigh Greenspace originates at Burleigh Heads National Park and reaches a high point of around 74m above mean sea level at Skyline Terrace, making it a prominent feature of the southern part of the city. The ridge comprises moderately sloping elevated remnants of Neranleigh Fernvale rocks, mantled with a steeper angled basalt capping, which originated from the Mt Warning Volcano between 23 and 25 million years ago (QPWS, 1999).

The underlying geology and resultant topography has a large bearing on the diversity of vegetation types found within the reserves: the fertile soils derived from weathering of basalt caps provide a suitable environment for the evolution of species-rich vine forest communities, whereas the metasediments and metamorphosed mudstones of Neranleigh Fernvale rocks produce less fertile, shallow clay-gravel soils. The low-lying reserves along Tallebudgera Creek, including Lot 13 RP114420, Lot 208 W311480, and sections of Ocean Parade Parklands, occur on quaternary estuarine and marine deposits (sand and mud) subject to periodic inundation from Tallebudgera Creek. These saline deposits support different vegetation communities tolerant of inundation, including saltmarsh and mangroves.

The reserves support a total of nine regional ecosystems (summarised in Table 2 below), including eucalypt forest, vine scrub and mangrove communities, and small pockets of endangered blackbutt (*Eucalyptus pilularis*) forest. Despite small reserve size, fragmentation and weed incursion, most reserves support a surprisingly high diversity of plant species. A total of 325 native species have been recorded during recent flora surveys (Caddick 2006, G. McDonald unpublished data 2003), including several significant species: fine-leaved tuckeroo (*Lepiderema pulchella*), long-leaved tuckeroo (*Cupaniopsis newmanii*), velvet laurel (*Endiandra hayesi*), bush nut (*Macadamia integrifolia*) and Richmond birdwing butterfly vine (*Pararistolochia praevenosa*) (see Table 3 below). Other species of local significance are listed in Table 3. Some reserves, particularly Burleigh Ridge, Ron Mason and Skyline Terrace parks, also contain a large number of mature, hollow-bearing trees, which provide habitat for arboreal mammals and native birds.

### Table 2. Vegetation types occurring within Burleigh Green Space Conservation Reserves

<table>
<thead>
<tr>
<th>Regional Ecosystem</th>
<th>Vegetation Description</th>
<th>GCCC Vegetation Type</th>
<th>Vegetation Management Act Status</th>
<th>Extent Remaining in City</th>
</tr>
</thead>
<tbody>
<tr>
<td>12.1.1</td>
<td><em>Casuarina glauca</em> open forest on margins of marine clay plains</td>
<td>16</td>
<td>Of concern</td>
<td>51%</td>
</tr>
<tr>
<td>12.1.2</td>
<td>Saltpan vegetation including grassland and herbland on marine clay plains</td>
<td>22</td>
<td>Not of concern</td>
<td>53%</td>
</tr>
<tr>
<td>12.1.3</td>
<td>Mangrove shrubland to low closed forest on marine clay plains and estuaries</td>
<td>18f</td>
<td>Not of concern</td>
<td>92%</td>
</tr>
<tr>
<td>12.3.11</td>
<td><em>Eucalyptus siderophloia</em>, <em>E. tereticornis</em>, <em>Corymbia intermedia</em> open forest on alluvial plains near the coast</td>
<td>6</td>
<td>Of concern</td>
<td>8%</td>
</tr>
<tr>
<td>12.8.14</td>
<td><em>Eucalyptus eugenioides</em>, <em>E. biturbinata</em>, <em>E. melliodora</em> open forest on Cainozoic igneous rocks ± <em>E. tereticornis</em>, <em>Eucalyptus siderophloia</em> or <em>E. crebra</em></td>
<td>6d</td>
<td>Not of concern</td>
<td>85%</td>
</tr>
<tr>
<td>12.11.3</td>
<td>Open forest with <em>Eucalyptus siderophloia</em> and <em>E. propinqua</em> on metamorphics ± interbedded volcanics</td>
<td>1b</td>
<td>Not of concern</td>
<td>58%</td>
</tr>
<tr>
<td>12.11.5k</td>
<td>Open forest with <em>Corymbia henryi</em>, <em>Eucalyptus fibrosa</em> subsp. <em>fibrosa</em> ± C.</td>
<td>4d</td>
<td>Not of concern</td>
<td>16%</td>
</tr>
</tbody>
</table>
### Regional Ecosystem | Vegetation Description | GCCC Vegetation Type¹ | Vegetation Management Act Status² | Extent Remaining in City³
--- | --- | --- | --- | ---
|  | citriodora, C. intermedia, Angophora leioarpa, E. propinqua, E. carnea on drier ridges on metamorphosed sediments and interbedded volcanics. |  |  |  
| 12.11.9 | Lowland coastal Eucalyptus tereticornis open forest on metamorphics ± interbedded volcanics. | 6a | Of concern | 16%  
| 12.11.23 | Tall open forest of Eucalyptus pilularis open forest on metamorphics and interbedded volcanics | 5 | Endangered | 12%  

²Queensland Vegetation Management Act 1999. Data from EPA Regional Ecosystem Description Database (REDD)  

### Table 3. Significant plants known to occur within Burleigh Green Space Conservation Reserves

<table>
<thead>
<tr>
<th>Scientific Name</th>
<th>Common Name</th>
<th>Status</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Angophora woodsiana</td>
<td>roughbark apple</td>
<td>Common¹ Restricted distribution in Southeast Qld</td>
<td>Northern end Herbert Park</td>
</tr>
<tr>
<td>Cordyline congesta</td>
<td>a palm lily</td>
<td>Common¹ Locally uncommon</td>
<td>Throughout reserves, generally in moist gullies</td>
</tr>
<tr>
<td>Corymbia henryi</td>
<td>large-leaved spotted gum</td>
<td>Common¹ Locally uncommon</td>
<td>Herbert Park, northeast ridgeline</td>
</tr>
<tr>
<td>Cupaniopsis newmanii</td>
<td>long-leaved tuckeroo</td>
<td>Rare⁷</td>
<td>Skyline Terrace</td>
</tr>
<tr>
<td>Desmodium brachypodium</td>
<td>large tick trefoil</td>
<td>Common¹ Uncommon on the Gold Coast</td>
<td>Herbert Park</td>
</tr>
<tr>
<td>Desmodium heterocarpon</td>
<td>trefoil</td>
<td>Common¹ Uncommon on the Gold Coast</td>
<td>Skyline Terrace</td>
</tr>
<tr>
<td>Endiandra hayesii</td>
<td>velvet laurel</td>
<td>Vulnerable¹²</td>
<td>Herbert Park</td>
</tr>
<tr>
<td>Endiandra sieberi</td>
<td>corkwood</td>
<td>Common¹ Locally uncommon</td>
<td>Herbert Park</td>
</tr>
<tr>
<td>Eucalyptus seeana</td>
<td>fine-leaved red gum</td>
<td>Common¹ Restricted distribution in Southeast Qld</td>
<td>Skyline Terrace, western end of Ron Mason Park</td>
</tr>
<tr>
<td>Grewia latifolia</td>
<td>dysentary plant</td>
<td>Common¹ Uncommon on the Gold Coast</td>
<td>Herbert Park &amp; Skyline Terrace, generally adjacent to gullies</td>
</tr>
<tr>
<td>Indigofera hirsuta</td>
<td>hairy indigo</td>
<td>Common¹ Uncommon on the Gold Coast</td>
<td>Skyline Terrace</td>
</tr>
<tr>
<td>Lepiderema pulchella</td>
<td>fine-leaved tuckeroo</td>
<td>Rare⁷</td>
<td>Herbert Park</td>
</tr>
<tr>
<td>Lomatia silaifolia</td>
<td>crinkle bush</td>
<td>Common¹ Locally uncommon</td>
<td>Southern end Herbert Park</td>
</tr>
<tr>
<td>Macadamia integrifolia</td>
<td>bush nut</td>
<td>Vulnerable¹²</td>
<td>Herbert Park</td>
</tr>
<tr>
<td>Pararistolochia pravenosa</td>
<td>Richmond birdwing vine</td>
<td>Rare⁷</td>
<td>Burleigh Ridge</td>
</tr>
<tr>
<td>Spermacoce brachystema</td>
<td>no common name</td>
<td>Common¹ Uncommon on the Gold Coast</td>
<td>Eastern end Skyline Terrace</td>
</tr>
</tbody>
</table>
Although the pressures of fragmentation, weeds and domestic and feral animals influence the reserves, they still provide refuge for a high diversity of fauna no longer common in more urbanised parts of the Gold Coast.

Recent fauna surveys of Burleigh Green Space recorded a total of 194 species, and indicated that the reserves are likely to support well over 100 vertebrate species and an invertebrate assemblage totalling in the thousands (White et al., 2006). The reserves provide significant lowland urban bushland habitat for the vulnerable koala *Phascolarctos cinereus* and grey-headed flying-fox *Pteropus poliocephalus*, in addition to increasingly uncommon ground-dwelling mammals such as the yellow-footed antechinus *Antechinus flavipes* and swamp rat *Rattus lutreolus*. Mature, hollow-bearing trees and vegetation structural complexity provide habitat for numerous other vertebrates, including common brushtail possums *Trichosurus vulpecula*, bobucks *Trichosurus caninus* and sugar gliders *Petaurus breviceps*. Red-necked wallabies *Macropus rufogriseus*, swamp wallabies *Wallabia bicolour*, echidnas *Tachyglossus aculeatus*, carpet pythons *Morelia spilota* and several skink species also occur within the reserves.

Despite the lack of adequate habitat and small number of animals, Burleigh Head has been identified as a Koala Habitat Area (KHA) in Council’s *Koala Habitat Mapping and Population Assessment* (Biolink, 2007), largely because the koala population here is long-standing (it has persisted for at least five decades), iconic and internationally recognised as a natural asset of Burleigh Head.

The diversity of terrestrial habitats present (including weedy areas) has also resulted in a high insect diversity, including several uncommon and habitat specialist butterfly species, the regent skipper (*Euschemon rafflesia*), eastern dusk-flat (*Chaetocneme beata*), purple crow (*Euploea tulliolus*) and moonlight jewel (*Hypochrysops delicia*) (White et al. 2006).

Significant species present are summarised in Table 4 below.

**Table 4. Known and possible fauna species of conservation significance within Burleigh Green Space Conservation Reserves**

<table>
<thead>
<tr>
<th>Scientific Name</th>
<th>Common Name</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Antechinus flavipes</em></td>
<td>yellow-footed antechinus</td>
<td>Common¹, Locally significant</td>
</tr>
<tr>
<td><em>Chaetocneme beata</em></td>
<td>eastern dusk-flat butterfly</td>
<td>Common¹, Locally significant</td>
</tr>
<tr>
<td><em>Egernia frerei</em></td>
<td>major skink</td>
<td>Common¹, Locally significant</td>
</tr>
<tr>
<td><em>Euploea tulliolus</em></td>
<td>purple crow butterfly</td>
<td>Common¹, Locally significant</td>
</tr>
</tbody>
</table>

² Commonwealth *Environment Protection and Biodiversity Conservation Act 1999.*
## 2.3.2 Cultural heritage values

The Gold Coast region has a rich Aboriginal history and the planning area lies within the territory of the Yugambeh people, which stretches from the Albert River in the north, to the Tweed River in the south and west to Scenic Rim Shire.

Little is known about the cultural significance of the Burleigh Greenspace reserves however, Burleigh Head, or Jellurgal, which lies just north east of the planning area, is an integral component of the overall cultural landscape of the area (QPWS 1999). Its creation is described in local aboriginal stories, where the columns of rock extending from the headland represent the giant rocky fingers of the Creation Spirit, Jarbreen (O'Connor 1997), as he stretched skywards after washing native bee honey from his hands in the ocean, breaking up the coastline that previously formed an unbroken line from the mouth of Nerang Creek to the Tweed (Hanlon 1935).

The forests, creeks and swamps of Burleigh were amongst the most popular food-gathering localities for the Yugambeh, with fresh water lagoons (reclaimed in 1933 for camping) close to the beach, oyster beds along the creek and abundant fish, including bream, whiting, gar, flathead and mullet. Shell middens at Burleigh Head are evidence of traditional use by Aboriginal people, and remnants of fish traps are still visible near Tallebudgera Creek Park. Abundant bird life in the swamps behind North Burleigh, and macropods, bandicoots and carpet pythons in the forests adjacent to coast also provided a food source (Longhurst 1991). The higher ground occupied by Burleigh Green Space reserves may have provided a good means of access from the hinterland to the coast, avoiding lower swampy areas to the north and south (H. Best pers. comm. October 2009). Corroborees and dances attracting people from throughout the region were held around the headland and Jebbribillum Bora ring, reserved since 1913, is located just a few kilometres north up the coast from the reserves (Longhurst 1991). A second bora ring was previously recorded just inland of Burleigh Head, but has since been removed by land clearing (Hanlon 1935).

The area has a relatively long conservation history, with Burleigh Head (now Burleigh Head National Park) first set aside as a public reserve in 1886. The recreational amenity value of the area was recognised long before it became easily accessible, with visitors from Brisbane and Southport accessing the beaches and lagoons via horseback and carriage along the beach (Longhurst 1991). Reserves in the planning area were mostly used for agricultural purposes in the 20th century and planted flooded gums in Herbert Park are evidence of this past land use. A rail link to west Burleigh was established in 1903 and, although the formal township was slow to develop, by 1917 there were over 600 holiday makers camping on the...
foreshore for the Christmas holidays (Queenslander, p. 29, 3 February 1917) and, by 1936, over 20,000 (Longhurst 1991).

An old grave at the eastern side of Burleigh Ridge park commemorates members of the West family, from Toowong, who drowned in a fishing accident in Tallebudgera Creek in 1922. This grave site was restored by Council in 1991, with a new plaque bearing the names of the mother and her two young sons who lost their lives.

2.3.3 Recreation values

Burleigh Greenspace is an important part of the urban fabric of Burleigh for locals, providing a green refuge for walking, running, playing, relaxing and nature appreciation. Local recreational linkages not only enhance the amenity value of the area, but also encourage local residents to be healthy and active. Trails within the reserves provide an extension to the popular walking trails in Burleigh Head National Park, one of the most highly visited National Parks in Queensland (QPWS 1999), David Fleay Wildlife Park and walking tracks linking to the coast along Tallebudgera Creek, and this corridor is identified as a key pedestrian linkage in Councils Priority Infrastructure Plan. There is also the opportunity to link the reserves to planned public transport nodes and walking tracks on the western side of the Pacific Motorway.

However, existing fauna values are fragile and vulnerable to disturbance. Therefore it is crucial that recreational activities are managed in a sustainable way that is consistent with protection of the ecological values that make the reserves such an important socio-economic and recreational asset.

2.3.4 Scientific and education values

The proximity of Burleigh Greenspace to a large urban interface puts the reserves within easy reach of many different educational and research institutions, although the extent to which the reserves are used as a resource for studying native plants and animals is unknown.

The role of the reserves in forming part of the altitudinal gradient corridor from the Pacific coast to the hinterland is also of educational and scientific interest. Proposed works to maintain and enhance this corridor during development of the Reedy Creek Transport Corridor provide the opportunity to develop an internationally significant example of how environmental degradation can be retrofitted to repair impacts of human activity (Chenoweth 2006a).

2.3.5 Social and economic values

The reserves contribute significantly to the health and lifestyle of nearby residents, offering space for daily exercise, visual benefits afforded by the presence of vegetation, geographic recognition, a sense of identity and also higher property values.

On a city-wide scale, the forested ridgelines of Burleigh Green Space are also a prominent Gold Coast landmark, mapped under the Gold Coast Planning Scheme as major visually significant remnant vegetation and a timeless gateway that forms a significant entry point to the city. From a tourism and marketing perspective this landscape helps to shape a positive arrival experience and re-enforces the clean, green image of the city (Aspect 2006) and the notion of ‘the green behind the gold’. The Green Space reserves enhance the aesthetic appeal of other tourist attractions in the Burleigh area, including beaches, Burleigh Heads National Park and David Fleay Wildlife Park. The natural values of the Gold Coast have been
identified as a significant driver in attracting people and businesses to the region, provide opportunities for investment, business development and employment (Aspect 2006).

Despite their small size, the reserves also provide crucial ecosystem services at a local scale, including the provision of a natural buffer between urban development and the Tallebudgera Creek estuary. Recent landslips in the area indicate the vulnerability of the underlying geology to clearing and the importance of the densely vegetated ridges in slope stabilisation and erosion minimisation.

### 2.4 Climate change

Current observations of global air and ocean temperatures, changing sea levels and melting snow and ice indicate a warming of the global climate system (IPCC 2007), with a warming of approximately 0.8 – 1.3 °C recorded in Northern NSW since 1950 (CSIRO 2007). The Australian Government now includes loss of climatic habitat caused by anthropogenic emissions of greenhouse gases as a key threatening process (DEH 2004).

Specific impacts of the changing climate are difficult to predict, with simulated climate futures varying considerably in their predictions of variables such as rainfall, wind speeds, relative humidity and storm activity (Bushfire CRC 2006). However, regional changes to climate are likely to have significant impacts on species biodiversity, including changes in species distributions, as some species are no longer able to survive in a particular area and others become more competitive and begin to colonise (CSIRO 2007). It is anticipated that climate change will impact Gold Coast weather patterns and amplify the occurrence of extreme events like cyclones and heat waves and natural disasters including bushfire, flood and drought (GCC 2009b). At particular risk are species that occupy a narrow altitudinal or latitudinal distribution that is unlikely to retain the required temperature envelope for that species under a changing climate (Westoby and Burgman 2006). Even for those species physiologically able to cope with a change in temperature, threats may arise from the cumulative effects of multiple stresses including coping with competitors and diseases previously confined to warmer zones (DECC NSW 2008), changed disturbance regimes, loss of critical habitat or changes to physiological and biological processes due to elevated atmospheric carbon dioxide (Pittock 2003, Howden et al. 2001).

The impacts of climate change are also likely to have a significant impact on low lying coastal wetlands such as those found in reserves along Tallebudgera Creek, including increased frequency, intensity and inland penetration of storm surges as well as changes in the boundaries of intertidal zones resulting from sea level rise.

Conservation planning under climate change needs to be wide-scale as there are limits to what can be achieved at a reserve, or even a regional scale (Hughes and Westoby 1994). Management attempts to retain species in their present location are dependent on those species being able to tolerate changing temperatures and associated stresses including competition and disease. Translocation of threatened species to a more suitable temperature envelope requires alignment of numerous other factors, including soils, rainfall, disturbance regimes, competition and co-dependant species. Therefore the option of attempting to halt global carbon emissions and prevent further warming is likely to be critical (Westoby and Burgman 2006).

However, climate change is, to a large extent, an exacerbator of other threats to biodiversity and management options that can be adopted at the reserve scale to mitigate these threats may in turn maximise the capacity of species and ecosystems to adapt to changing climates (DECC NSW 2008, NRMMC 2004). Relevant management options are provided in Section 4.
of this plan and include specific actions and guidelines to assist in building resilience into natural systems through reducing existing threats to biodiversity; ongoing development of an adequate, representative and well connected protected area network; monitoring and research into the impacts of climate change and adaptation options for threatened species and ecosystems; and adapting management systems to incorporate climate change information and associated management tools.

Council’s Climate Change Strategy (GCCC 2009b) has been developed to provide a comprehensive approach to climate change on the Gold Coast. The dynamic nature of the Gold Coast, with around 55 kilometres of coastline, over 260 kilometres of navigable waterways and a historic and anticipated high population growth rate, makes its exposure to climate change particularly unique. The main focus of the Climate Change Strategy is to provide Council and the community with a well-defined direction for responding to climate change risks and challenges and to develop resilience to future impacts. The Climate Change Strategy adopts two broad treatment options to address the risks of climate change: mitigation of the impacts of climate change through reducing the city’s carbon footprint and addition to adaptations to changing circumstances in response to anticipated climate change.

A comprehensive risk response matrix has been developed to identify and prioritise how Council will address climate change risks including bushfire, drought, extreme weather events and impacts on biodiversity. Additionally, Council’s Climate Change Strategy allows provision for Council’s functions and services to be continually informed by a contemporary understanding of climate change, resulting in ongoing adaptive risk-based management responses. The strategy will be reviewed annually to ensure it is consistent with the most recent and relevant information, science and response methodology available.

3 Management framework

3.1 Legislative and policy framework

3.1.1 Gold Coast Planning Scheme and other GCCC policies and guidelines

3.1.1.1 Domains and Local Area Plans

The Gold Coast Planning Scheme designates the majority of Burleigh Green Space reserves as Environmental Public Open Space within the Burleigh Ridge Local Area Plan (LAP). Lot 13 RP114420 West Burleigh Rd is currently designated as community facilities. Burleigh Ridge LAP recognises the valuable natural, visual and local character qualities of Burleigh Head and Burleigh Ridge and identifies these topographic elements as a feature of great landscape significance to the identity of the city. The management intent for the Environmental Public Open Space precinct is to maintain it in a natural state, with extensive vegetation cover and development limited to passive recreation facilities to maintain the generally natural profile and character of Burleigh Ridge. Environmental Public Open Space is the largest precinct within the LAP and is intended to contribute to the achievement of a continuous linked area of natural vegetation communities that contribute to the protection of wildlife habitat.

It is intended that all land within the Public Open Space Domain is to be subject to a development concept plan or an integrated management plan which will guide future development and this document represents that plan for the conservation reserves within the LAP area.
The two lots that comprise the small reserve to the south of David Fleay Wildlife Park and Oyster Creek (lot 3 RP864252 and lot 36 RP228768 Tallebudgera Creek Road) occur within the West Burleigh LAP, which provides for the conservation of historical character, whilst recognising the indigenous cultural heritage and environmental significance of the area. Within this LAP, open space areas with environmental, ecological or visual significance are to be conserved in a natural state. The conservation and maintenance of the environmental quality of the Tallebudgera Creek and environs is identified as a Desired Environmental Outcome. Both lots fall within the Tallebudgera Creek and Environs precinct, which is intended to be retained in a natural state, to provide for the protection of land in public ownership for nature conservation, outdoor recreation, landscape preservation, environmental buffers and natural resource management, and natural hazard management purposes. Development is to be restricted to parks that facilitate low intensity, passive recreational pursuits, in keeping with the natural environment and any necessary public utility or any special use associated with the park. This precinct provides opportunity for an environmentally sensitive link along Tallebudgera creek (possibly an elevated boardwalk) connecting with Tallebudgera Conservation Park, David Fleay Wildlife Park and Burleigh Head National Park. This boardwalk is to be sympathetic to its surrounds and include signage at strategic points, identifying the flora and fauna and cultural significance of the area.

Lot 208 W311480, to the east of David Fleay Wildlife Park, is outside both of the aforementioned LAPs and falls within the public open space domain of Councils planning scheme. The intent of this domain is to provide for the protection of land in public ownership for nature conservation, outdoor recreation, landscape preservation, environmental buffers, natural resource management, and natural hazard management purposes. It is intended that all land within the Public Open Space Domain is to be subject to a development concept plan or an integrated management plan which will guide future development.

3.1.1.2 Planning Strategy

The Nature Conservation Planning Strategy within the Gold Coast Planning Scheme has been developed in accordance with the Gold Coast City Nature Conservation Strategy, as a mechanism to achieve protection of the city’s natural assets through the Planning Scheme and planning process. A Conservation Strategy Plan was also created (Planning Strategy Map PS-3: Conservation Strategy Plan, and Overlay Map OM20: Conservation Strategy Plan) that, along with associated text, provides critical guidance to land use and management decisions within the city’s areas of natural vegetation.

The Conservation Strategy Plan identifies the majority of Burleigh Green Space as part of a Major Linkage. Under the Conservation Strategy Plan, Major Linkages have been identified as a functioning ecological network which provide linkages between the large habitat systems and key isolated remnants, and between coastal and inland areas, providing corridors for fauna movement. Major Linkage (Water Based) areas also contribute to the protection and maintenance of water quality. It is of critical importance that these ecological connections be sustained in the long term, with emphasis placed on retaining existing vegetation, rehabilitating degraded areas, and avoiding the construction of barriers to fauna movement.

The City Image and Townscape Planning Strategy within the Gold Coast Planning Scheme provides an overall framework for the built form of the city that aims to retain and enhance the Gold Coast’s physical features and its distinctive built form. Key elements and relationships of the city’s landscape and form are shown on Planning Strategy Maps 11, 12, 13 and 14, which highlight the predominantly urban form of the city, and the major views and key elements that contribute to visual quality and primary scenic routes and gateways.
Planning Strategy Map 11 City Image Urban Form identifies the ridgeline formed by Burleigh Head National Park, Burleigh Ridge, Herbert Park, Skyline Terrace Reserve and Ron Mason Park as a Major Ridgeline within the planning area. Major Ridgelines and associated foothills are particularly important topographical features that contribute to the ‘green’ of the City. These should remain predominantly undeveloped and well vegetated, to protect the notion of the ‘green behind the gold’.

Planning Strategy Map 12 City Image Major Views identifies the view north from Burleigh Ridge and Burleigh Head National Park as a Landmark View. Landmark Views occur from a specific viewpoint toward a landmark and/or scenic resource, in this case showing the sweep of the coastline north to the high rise of Surfers Paradise. It is particularly important that inappropriate forms of development do not compromise these viewpoints.

Planning Strategy Map 13 City Image Visual Quality identifies the planning area as Major Visually Significant Remnant Vegetation. These areas retain remnant vegetation of ecological and visual value in areas of rapidly altering landscape, with the landscape character strongly defined by the remnant vegetation. Any future development should therefore carefully integrate the remnant vegetation, through landscape work and the retention of open space areas. Map 13 also identifies the eastern end of the planning area, particularly Burleigh Ridge Park (and Burleigh Head National Park) as part of both a Primary Visual Node and a Timeless Gateway. Visual Nodes are strategic focal points and primary urban centres which reinforce the image of the gold in front of the green. Large numbers of people view them, and their development should respond to the topographic and landscape features that make them strongly identifiable. Timeless gateways are the significant natural entry points into the various parts of the City that help shape an arrival experience. They comprise landscape features that should always be perceived as gateways protected from significant change, and strengthened over time.

3.1.1.3 Priority Infrastructure Plan

The planning area falls within the Burleigh Heads Statistical Local Area (SLA), which covers the Burleigh ridgeline to the Pacific Highway and also extends up the coastal strip to North Burleigh Headland. Population estimates associated with the Gold Coast Planning Scheme’s Priority Infrastructure Plan indicate that the population of this SLA is expected to grow steadily from 10,704 in 2004 to around 12,241 in 2021. This population growth is relatively low compared with other parts of the city but nevertheless is likely to result in increased impacts and demands on the reserves of the planning area.

3.1.1.4 Other GCCC policies and guidelines

The provisions of a number of other GCCC policies and guidelines have been considered in the development of this management plan. These include: the Gold Coast City Nature Conservation Strategy 2009-2019, Gold Coast City Bushfire Management Strategy 1998, City of the Gold Coast Pest Management Plan 2006-2010, Our Natural Playground: A Parks and Recreation Plan for the Gold Coast, Gold Coast City Climate Change Strategy 2009-2014 and the Gold Coast City Council Corporate Plan 2005-09.

An Interim Management Plan (IMP) was prepared for the Burleigh Green Space cluster in 2006. This plan was designed to provide an overview of the planning area’s key values, threatening processes, management objectives and management strategies. It provides interim guidelines for a range of land management operations including: landscape, soils and catchment protection; native plants and animals; bushfire management; pest plants and animals; cultural heritage; recreation and interpretation; and neighbours, surrounding land
uses and future development. Having been prepared in accordance with the intent of this interim document, the adoption of this management plan supersedes the IMP for the planning area.

The day to day operations of Council’s natural areas management officers, who are the asset custodians for Burleigh Green Space Reserves, are guided by the Natural Areas Management Unit Business Plan 2008-2011. Implementation and prioritisation of management actions and guidelines given in this management plan will be in accordance with the Natural Areas Management Unit Business Plan.

### 3.1.2 Strategies for South East Queensland

The South East Queensland Regional Plan 2009-2031 (Office of Urban Management 2009) provides a sustainable growth management strategy for South East Queensland. Within this strategy, the planning area falls within the Urban Footprint, which aims to accommodate the full range of urban uses, such as housing, industry, business, infrastructure, community facilities and urban open spaces. The Urban Footprint does not imply that all included land can be developed for urban purposes. For example, national parks, state forests and wetlands will continue to be protected under state legislation such as the Vegetation Management Act 1999. Land in the Urban Footprint may also be unsuitable for urban development for a range of more local reasons, including constraints such as flooding, land slope, scenic amenity, and the need to protect biodiversity values of state, regional or local significance.

The South East Queensland Regional Plan 2009-2031 identifies the planning area as being located within a Biodiversity Area of State Significance, including habitat for rare and threatened species. Policies for the management of significant biodiversity values within the Urban Footprint include the requirement for planning schemes and development approvals to ensure that development has regard to adverse impacts on these values and that construction adjacent to areas of significant biodiversity value avoids or mitigates adverse impacts on these values. Additionally the plan highlights the identification of biodiversity networks to protect and manage areas with significant biodiversity values, rehabilitate degraded areas critical to the resilience and functionality of the network, and integrate with adjacent regional and local networks.

All management actions identified in this management plan are consistent with the Regional Nature Conservation Strategy for South East Queensland 2003-2008. The strategy sets the regional framework for nature conservation, and has been endorsed by State and Local governments and establishes agreed processes for assessing, protecting and managing nature conservation and biodiversity values in South East Queensland. Furthermore, management actions are consistent with the targets and objectives of other relevant regional natural resource management plans including the South East Queensland Natural Resource Management Plan 2009-2031, South East Queensland Regional Water Quality Management Strategy and the South East Queensland Regional Coastal Management Plan 2006.

### 3.1.3 Other relevant legislation

Management of the planning area must be consistent with the provisions of all relevant State, Commonwealth legislation, including acts, regulations and international agreements. Table 5 outlines the primary legislative framework under which Council has management obligations. This addresses those measures which are most directly relevant to management planning within the area and may be subject to change through amendments, repeal, or the creation of new legislation. For a more comprehensive list of legislation applicable to the management of the planning area, refer to Appendix B of Council’s Conservation Areas Management
Planning Framework for sites acquired with funds from the Open Space Preservation Levy (GCCC 2003).

**Table 5. Relevant State and Commonwealth legislation and International agreements to the management of the planning area.**

<table>
<thead>
<tr>
<th>Jurisdiction</th>
<th>Legislation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><em>Nature Conservation (Wildlife) Regulation 2006</em></td>
<td>Establishes declared management intents for classes of protected wildlife that include addressing threatening processes through recovery plans and conservation plans.</td>
</tr>
<tr>
<td></td>
<td><em>Vegetation Management Act 1999</em></td>
<td>Provides for the protection of remnant vegetation.</td>
</tr>
<tr>
<td></td>
<td><em>Nature Conservation (Koala Conservation Plan and Management Program 2006-2016</em></td>
<td>Provides for protection of koalas and koala habitat</td>
</tr>
<tr>
<td></td>
<td><em>Aboriginal Cultural Heritage Act 2003</em></td>
<td>Ensures protection of Aboriginal cultural heritage values and imposes a duty of care where construction or disturbance is planned.</td>
</tr>
<tr>
<td></td>
<td><em>Land Protection (Pest and Stock Route Management) Act 2002</em></td>
<td>Requires eradication, control or containment of declared weeds and animals on Council-managed land.</td>
</tr>
<tr>
<td></td>
<td><em>Fire and Rescue Services Act 1990</em></td>
<td>Requires a reduction of bushfire risk on Council-managed land and management measures to ensure that bushfire does not impact upon neighbouring properties.</td>
</tr>
<tr>
<td>State</td>
<td><em>Fisheries Act 1994</em></td>
<td>Requires eradication, control or containment of declared weeds and animals on Council-managed land.</td>
</tr>
<tr>
<td></td>
<td><em>Environmental Protection Act 1994</em></td>
<td>Provides for ecologically sustainable development.</td>
</tr>
<tr>
<td></td>
<td><em>Integrated Planning Act 1997.</em></td>
<td>In conjunction with the <em>South East Queensland Regional Plan 2005</em> and the Integrated Development Assessment System, provides direction for infrastructure development and triggers for referrable wetlands.</td>
</tr>
<tr>
<td></td>
<td><em>Water Act 2000</em></td>
<td>Provides for protection and sustainable management of water resources</td>
</tr>
<tr>
<td></td>
<td><em>Local Government Act 1993</em></td>
<td>Provides for environmental management in accordance with Council’s <em>Parks and Reserves Law</em> (Local Law 9).</td>
</tr>
<tr>
<td></td>
<td><em>Queensland Heritage Act 1992</em></td>
<td>Provides for the protection and management of sites on Queensland’s Heritage Register</td>
</tr>
<tr>
<td></td>
<td><em>Queensland Workplace Health and Safety Act 1995.</em></td>
<td>Provides for safe access and work within reserves.</td>
</tr>
</tbody>
</table>
Jurisdiction | Legislation | Description |
---|---|---|
| | Land Act 1994 | Provides for State Government land to be held in trusteeship by local Councils for community purposes. |
| Commonwealth | Environment Protection and Biodiversity Conservation Act 1999 | Provides for the protection of federally threatened species and critical habitat, the identification of key threatening processes and the preparation of recovery plans and conservation agreements. |

### 3.2 Specific management objectives for Burleigh Green Space Reserves

The planning area will be managed to maximise its connectivity and ecological viability. The conservation and protection of its environmental, scenic, catchment and cultural heritage values will be paramount. This will be achieved through the provision of opportunities for low-impact sustainable nature-based public use, targeted interpretation and educational material, and responsive ecological management. Specific management objectives for the planning area are listed below.

- Manage the planning area within the context of a broader interrelated reserve system.
- Maintain and enhance viable habitat corridors contributing to the ecological richness of the region.
- Conserve geological and geomorphological features and maintain natural biophysical processes.
- Protect and enhance the diversity, integrity and viability of indigenous flora and fauna communities, particularly those identified as significant or threatened.
- Protect and monitor threatened and biogeographically significant species and their habitat.
- Restore the ecological function of degraded ecosystems to the greatest possible extent.
- Control pest plant and animal species.
- Implement bushfire management strategies that protect life and property, whilst ensuring the diversity and function of natural communities is maintained.
- Protect catchment values of Tallebudgera Creek.
- Protect and improve public appreciation of Aboriginal and European cultural heritage sites and values.
- Involve traditional owners in cooperative management of indigenous cultural heritage values.
- Protect and enhance the planning area’s significant landscape values.
- Provide opportunities for safe, minimal-impact and sustainable nature-based recreation consistent with the protection of natural and cultural values.
- Develop recreational infrastructure that does not impact upon scenic values associated with intact vegetative cover along ridgelines visible from coastal areas.
- Mitigate against existing and potential anthropogenic impacts upon biodiversity such as rubbish dumping, inappropriate use of the reserve, the effects of increased visitation and adjacent land uses.
- Engender greater public awareness and appreciation for the values and management of the planning area.
- Provide interpretation and educational material that promotes appreciation of the reserve and support for the conservation of its values.
• Encourage and facilitate scientifically rigorous research and monitoring to improve knowledge of natural and cultural values of the area, and provide feedback into the ongoing strategic management of reserves.
• Develop and maintain strong relationships with neighbours, authorities, Government departments, other Council land and/or asset managers and other key stakeholders to enhance the protection, viability and integrated management of the area.
• Where required, employ principles of adaptive management to address the potentially detrimental effects of climate change.
• Manage in accordance with all relevant legislation and policy.

4 Management strategies for Burleigh Green Space Reserves

4.1 Landscape protection

4.1.1 Current management situation

Under the Gold Coast Planning Scheme, the management intent for visually prominent landscape features such as Burleigh Greenspace is to strengthen these features over time through retention of vegetation and minimising development. Preliminary community consultation carried out during the development of this plan (Burleigh Green Space Conservation Reserves Community Consultation Report, in prep.) indicated a strong public interest in retention of the Burleigh Green Space for scenic and amenity purposes as well as for nature conservation.

Vegetation clearing is carried out by electricity providers along Powerlink distribution easements in Herbert Park (Powerlink), Ron Mason Park and Skyline Terrace Reserve (Energex) (see also Table 8, Section 4.10). While some clearing is necessary for the safe operation of power lines within these easements, appropriate timing of clearing, use of sediment control measures, weed control and minimising the level of clearing would reduce risks of erosion in addition to improving the visual amenity of the area.

The majority of the planning area has a low to moderate slope instability hazard rating, however high slope instability hazard is mapped along the western half of Ocean Parade Bush Parklands. Steep slopes along the ridgeline are vulnerable to landslips, as evidenced through several recent landslides in Burleigh Head National Park, a landslide in 2009 above Ramly Drive in Ron Mason Park and a landslide in 2006 at Ocean Parade Parklands below Vantage Point Drive, all following heavy rainfall. Vegetation cover is critical in protecting unstable slopes, and the degradation of native vegetation through development, encroachment, inappropriate use of fire and informal track construction increases the vulnerability of the reserves to severe erosion events. A network of informal walking and mountain bike tracks constructed in Herbert Park, Ron Mason Park, Skyline Terrace Reserve and Burleigh Ridge Park are causing erosion and degradation. Large basalt boulders, or ‘floaters’ around the perimeter of basalt caps at Burleigh Ridge, Skyline Terrace, Ron Mason and Herbert Parks contribute to slope instability and are also a significant hazard for construction of recreational or maintenance tracks.
4.1.2 Desired outcomes

- Significant landscape features and the vegetated nature of Burleigh ridge line is protected and enhanced.
- Visual impacts on the natural landscape, especially from major viewing points, are minimised.
- Infrastructure complements and does not detract from the natural landscape.
- Geological hazards, soil erosion and slope instability are minimised and prevented where possible.
- Geological and soil landscapes are protected from human induced disturbance.

4.1.3 Management strategy

4.1.3.1 Guidelines

G1.2 Limit clearing of native vegetation within the planning area to that necessary for essential statutory and operational requirements.

G1.3 Ensure that reserve facilities and management infrastructure are located and designed to minimise their visual impact within the landscape.

G1.4 Locate new infrastructure outlined in this plan on previously disturbed sites wherever possible.

G1.5 Ensure reserve facilities, visitor use and management actions do not adversely impact on geological and soil landscapes.

G1.6 Locate all new infrastructure and embellishments at appropriate setbacks to unstable slopes, as defined by the relevant engineering/geotechnical assessments where necessary.

G1.7 Fence unstable slopes where necessary (e.g. where there are risks to human safety, soil erosion, or sensitive vegetation communities).

G1.8 Avoid locating new infrastructure and embellishments within areas of Moderate – High Slope Instability Hazard.

G1.9 Where locating new infrastructure and embellishments within areas of Moderate Slope Instability Hazard or greater, a Slope Stability Report must be prepared. This report must: demonstrate that the area is suitable for building purposes (with due consideration of the stability risk and potential stability problems); provide construction measures to support the proposed works; and be prepared by a registered and appropriately experienced engineer.

G1.10 Where construction/remediation works (e.g. associated with landslip) are required in a reserve, works should be conducted in accordance with conditions outlined in the Application for Use of Council Controlled Parkland, with conditions put in place by natural areas officers where necessary to ensure protection of the environmental values of the reserve.

G1.11 Implement appropriate sediment and erosion control measures during all works conducted within the planning area. For major works, or those conducted upon slopes of a Moderate or High Slope Instability Hazard, it is recommended that an erosion hazard assessment be conducted and where necessary, an Erosion and Sedimentation Control Plan should be prepared.
G1.12 Ensure that weed control activities are conducted in such a manner as to minimise soil disturbance and erosion, and that degraded and erosion-prone areas are prioritised during restoration planning.

4.1.3.2 Actions

A1.1 Liaise with Powerlink and Energex to ensure future vegetation management within power easements at Herbert Park, Skyline Terrace Reserve and Ron Mason Park has minimal impacts on scenic amenity, particularly along prominent ridgelines.

A1.2 Liaise with neighbours to encourage the retention of landscape values adjoining the planning area, and support Council’s environmental planning officers in developing/promoting private landholder vegetation conservation incentives to residents in the planning area – particularly those neighbouring conservation reserves.

A1.3 Support the acquisition of vegetated and visually prominent properties along the Burleigh ridge line through Council’s Open Space Preservation Levy.

A1.4 Liaise with Council’s implementation and assessment, recreational planning and engineering services officers to ensure that future developments complement the natural character of the area, and protect significant scenic and landscape features adjoining, or in proximity to, the planning area.

A1.5 Close and rehabilitate informal walking and mountain bike tracks that do not form part of the strategic recreational tracks network (refer to Section 4.9) in Herbert Park, Ron Mason Park, Skyline Terrace Reserve and Burleigh Ridge Park.

4.1.4 Key monitoring priorities

- Monitor effectiveness of informal track management/track closure to identify where, if necessary, further management measures are required.
- Monitor reserve boundaries for private encroachments within the planning area.
- Monitor erosion and sediment control measures used during any operational works (including those carried out as part of maintenance of electrical easements) so that any additional management requirements can be identified and implemented immediately.

4.2 Catchment management

4.2.1 Current management situation

The majority of the reserves fall within the Tallebudgera Creek catchment, with the main ridge line of Burleigh Ridge, Herbert Park and Skyline Terrace forming the boundary between the Tallebudgera and Nerang River catchments.

Lots 36 RP228788, 3 RP864252 and 208 WD311480 abut the lower reaches of Tallebudgera Creek downstream of the Elanora treatment plant, and a small tidal drain, Oyster Creek, bisects lot 36 RP228788 and lot 13 RE114420. Consequently these reserves are dominated by estuarine vegetation communities and are accessed by people using Tallebudgera Creek for recreational activities such as fishing and boating. Areas of salt marsh on lots 208 and 36 are particularly susceptible to trampling and some members of the public have also raised concerns regarding bank erosion caused by boats travelling along Tallebudgera Creek (Burleigh Green Space Conservation Reserves Community Consultation Report, in prep. and
Australian Wetlands 2009). All or part of the reserves adjacent to Tallebudgera Creek are mapped as a Designated Flood Affected Area under Councils Town Planning Scheme, and Oyster Creek drain, in particular, is known to flood regularly (P. Novy, Gold Coast Council, pers. comm. January 2010). Development within Flood Affected Areas is subject to the provisions of Councils Constraint Code for Flood Affected Areas, which gives standards for development to ensure that the runoff from land and/or premises does not create any adverse environmental impacts. No new stormwater infrastructure is planned within the reserves within the lifetime of this plan (P. Novy, Gold Coast Council, pers. comm. January 2010).

There are no other significant waterways within the planning area although ephemeral water bodies occur within Herbert Park, Skyline Terrace and Ron Mason Park. Recent fauna surveys (White et al. 2006) indicate that these water bodies are in poor condition due to severe pollution from runoff from nearby roads, residences and informal mountain bike tracks constructed within the reserves, and recommend ongoing water quality monitoring to direct more effective waterway management.

The Tallebudgera Creek Catchment Management Plan (Australian Wetlands 2009) describes the current condition of the Tallebudgera Creek catchment, delineates the riparian zone and presents strategies and actions to improve the health of the catchment and compliance with water quality objectives for the creek defined by Queensland Department of Environmental and Resource Management (EPA 2006a). The main threats to the lower reaches of the creek, part of which is adjacent to Burleigh Green Space reserves, include weed encroachment, damage to creek bank stability in heavily used recreational areas (particularly boat wash), narrowness of the riparian vegetation buffer zone and discharge of urban nutrient loads. The water quality of the lower estuary is in excellent condition although aquatic fauna numbers are low. Areas of mangrove, seagrass and other fringing vegetation along the lower estuary, including in Burleigh Green Space reserves, is identified as essential to the maintenance of a diverse estuarine fish fauna and recreational fishing opportunities within the estuary.

Sections of the catchment incorporating Burleigh Green Space reserves are identified in the Tallebudgera Creek Catchment Management Plan (CMP) as being in near pristine condition and both vegetation and geomorphic condition have a high conservation value recovery potential. These sites and the adjoining hill slopes provide a critical refuge to indigenous riparian flora and fauna and need to be protected from future development and land clearing. Specific stream restoration targets identified in the CMP for the estuarine communities within Burleigh Green Space include protection and restoration of adjoining channel oxbows, anabranches and floodplain/estuarine wetlands, improvement of riparian/wetland vegetation associations and connection with adjoining vegetation communities and prevention of channel dredging.

Other relevant management actions listed within the CMP include:

- Preparation, in cooperation with relevant landholders, of natural area management plans and site based restoration plans for valuable coastal wetlands within the riparian zone;
- Rehabilitation of the riparian corridor, particularly in areas mapped as conservation and high recovery potential;
- Rehabilitation of ecological corridor areas to reinstate the Burleigh-Springbrook corridor;
- Provide the community with demonstration sites of healthy riparian vegetation and ‘before’ and ‘after’ information throughout the riparian zone;
- Acquisition of riparian land for conservation and water quality protection;
- Incorporation of the mapped riparian zone into Councils planning scheme;
• Development of fauna friendly fencing guidelines;
• Use of erosion and sediment control planning during construction;
• Increasing public awareness of protection of and threats to natural resources through education and ownership strategies;
• Initiatives to encourage public awareness, ownership and protection of the natural resources of the catchment;
• Provide community information on weed management and natural vegetation.
• Undertake a cultural heritage assessment of the catchment to determine scope for interpretive education; and
• Consider establishment of a comprehensive baseline study of estuarine and freshwater fish and invertebrate assemblages.

Aquatic environments, and estuaries in particular, are dynamic systems in which changes in the location of land and water can occur over a relatively short period of time. Some changes in the location and area of those reserves within the planning area that are adjacent to Tallebudgera Creek (lots 208 W311480, 36 RP228768 and 3 RP864252) are possible within the lifetime of this plan, and should be considered during subsequent plan reviews and infrastructure repair or upgrades. Where necessary, Council undertakes bank stabilisation works adjacent to waterways. At the time of writing, no such works were occurring or planned within the planning area. However rock revetment maintenance is occurring in Kevin Gates recreation park and Council is also liaising with QPWS regarding foreshore stabilisation in Tallebudgera Creek Conservation Park.

4.2.2 Desired outcomes

• Catchment values, riparian condition, water quality and the health of waterways are maintained or improved.
• Degraded riparian and aquatic ecosystems are rehabilitated to protect downstream water quality.
• Sustainable waterway access is maintained.

4.2.3 Management strategy

4.2.3.1 Guidelines

G2.1 Ensure that management actions and operational works do not adversely impact upon water quality or natural drainage patterns, through use of appropriate erosion control measures, including preparation of sedimentation and erosion control plans where necessary.

G2.2 Ensure that feasibility assessments are conducted where infrastructure is proposed within flood affected areas and to determine appropriate setbacks of planned infrastructure to waterways and ephemeral flow paths.

G2.3 Facilitate waterway access at designated, formalised access points only.

G2.4 Ensure that management actions and outcomes associated with waterways are in accordance with the provisions of the Tallebudgera Creek Catchment Management Plan.

G2.5 Prevent herbicides from entering the aquatic environment during weed control.

4.2.3.2 Actions
A2.1 Liaise with Council’s catchment management officers with regards to restoration programs within riparian parts of the planning area including the use of healthy vegetation demonstration sites identified in the Tallebudgera Creek CMP (see also Section 4.12 of this plan).

A2.2 Close and rehabilitate informal mountain bike tracks that do not form part of the strategic recreational tracks network (refer to Section 4.9) in Burleigh Ridge, Herbert Park, Skyline Terrace and Ron Mason Park.

A2.3 Liaise with Council’s catchment management officers to review condition and level of use of formal and informal waterway access points within the planning area and repair/formalise access where necessary to reduce damage to riparian communities.

A2.4 Work with Council’s catchment management officers to implement management strategies to repair existing bank erosion and mitigate causative agents in the vicinity of Lot 208 W311480 and Lot 36 RP228768.

A2.5 Liaise with Council’s catchment management officers and other organisations including DERM and South East Queensland Catchments (SEQ Catchments) as needed in regard to catchment management initiatives required to maintain water quality within waterways of the planning area.

A2.6 Liaise with Council’s catchment management officers regarding future aquatic monitoring within the planning area, including incorporation of existing baseline SIGNAL data (White and White, 2006) for the reserves into future studies.

A2.7 Promote responsible attitudes towards water quality management through interpretive material (eg. signage at key entry points, sites currently used by mountain bikers, along the main waterway through Herbert Park and in reserves adjacent to Tallebudgera Creek). Liaise with Council’s catchment management officers to ensure integration of new public awareness and education initiatives implemented as part of the Tallebudgera Creek Catchment Management Plan with interpretive material developed for the planning area (refer to Actions 6.8 and 12.4.

A2.8 Liaise with Council’s implementation and assessment, recreational planning and engineering services officers to ensure that development or land use proposals within or adjacent to the reserves of the planning area do not result in significant alterations to natural flow regimes and aquatic ecosystems and support the rehabilitation of the Burleigh-Springbrook Corridor.

4.2.4 Key monitoring priorities

- Monitor effectiveness of informal track management/track closure to identify where, if necessary, further management measures are required.
- During operational works within the vicinity of waterways, undertake regular site monitoring to ensure that appropriate management measures for the protection of waterway values (e.g. sediment and erosion controls) have been implemented and adequately maintained.
- Monitor water quality in association with Council’s catchment management officers to assess effectiveness of restoration works and identify further management requirements.
4.3 Native flora

4.3.1 Current management situation

Despite their small size, Burleigh Greenspace reserves, together with adjacent state managed reserves, support a high floristic diversity and continue to function as an important refuge for native coastal wet and dry forest species and mangroves.

Sites of particular floristic significance include the central gully and Western ridge line of Herbert Park, which provide habitat for *Lepiderema pulchella*, *Macadamia integrifolia* and *Endiandra hayesii*; the moist gully between George Street and Djerral Avenue in Burleigh Ridge Park, in which *Pararistolochia praevensia* has been recorded, and South-facing gullies of Skyline Terrace Reserve, which contain significant mature populations of *Cupaniopsis newmanii*. These sites not only contain significant plant species, they also, with appropriate management, provide suitable habitat conditions for a greater diversity of moist sclerophyll and vine forest species than that which currently exists within the reserves. Vegetation types of particular management significance include tidal areas along Loman Lane that are dominated by marine plants (mangroves, salt marsh and swamp oak) protected under the Queensland Fisheries Act 1994, and Regional Ecosystems 12.11.9, 12.3.11 and 12.1.1, which are a management priority due to their status 'of concern' under the Queensland Vegetation Management Act. There is also a fragment of endangered Blackbutt open forest (RE 12.11.23) in Ron Mason Park, which is too small to show on current regional ecosystem mapping.

The diversity of vegetation in reserves of this size reflects the context of the reserves within the partially intact Burleigh-Springbrook coast-hinterland vegetation corridor (see Section 2.2). Further fragmentation of this linkage by urban development would threaten the regeneration and dispersal ability of some plant species, particularly those dependant on native animals for pollination and/or seed dispersal.

Recent flora surveys (Caddick 2006) indicate that around 50 percent of the plant species recorded in the reserves are exotic, placing a significant threat over the long-term integrity of native vegetation. Exotic plant species compete with natives for space and resources, preventing native plants from germinating and growing and altering structural and floristic diversity. Exotic species also impact on soil conditions, altering nutrient cycling processes and resulting in tree dieback, as evident in the central moist gully within Herbert Park. Some residents have expressed concern about the numbers of weeds present in the planning area (Burleigh Green Space Conservation Reserves Community Consultation Report, GCCC in prep.) however, many locals are unlikely to be aware of the threats posed by allowing exotic garden species to encroach into the reserves.

Vegetation degradation is also occurring as a result of the extensive informal track network that has become established throughout the reserves, causing soil erosion and facilitating the spread of exotic species. Of particular concern are the mountain bike tracks constructed at Herbert Park, Skyline Terrace and Ron Mason Park (see Section 4.9.1.4).

The small size and urban context of the reserves also makes the vegetation vulnerable to inappropriate fire caused by arson, which is addressed in further detail in 4.5 below.

Rehabilitation works to control weeds and restore damage by informal tracks have been initiated in Herbert Park, Burleigh Ridge and lot 13 RP114420 and are addressed in further detail in Section 4.6.
4.3.2 Desired outcomes

- Protection and enhancement of the structural and biological diversity and integrity of the full range of remnant vegetation communities, and populations and the diversity of rare, threatened or otherwise significant plant species present.
- Maintenance and, where possible, improvement of wildlife corridors and habitat connectivity.
- Increased understanding of indigenous native flora populations and population viability within the planning area.
- Greater public appreciation and support for the protection of indigenous native flora.

4.3.3 Management strategy

4.3.3.1 Guidelines

**G3.1** Prioritise management and restoration of Endangered and Of Concern Regional Ecosystems/vegetation communities, and areas known to provide habitat for threatened and/or locally significant native plant species, or other significant ecological function (eg. buffers and wildlife corridors).

**G3.2** Minimise human access in sensitive areas, including those containing known populations of rare and threatened flora species, riparian areas, and restoration sites. Where required, management measures such as information signage, closure of informal and unnecessary tracks, buffer planting and exclusion zones should be implemented to deter inappropriate access.

**G3.3** Ensure that management operations, such as slashing, controlled burns, weed control, pest animal control, and infrastructure construction and maintenance, do not impact upon significant plant species and communities. Where potential damage or incursion is likely, ensure exclusion zones are created (signed appropriately to ensure visitor safety) and/or suitable barriers are installed.

**G3.4** Where essential works necessitate the clearing of remnant vegetation, approval for these works must be sought under the Queensland Vegetation Management Act 1999 and the Gold Coast Planning Scheme.

**G3.5** Ensure that all operational works conducted near or adjacent to marine plant habitat are carried out in accordance with the Queensland Fisheries Act 1994, with relevant permits obtained where necessary.

**G3.6** Liaise with Council’s environmental planning officers to ensure that all activities in relation to the management of threatened plant species are consistent with the Recovery Planning Process identified by relevant State or Commonwealth government agencies, and that management is in accordance with the management intent of their listing under the Nature Conservation Act 1992 and the Environment Protection and Biodiversity Conservation Act 1999.

**G3.7** Essential removal/translocation and seed collection of rare or threatened plant species must be subject to assessment and approval under the Commonwealth Environment Protection and Biodiversity Conservation Act 1999 and the Queensland Nature Conservation Act 1992, with relevant permits obtained where necessary.

**G3.8** All other seed collection activities are to be guided by Council’s seed collection policy (currently under development) and managed by Council’s natural areas restorations officers.
4.3.3.2 Actions

A3.1 Continue with ongoing restoration works throughout Burleigh Green Space in accordance with detailed restoration plans developed for Herbert Park, Burleigh Ridge Park, lot 13 RP114420 and Ron Mason Park and prepare and implement restoration plans for the remaining parks within the planning area.

A3.2 Forward the results of all new floristic studies and incidental flora records to Council’s environmental planning officers to be updated to the Gold Coast City Nature Conservation Strategy Database.

A3.3 Using existing survey data (Caddick 2006) as a baseline, in conjunction with Council’s environmental planning, conduct floristic surveys (particularly in Endangered and Of Concern vegetation communities) at regular intervals (e.g. every 5 years) to assess changes in ecological condition, floristic diversity, and rare or threatened plant populations.

A3.4 Work with Council’s environmental planning officers to maximise opportunities to provide/retain future vegetation connectivity along the Burleigh-Springbrook corridor, eg. through land acquisition and private landholder/developer incentives.

A3.5 Liaise with other land managers, particularly QPWS, to encourage restoration of native vegetation and generate support for a collaborative approach to vegetation management in the Burleigh-Springbrook corridor.

A3.6 Support Council’s environmental planning officers in the development of private landholder conservation initiatives such as an Urban Biodiversity Program to increase resident participation in protection of native vegetation, eg through weed control and planting of local native species in private gardens.

A3.7 Through operational patrols and interpretive material, provide information to encourage responsible public attitudes towards vegetation protection, including control of environmental weeds, and issues such as the impacts of informal track creation on native vegetation, and of household and green waste dumping.

A3.8 Where disturbances to native vegetation (e.g. through illegal clearing, encroachment, or garden waste dumping) are identified, implement appropriate management measures to control these activities, where necessary with the assistance of Council’s law enforcement officers.

4.3.4 Key monitoring priorities

- Monitor presence/absence and population changes at known locations of rare, threatened and/or locally significant species within the planning area.
- Monitor disturbances to native vegetation (e.g. through encroachment, damping, illegal clearing etc), and the impact of management strategies in remediation and prevention of these issues.
- Monitor the impacts of restoration programs on native vegetation structure, diversity and integrity.
4.4 Native fauna

4.4.1 Current management situation

Despite fragmentation and surrounding urbanisation, Burleigh Greenspace reserves support a surprisingly high faunal diversity due to their connectivity with adjacent state managed conservation reserves and the presence of a diversity of habitat types including rocky outcrops, hollow-bearing trees and dense shrubbery.

The most significant threat to faunal diversity at Burleigh Greenspace is habitat fragmentation and associated edge effects. Threats from edge effects include weed invasion, intrusion of aggressive edge specialist flora and fauna (both native and exotic), increased wind sheer and light penetration, disease and road kill. Ocean Parade Parklands, which contains the most fragmented reserves in the management area, is most susceptible to edge effects, but nevertheless provides connectivity between larger remnants to the north and south. Even with full restoration of native vegetation communities, the ability of these reserves to support viable populations of some fauna species in the long term is significantly constrained by their small size and isolation.

Many local residents use the reserves to play, exercise, walk their dogs or ride mountain bikes and the haphazard development of numerous informal tracks throughout the planning area is causing disturbance to native fauna. Ground dwelling mammals, such as the swamp rat and yellow-footed antechinus are particularly vulnerable to predation from domestic cats and dogs and are often amongst the first native species to be lost from urban conservation reserves.

Although the planning area is of a sufficient size to support breeding populations of some species, isolation from larger habitat areas to the west increases vulnerability to local extinctions and potential loss of genetic diversity. Isolated habitat patches tend to experience greater rates of species loss and lower rates of recolonisation (Collinge 2000). Fox-proof fencing around David Fleay Wildlife Park and the adjacent Tallebudgera Conservation Park forms a barrier to movement of ground fauna through part of the corridor. There may be opportunities to restore connectivity through Tallebudgera Conservation Park, however fencing around David Fleay Wildlife Park is necessary to protect native animals within the park.

The Pacific Motorway and Gold Coast Highway are also significant barriers to fauna movement and a review of recent studies suggests that only the most urban-tolerant species are likely to be able to successfully cross the Pacific Motorway and utilise the corridor in its current condition (Maunsell-AECOM 2009). Fauna crossing structures may be critical to the long-term viability of the Burleigh-Springbrook corridor and the ecological functionality of the lowland reserves of Burleigh Green Space (Chenoweth 2006a). Seasonal fauna migrations between upland and lowland areas play a crucial role in plant pollination and seed dispersal and thus in the preservation of lowland plant diversity and habitat resources. The extension of the Reedy Creek Transport Corridor is likely to have a significant impact on east-west fauna connectivity but also presents the opportunity to reinstate ecological connectivity at the intersection of the wildlife corridor and the transport corridor, and this has been the subject of a number of reports (Chenoweth 2006 a, b and c, Chenoweth 2008, Maunsell-AECOM 2009) and discussions between Council and State Government Infrastructure Providers (Queensland Transport, Queensland Department of Main Roads, ENERGEX and QR Ltd). A strategy for mitigating the barrier imposed by the transport corridor is currently being investigated by Council and State Infrastructure Providers, and includes the potential use of vegetated overpasses, fauna exclusion fencing, fauna underpasses with dry celled culverts, strategic revegetation and restoration and wide span bridges to provide physical connectivity.
Council is investigating fauna usage in the vicinity of the Pacific Motorway (Maunsell-AECOM 2009) and has initiated a GIS study to identify the route, extent and functioning of the corridor and associated buffers at a property level to assist in determining suitable measures to protect the ecological values of the corridor.

In its lack of connectivity, Burleigh differs from other Koala Habitat Areas (KHA) in the city, most of which are large and support significant koala populations. The Burleigh area, including Burleigh Green Space, comprises only 168 ha of potential koala habitat, sustaining a population of between 13 and 25 koalas. The vulnerability of small populations such as these to extinction has lead to a recommendation of special management attention for the Burleigh KHA (Biolink 2007). Proposed management actions include a comprehensive population assessment to identify opportunities to facilitate survival of the population, community education, planting of preferred koala food trees, responsible dog ownership and motor vehicle use and a habitat restoration program linked to an incentives scheme to secure permanent habitat protection on private property.

The lower and middle sections of Tallebudgera Creek estuary contain areas of seagrass, mangrove and fringing riparian vegetation that are essential to maintenance of a diverse estuarine fish fauna (Australian Wetlands 2009). However, recent surveys (Australian Wetlands 2009) indicated a relatively depauperate aquatic fauna within the mid-lower estuary, although this may, in part, be attributed to the tide cycle and high freshwater flows at the time of sampling. Away from Tallebudgera Creek estuary (see Section 4.2), aquatic habitat within the planning area is very limited, and that which is present is in poor condition due to pollution and sedimentation, resulting in low aquatic macroinvertebrate and amphibian populations. Restoration works carried out a number of years ago in Herbert Park, which contains the largest waterway in the planning area, have increased the number of native plant species present but decreased the area of boggy (weedy) habitat occupied by the swamp rat. Skyline Terrace Reserve also contains a rocky gully and ephemeral watercourse that is weed infested but, with appropriate restoration, has the potential to support numerous vertebrate and invertebrate species (White et al. 2006).

The vulnerable Richmond birdwing butterfly, *Ornithoptera richmondii*, was once widespread in the planning area but declined as vegetation disturbance and drought reduced populations of the native larval food plant (*Pararistolochia praevenosa*). Proliferation of the exotic Dutchman’s pipe vine (*Aristolochia elegans*) in gardens poses a further threat by providing an alternative host plant that is toxic to butterfly larvae. However, the butterfly occurs in higher numbers in the southern Gold Coast hinterland and, in the last two years, recolonisation of the coastal reserves has begun (R. Booth pers. comm 21 July 2009). *P. praevenosa* occurs naturally within Burleigh Head National Park and Burleigh Ridge, and the vine has been planted extensively within David Fleay Wildlife Park as part of a captive breeding program for the butterfly (refer to Section 4.13). Establishment of additional larval host plants and butterfly food plants in adjacent Council reserves would help to re-establish suitable breeding habitat along the corridor connecting Burleigh Head National Park with existing known butterfly populations in the Tallebudgera Valley, Bonogin and Mudgeeraba.

The Burleigh Green Space corridor also provides a suitable location for planting of larval host plants of other locally uncommon butterfly species, including the regent skipper *Euschemon rafflesia* and purple crow *Euploea tulliolus*, which lay eggs on *Wilkea* spp. and *Trophis scandens* respectively. Both plants are known to occur in shaded habitats within the reserves. The endangered mangrove ant blue butterfly *Acrodipsas illidgei* has not been recorded in the area since the 1970s, but small areas of suitable habitat exist along Tallebudgera Creek (White et al. 2006) and further detailed studies are required to confirm the presence or absence of this species.
4.4.2 Desired outcomes

- Current levels of indigenous fauna species diversity are maintained and, where possible, viable populations of native species are protected within the planning area.
- Habitat condition, diversity and connectivity are maintained and enhanced.
- Increased understanding of native fauna populations and population viability within the planning area.
- Greater public appreciation of, and willingness to protect, local native fauna.

4.4.3 Management strategy

4.4.3.1 Guidelines

G4.1 Undertake all management operations in such a way as to minimise disturbance to indigenous native aquatic and terrestrial fauna at all times.

G4.2 Avoid rapid, broad-scale control of pest plant infestations to ensure that there is no abrupt decline in available habitat to local native fauna within the planning area. Restoration plans for each reserve must be developed with consideration for local fauna habitat requirements.

G4.3 Liaise with Council’s environmental planning officers to ensure that all activities in relation to the management of threatened fauna species are consistent with the Recovery Planning Process identified by relevant State and Commonwealth government agencies, and that management is in accordance with the management intent of their listing under the Nature Conservation Act 1992 and the Environment Protection and Biodiversity Conservation Act 1999.

G4.4 Essential removal or translocation of rare or threatened fauna species must be subject to assessment and approval under the Environment Protection and Biodiversity Conservation Act 1999 and Nature Conservation Act 1992, and relevant permits must be obtained where necessary.

G4.5 Support community initiatives (such as World Environment Day and the Richmond Birdwing Recovery Network) that encourage provision of native fauna habitat in adjacent private properties.

4.4.3.2 Actions

A4.1 Minimise access in areas containing known populations of rare and threatened species (except for that required for management actions) to avoid disturbance and displacement. Where required, management measures such as information signage, closure of unnecessary tracks, and buffers should be implemented to deter inappropriate access.

A4.2 Retain and/or restore elements or areas of key indigenous fauna habitat, and maintain and enhance critical habitat corridors for fauna identified on, or adjacent to, conservation reserves. In particular, investigate opportunities for enhancing swamp rat habitat along the waterway in Herbert Park.

A4.3 Liaise with Council’s environmental planning officers, SEQ Catchments, QPWS and the Richmond Birdwing Recovery Network (RBRN) to integrate Council operations with existing programs to restore Richmond birdwing butterfly habitat connectivity along the Burleigh-Springbrook corridor.
**A4.4** Encourage the provision of habitat and food plants for native species within private residences, in particular retention of hollow-bearing trees and planting of locally sourced seed stock of significant butterfly food plants listed in 4.4.1 above.

**A4.5** Liaise with QPWS to develop consistent and coordinated fauna management practices and connectivity for linked areas of fauna habitat.

**A4.6** Liaise with QPWS regarding opportunities for fauna friendly fencing in Tallebudgera Conservation Park adjacent to lot 13 RP114420.

**A4.7** Forward the results of all new fauna studies and incidental records to Council’s environmental planning officers to be added to the Gold Coast City Nature Conservation Strategy Database.

**A4.8** Work with Council’s environmental planning officers to implement recommendations of the GCCC Koala Habitat and Population Assessment (Biolink 2007) and other strategic environmental plans under development in the planning area including the Burleigh-Springbrook Corridor Strategy.

**A4.9** Liaise and provide advice to Council’s environmental planning and engineering officers and State Infrastructure Providers where required to assist with development of design and construction measures to protect and enhance ecological connectivity across the Reedy Creek Transport Corridor. Liaise with Council’s environmental planning officers to implement corridor protection measures identified.

**A4.10** Using existing survey data as a baseline, in conjunction with Council’s environmental planning officers, conduct fauna surveys (particularly for key animal species listed under threatened species legislation or regarded as locally significant) at regular intervals (e.g. every 5 years) to assess changes in variables such as species richness, abundance, and distribution.

**A4.11** Maintain records of fauna mortality and cause of death within the planning area from Council staff and community observations and local Wildcare records. Where increased disease-related mortality is observed, implement management measures to mitigate risk of further mortality and, where relevant, manage in accordance with State and Commonwealth guidelines for threatened species and/or threatening processes.

**A4.12** Where incidences of infectious fauna diseases such as amphibian Chytridiomycosis, Koala Chlamydiosis and Cryptococcosis, and other diseases spread by pest animals are recorded within the planning area, assess the level of risk to the fauna of the planning area and where appropriate, undertake measures based on current best practice guidelines to control their spread.

**A4.13** Promote public understanding and appreciation of native animals through operational patrols, interpretive programs, and materials to increase awareness of local fauna conservation and management issues.

**A4.14** Install signage to exclude dogs from all parts of the reserves. Signage should direct dog walkers to alternative recreational parks in the area including Schusters Park, foreshore parks along Burleigh Esplanade, Burleigh Lake Park and the off-leash area at the northern end of Palm Beach.
4.4.4 Key monitoring priorities

- Record all visitor-related disturbance incidents, including infringements of dog restrictions, during ranger patrols. Periodically review records to identify high risk periods and locations to help direct future management effort.
- Assist Council’s environmental planning officers in monitoring native fauna use of reserves to contribute towards ongoing monitoring of the condition of the Burleigh-Springbrook corridor.
- Initiate target searches for the mangrove ant blue butterfly, including searches for the attendant ant *Crematogaster laeviceps* group’, to identify whether further management action for this endangered species is required.
- Initiate terrestrial invertebrate monitoring to improve understanding of invertebrate diversity within the reserves and to provide a baseline for future monitoring.
- Initiate an aquatic macroinvertebrate monitoring program using the SIGNAL analysis methodology used in the Fauna Survey Report on Burleigh Greenspace Conservation Reserves (White *et al*. 2006) to compare changes in pollution levels over time and help to identify specific problem areas.

4.5 Bushfire

4.5.1 Current management situation

Little precise information is known regarding recent fire history of the planning area. However, Queensland Fire and Rescue Service (QFRS) records indicate that fires over the past six years have predominantly been small grass, bush or backyard fires, less than 1ha in size. There do not appear to have been any significant bushfires within Burleigh Green Space in the last decade, although a small part of the western flank of Herbert Park burned in around 1999 (S. Towner pers. comm.) and there have been a several bushfires on QPWS managed land at Burleigh Knoll and Burleigh Head National Park. Common causes of bushfire in the area include burning garden waste, arson and illegal bonfires.

Council’s 2006 bushfire mapping indicates that the majority of the reserves have a medium to high bushfire hazard classification, with high fire hazard areas located on north and west facing slopes at Ron Mason Park, Ocean Parade Bush Parklands and Burleigh Ridge. Low, grassy portions of Skyline Terrace Reserve, Herbert Park, Burleigh Ridge and estuarine reserves south of David Fleay Wildlife Park have a low bushfire hazard classification. The high bushfire hazard classifications relate to the steep topography, north to northwest aspect and presence of dry sclerophyll or weedy/grassy vegetation dominated by lantana or molasses grass.

The large number of private properties neighbouring the planning area has resulted in frequent dumping of garden waste into adjacent reserves, including larger shrubs and trees cleared to improve views. This build up of dead, woody material significantly increases available fuel loads, increasing the risk of wildfire to native vegetation and adjacent properties. Due to their close proximity to residential areas, too frequent fires caused by arson are also a risk in the reserves. Too frequent bushfires prevent native species from reaching reproductive maturity, reduce species diversity, destroy important habitat such as leaf litter and fallen logs and facilitate further invasion of weeds, particularly pyrogenic species such as molasses grass (*Melinis minutiflora*) that increase the overall bushfire hazard.
Steep slopes, lack of formal access, and the occurrence of residential lots immediately upslope of reserves limit the use of fire as a vegetation management tool in the planning area. Reserve size and connectivity is also an important consideration: whilst fire can be important in maintaining long-term ecological integrity, eg. by stimulating regeneration of fire dependant species and maintaining nutrient cycles necessary to sustain ecosystem health, in the short term fire can reduce the area of habitat available for fauna. In a natural system with extensive connectivity between large habitat areas, fauna can adapt to the temporary disturbance of bushfire by moving into adjacent habitat areas. However, small, isolated ecosystem ‘islands’ such as Burleigh Green Space, with limited connectivity to adjacent habitat systems, are less resilient to such disturbance and may be too heavily constrained by urbanisation to be managed using natural ecological fire regimes.

A Bushfire Management Plan (BMP) has been produced for the reserves (AECOM 2009), which describes bushfire management zones and management actions within each zone, specific management strategies for sites containing significant flora and fauna, appropriate fire regimes for vegetation communities present and bushfire operation and suppression guidelines. The majority of the planning area is mapped as a Rehabilitation Zone, from which fire is to be excluded until intensive weed control, soil stabilisation and revegetation works are complete. The extent of the Rehabilitation Zone will be reviewed at the end of the (5 year) lifetime of the BMP, at which point fully restored areas may be transferred into a Conservation Zone. The north facing ridgeline of Ron Mason Park is a Wildfire Mitigation Zone, to be maintained at reduced fuel levels through prescribed burning to facilitate fire fighter access.

Moist sclerophyll gullies in Herbert Park, Skyline Terrace and Burleigh Ridge are mapped as Conservation Zones, the general intent of which is to manage using optimum fire regimes required for the maintenance of biodiversity. However, within the current plan these areas will not be burnt, in order to allow natural and/or assisted regeneration of native rainforest species, which will reduce the flammability of the vegetation. Whilst no planned burning is proposed within the lifetime of the current BMP, subsequent bushfire planning will need to consider the impact of planned burns within such small and highly fragmented units of vegetation.

A network of linear fuel-reduced Protection Zones has been proposed between vegetated edges of the reserves and adjacent urban areas, to provide a defendable space for fire fighters and reduce radiant heat and bushfire hazard to adjacent assets, including private residences. Few of the existing internal tracks in the reserves are of a sufficient size to provide access for fire fighting vehicles, although all or part of most reserves have road access. The BMP notes that the use of heavy earth moving equipment is not suitable for fire fighting within the reserves due to environmental values and steep, unstable slopes, although smaller rubber-tyred vehicles may be usable in some locations. There is a four wheel drive track along the upper north west ridge of Herbert Park and investigations are currently underway to extend this track west through Ron Mason Park to provide access to the wildfire mitigation zone and create a formal recreational linkage (see Sections 4.9.1.1 and 4.9.1.4).

Current best practice fire regimes for the site’s vegetation communities are outlined in Table 6. Prescribed burns should not occur below the lower frequency limit, with programs aiming to vary the inter-fire range within the limits for each community. Maximising this variability allows for a mixed-aged forest, increase the mosaic patterns, and create different microclimates within the one forest type, serving to increase species diversity. As these regimes are those which generally apply to each vegetation community, they should only be used as a guide.
**Table 6. Vegetation group and ecological fire regimes for Regional Ecosystems occurring within the planning area**

<table>
<thead>
<tr>
<th>Regional Ecosystem</th>
<th>Fire Vegetation Grouping ¹</th>
<th>Fire Management Strategy ³</th>
<th>Issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>12.1.1 – <em>Casuarina glauca</em> open forest on margins of marine clay plains</td>
<td>Fringing vegetation</td>
<td>Some disturbance required to maintain structure, prevent weed invasion and reduce accumulation of dry fuels.</td>
<td>Fire ecology of this RE is poorly known and further monitoring of fire recovery is needed.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Retain at least 25-50% unburnt.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fire season: early winter or storm season.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fire intensity: low to moderate.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fire interval: 7 year minimum to allow <em>Casuarina</em> to reach reproductive maturity.</td>
<td></td>
</tr>
<tr>
<td>12.1.2 – Saltpan vegetation including grassland and herbland on marine clay plains</td>
<td>Saltmarsh / wet and ephemeral swamp</td>
<td>Can be burnt in association with the surrounding vegetation</td>
<td>Some elements of this grouping will be flammable and though not deliberately burnt, fire should not be avoided. Surrounding areas should be burnt when swamp is wet to avoid peat fires.</td>
</tr>
<tr>
<td>12.1.3 - Mangrove shrubland to low closed forest on marine clay plains and estuaries</td>
<td>Mangrove</td>
<td>Exclude fire</td>
<td>Consideration should be given to preventing scorch of the margins where this grouping adjoins flammable vegetation such as <em>Melaleuca</em> species.</td>
</tr>
<tr>
<td>12.11.5k - Open forest with <em>Corymbia henryi</em>, <em>Eucalyptus fibrosa</em> subsp. <em>fibrosa</em> ± <em>C. citriodora</em>, <em>C. intermedia</em>, <em>Angophora leiocarpa</em>, <em>E. propinqua</em>, <em>E. carnea</em> on drier ridges on metamorphosed sediments and interbedded volcanics.</td>
<td>Dry sclerophyll</td>
<td>Burn in late summer to winter (April to June) Low to moderate intensity Fire interval of 6-25 years Aim to achieve a mosaic burn with 25-50% of a block burnt. Promote mosaic burn by burning when soil moisture is elevated and using spot ignition techniques.</td>
<td>Maintain a mosaic of grassy and shrubby understorey. Operations planning to include post fire weed monitoring and management if required. Burning with sufficient soil moisture will assist in maintenance of patches of ground litter and fallen timber habitats. Important to vary seasonality and intensity of prescribed burns.</td>
</tr>
<tr>
<td>Regional Ecosystem</td>
<td>Fire Vegetation Grouping&lt;sup&gt;1&lt;/sup&gt;</td>
<td>Fire Management Strategy&lt;sup&gt;2&lt;/sup&gt;</td>
<td>Issues</td>
</tr>
<tr>
<td>--------------------</td>
<td>-------------------------------------</td>
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<td>--------</td>
</tr>
</tbody>
</table>
| 12.3.11 - *Eucalyptus siderophloia, E. tereticornis, Corymbia intermedia* open forest on alluvial plains near the coast | Dry sclerophyll (grassy) | • Burn early winter.  
• Low fire intensity.  
• Fire interval of 3-6 years  
• Aim to achieve mosaic burn with 30-60% of block burnt. Promote mosaic burn by burning when soil moisture is elevated and using spot ignition techniques. | • Operations planning to include post fire weed monitoring and management if required.  
• Burning with sufficient soil moisture will assist in maintenance of patches of ground litter and fallen timber habitats. |
| 12.8.14 - *Eucalyptus eugenioides, E. biturbinata, E. melliodora* open forest on Cainozoic igneous rocks ± *E. tereticornis, Eucalyptus siderophloia* or *E. crebra* 12.11.3 - Open forest with *Eucalyptus siderophloia* and *E. propinqua* on metamorphics ± interbedded volcanics 12.11.9 - Lowland coastal *Eucalyptus tereticornis* open forest on metamorphics ± interbedded volcanics. | Moist sclerophyll | Generally:  
• Burn late summer to winter.  
• Low to moderate fire intensity with occasional high intensity wildfire.  
• Fire interval 6-12 years. However, within lifetime of current Fire Management Plan, no conservation burns will occur in these areas to encourage growth of fire-resistant rainforest understory. | • Frequent fires needed to keep rainforest species in check. Hot fires may be needed in areas that have not been burnt for long periods to reduce well established rainforest pioneers. A second fire may be required soon after to manage rainforest pioneers.  
• Burn with elevated soil moisture to reduce impacts on moist gully vine thickets.  
• Once rainforest pioneers take hold in this vegetation group it is likely that these areas will no longer burn, even in a wildfire situation. |
| 12.3.5a – *Melaleuca quinquinervia* open forest on alluvium | Melaleuca wetland | • Burn in late summer (April – June) after rain.  
• Fire intensity moderate, occasionally high.  
• Fire interval 8-15 years.  
• Burn productive areas at lower end of inter-fire threshold and less productive areas at higher end. | • Melaleuca forests are well adapted to fire but too frequent fire will prevent regeneration.  
• Burn these areas when soil moisture is elevated to avoid peat fires.  
• Aim for a mosaic of burnt and unburnt areas. |
| - | Disturbed/weed infested areas | • Undergoing restoration.  
• Exclude fire. | • Exclude fire until ecological restoration complete. |

<sup>1</sup> Smith and Tran (2008).
4.5.2 Desired outcomes

- Human life and property within and adjacent to the planning area, including management structures are protected.
- Sites, relics and structures of European and Aboriginal cultural heritage value are protected from radiant heat and fire management activities.
- Maintenance and enhancement of ecosystem health and diversity through best practice ecological fire management.
- Where possible, fire is excluded from ecological communities that are not tolerant of fire.
- Understanding and cooperation between neighbours with regards to fire management.
- Where possible, unplanned bushfires are prevented from entering or leaving the planning area.
- Increased community understanding of bushfire hazards, individual responsibilities and bushfire ecology.
- Improved understanding of bushfire management requirements for ecosystems and species occupying the planning area.

4.5.3 Management strategy

4.5.3.1 Guidelines

G5.1 Undertake bushfire management in accordance with the BMP for Burleigh Green Space Reserves (AECOM 2009).

G5.2 Bushfire planning and management should protect life and property; enhance species and habitat diversity and connectivity across the landscape; and encourage recruitment of significant species.

G5.3 Where life and property priorities allow, ensure that the timing of planned burns in wildfire mitigation and conservation zones (as determined by the strategic Bushfire Management Plan) supports ecological restoration projects.

G5.4 Ensure that future bushfire management planning incorporates the latest recommendations of the South East Queensland Fire and Biodiversity Consortium and the Queensland Herbarium regarding appropriate fire management prescriptions for each Regional Ecosystem present within the planning area.

G5.5 To maximise opportunities for the protection of fire-sensitive species and ecosystems, Council’s natural area management officers and seconded QFRS officers are responsible for all fire planning and implementation within the planning area and are to provide incident control support at wildfire events.

G5.6 Ensure that thorough ground truthing is carried out at all sites prior to planned burning to identify site constraints, safety issues, and species, habitat or ecological communities requiring specific management.

G5.7 In respect to native animals, bushfire management in the planning area will be based upon:

- the maintenance of sufficient available habitat and connectivity for fauna
- the need to maintain or create an appropriate range of post fire successional vegetation stages and age classes, including the retention of mature vegetation and critical habitat components such as tree hollows and fallen wood debris
G5.8 Aim to protect tree hollows and logs and other known significant habitat from fire during prescribed burn operations.

G5.9 Wildfires will be extinguished as quickly as possible, except under circumstances in which the fire is considered to be of ecological benefit to the site and does not threaten life and property.

G5.10 In accordance with the Burleigh Green Space BMP, avoid the use of heavy machinery for fire suppression within the planning area, particularly in unstable areas and areas containing rare plants, threatened wildlife habitat, and cultural heritage value.

G5.11 Prioritise weed monitoring and control six months following planned and unplanned fires.

G5.12 To minimise the impacts of bushfire on assets, where practicable, utilise fire retardant materials for all infrastructure and embellishments.

G5.13 Do not promote or provide for uses within the planning area that may substantially increase the bushfire hazard or risk of ignition and threaten neighbouring homes. Additionally, ensure that all infrastructure is designed to minimise the potential for increased fire hazard through inappropriate usage.

G5.14 Prohibit open fires (e.g. campfires, wood barbeques) within the planning area.

G5.15 Restrict public access where necessary, in all or part of the planning area during and immediately after prescribed burning operations. Ensure that appropriate signage is provided at all entry points advising the public of these closures and associated risk.

G5.16 Ensure that potentially hazardous management activities (such as slashing, welding, grinding and other construction/demolition activities) are excluded from the planning area during periods of very high or extreme fire danger/weather days.

G5.17 Provide advice to the Council’s development assessment officers to ensure that all necessary bushfire hazard reduction measures are incorporated into proximate new developments and do not adversely impact on the planning area.

G5.18 Continue to support and facilitate partnerships with the South East Queensland Fire and Biodiversity Consortium.

G5.19 Liaise with QPWS regarding fire management planning on reserves adjacent to the planning area.

4.5.3.2 Actions

A5.1 Review the BMP every five years, in consultation with relevant stakeholders. Confine these reviews to amendments associated with:
- pertinent new research findings and information
- the results of monitoring programs, where they indicate the need for changes in management
- where existing management strategies are not achieving stated objectives
A5.2 Develop and maintain a mapping database which establishes mapping layers for effective fire planning, including:

- basic topographic attributes
- vegetation communities, including information on age classes
- threatened and significant plant species and communities
- the habitats of rare and threatened native animal species
- bushfire histories, including ignition sources and fire path information
- fuel load attributes
- management trails and fire breaks
- water points
- infrastructure and assets

A5.3 Develop and implement operational plans for implementing the Burleigh Green Space BMP, including the delivery of planned burns, maintenance of access tracks and protection and mitigation zones, all necessary ground truthing and the preparation and assessment of burn proposals to be assessed and approved by Council’s natural areas management officers.

A5.4 Where possible, prioritise and actively control all weed infestations considered to substantially increase bushfire hazard potential, bushfire intensity and the site’s capacity to carry fire (e.g. infestation of molasses grass).

A5.5 Keep the public, particularly neighbours, informed of bushfire management activities through local media, Council’s website and signage at entry points to the planning area.

A5.6 Facilitate community education (refer to Section 4.12) regarding threats posed by accidental fire and by dumping combustible garden waste in the reserves.

A5.7 Undertake vegetation and fuel hazard monitoring prior to and following all prescribed burns, and conduct similar monitoring following wildfires where time and resources permit.

4.5.4 Key monitoring priorities

- Monitor incidence of garden waste dumping and accidental/malicious fires on or adjacent to reserves to guide further management action.
- Monitor vegetation recovery, habitat condition and plant species composition (including weeds) at all sites burnt during planned or accidental fires.
- Where resources allow, establish long-term vegetation condition monitoring sites in fire affected areas to assess changes in vegetation and habitat condition and plant species diversity over time.

4.6 Pest plants and ecological restoration

4.6.1 Current management situation

Around 50 percent of plant species recently recorded within the planning area are exotic (Caddick 2006). Half of these are ranked amongst the 200 most invasive species in South East Queensland (Batianoff and Butler 2002) and 15 species are listed under the Queensland Land Protection (Pest and Stock Route Management) Act 2002. Pest plants are currently having a severe impact on the conservation values of Burleigh Greenspace and threaten the long-term viability of the reserves.
Historic land uses including agriculture and permaculture, in addition to the spread of seeds by birds and dumping of weeds from adjacent residential areas are the primary causes of weed invasion in the planning area, and the plant species composition of all reserves reflects this, including a high diversity of exotic garden escapes. Reserves that have been previously cleared, including the southern end of Herbert Park, lot 13 RP114420 and highly fragmented areas such as Ocean Parade Bush Parklands, contain the highest concentrations of pest plant species.

Dominant woody weeds include Mickey Mouse plant *Ochna serrulata*, lantana *Lantana camara*, Umbrella tree *Schefflera actinophylla*, cocos palm *Syagarus romanzoffiana*, camphor laurel *Cinnamomum camphora* and Easter cassia *Senna pendula var. glabrata*. These species form a significant component of the shrub layer, displacing native plants, but also provide a food and shelter resource for native fauna. Asparagus fern *Asparagus aethiopicus* dominates the ground layer in large parts of the planning area and is highly invasive, forming a dense ground cover that prevents establishment and growth of native seedlings. Other frequently occurring and highly invasive ground covers include mother of millions *Bryophyllum delagoense*, Singapore daisy *Sphagneticola trilobata*, coral berry *Ardisia crenata*, coral berry *Rivina humilis*, molasses grass *Melinis minutiflora* and other exotic grasses. Vines that pose a severe threat to the biodiversity values of the reserves include Madeira vine *Anredera cordifolia*, siratro *Macroptilium atropurpureum*, climbing asparagus fern *Asparagus plumosus* and coastal morning glory *Ipomoea cairica*. Long term, targeted control of *A. cordifolia* is occurring at Herbert Park, Ocean Parade Bush Parklands and lot 13 RP11442 and comprehensive management of other pest plant species is now underway.

Because highly invasive pest plant species are widespread throughout the planning area and also neighbouring private residences, state managed reserves and sites upstream along Tallebudgera Creek, long term ecological restoration requires a coordinated response between tenures and extending outside the boundaries of the planning area.

Restoration plans have been prepared for Burleigh Ridge Park, lot 13 RP114420 and Ron Mason Park and works are currently underway in Herbert Park, Burleigh Ridge, lot 13 RP114420 and Ocean Parade Bush Parklands. Follow up pest plant management is critical to the long-term sustainability of restoration programs, and there will be an emphasis on completing current projects to a self-sustaining level prior to implementation of restoration plans for other reserves. QPWS have prepared and are implementing a weed management plan for Burleigh Head National Park.

Through the Beaches to Bushland program, Council also provides resources and technical support to a local resident undertaking restoration in part of Ocean Parade Bush Parklands. Council also provides information on weed control and ecological restoration via workshops held within Burleigh Ridge Park (refer to 4.12.1).

**4.6.2 Desired outcomes**

- Degraded native vegetation communities restored to a level of minimum maintenance, to reduce impact of pest plants on native flora and fauna, cultural heritage sites and landscapes within the planning area.
- Reduced threat of future weed invasion and vegetation disturbance.
- Strategic, coordinated and collaborative planning for pest plant control and restoration.
- Improved public understanding of, and support for, restoration and pest plant management programs within the planning area.
4.6.3 Management strategy

4.6.3.1 Guidelines

G6.1 In cooperation with Council’s pest management officers, natural areas management officers will coordinate all pest plant control programs within the planning area, including management of declared species, to ensure an integrated and controlled program of ecological restoration. Neighbouring residents should be discouraged from carrying out inappropriate and potentially unsafe weed removal or revegetation works adjacent to their properties, where these works do not form part of a Council-coordinated restoration strategy.

G6.2 Ensure that all pest plant priorities, planning, and management are integrated and aligned with the intent and objectives of all relevant Commonwealth, State and Council guidelines, strategies, policies and legislation.

G6.3 Where practical and resources permit, Council restorations officers will be responsible for undertaking an assessment of the condition and degree of infestation within all reserves. New information on declared species, or new incidences of declared species, including aquatic weeds, should be regularly shared with Council’s pest management officers.

G6.4 Where revegetation is required within the planning area, use locally sourced native species suitable to the site and vegetation community. For suitable plant species refer to plant lists provided in restoration plans (Gecko Regen 2006a and b; Colvin, 2008) and/or Burleigh Green Space Flora Assessment (Caddick 2006).

G6.5 Do not use heavy machinery for weed removal within the planning area.

G6.6 Ensure that restoration activities are carried out with due sensitivity to fauna habitat, including:

- Sensitive use of herbicides adjacent to waterway/wetland areas. Herbicides will generally not be permitted to enter natural waterways and artificial water bodies within the planning area, and where possible, herbicide-free buffer zones should be established around aquatic systems to minimise risk. However, under circumstances in which it is necessary to apply herbicides within close proximity to water bodies, only low-impact chemicals suitable for use in aquatic environments (e.g. Glyphosate Bioactive or equivalent) should be employed.
- Minimise rapid or substantial loss of fauna habitat associated with restoration works. Rehabilitation of weedy areas known to provide fauna habitat is to be staged to ensure no temporary total loss of food resources or cover for ground dwelling species.
- Incorporation of known food plants of fauna species into restoration programs at an appropriate phase of vegetation establishment (refer to Section 4.4.1).
- Employment of professional bush regenerators for all restoration works.

G6.7 Council restorations officers are to liaise with fire planning officers regarding condition of restoration sites and appropriate zonation for fire management planning (refer to Burleigh Green Space Bushfire Management Plan (AECOM 2009)).

G6.8 Until an Ecological Restoration Plan, Action Plan or Contractor Specifications have been developed for each reserve, pest plant control should be limited to essential works only (i.e. follow up control, removal of declared species, high-threat environmental weeds, infestations located in high visitation areas and species considered to be a fire hazard or significant threat to the ecology of the site).
4.6.3.2 Actions

A6.1 Continue with current restoration works at Burleigh Ridge, Herbert Park and lot 13 RP114420, ensuring that adequate resources are provided for follow up management and current works are self-sustaining prior to implementation of new programs.

A6.2 Where resources allow, implement existing restoration plan for Ron Mason Park and develop and implement restoration plans for other reserves within the planning area (Skyline Terrace Reserve, Ocean Parade Bush Parklands, lots 208 W311480, 36 RP228768 and 3 RP864252). Investigate alternative sources (eg. federal grants, carbon offsets) for funding of restoration projects where necessary.

A6.3 Regularly update Natural Areas Restoration Database with weed species observed and treated during site restoration, area covered, methodology and hours worked.

A6.4 Following prescribed burns or wildfires, assess weed recolonisation and undertake follow-up weed control to facilitate regeneration of naturally occurring species. Control *Ochna serrulata* prior to implementation of prescribed burns.

A6.5 Educate neighbouring residents about the threat posed by ‘garden escapes’ on ecological values within the reserves through interpretive signage, Council’s website, local media, Council workshops, Council’s Urban Biodiversity Program (refer to Section 4.12), patrols by natural areas operational staff and the development and distribution of educational material regarding problematic garden species and suitable native garden alternatives. Identify priority streets adjacent to the reserves for targeted action (door knocks and letterbox drops).

A6.6 Install interpretive signage at visible points adjacent to restoration areas to educate park visitors about the restoration process, impact of restoration on ecological values, and how individual neighbours can help.

A6.7 Participate in the development and implementation of coordinated regional pest plant control initiatives with neighbours, community groups, and other land management agencies. Specifically: liaise with QPWS to facilitate collaborative pest plant management on adjacent Council and State managed reserves.

4.6.4 Key monitoring priorities

- Monitor restoration sites to assess the success of ecological restoration programs and for carry out follow up works until native vegetation is sufficiently well established to minimise further weed invasion.
- Council restoration teams and restoration contractors to monitor restoration sites to identify new occurrences of pest plant species or expansions of existing infestations within the planning area.
- Monitor reserve boundaries during operational patrols to identify and regulate new instances of green waste dumping or vegetation disturbance.
4.7 Pest animals

4.7.1 Current management situation

Introduced animals are those species not native to the planning area. They have an unacceptable impact on the area through predation, displacement or competition with native animals. Small fauna populations in isolated remnants such as Burleigh Green Space are less resilient to chance disturbances and external pressures and are therefore particularly vulnerable to predation by or competition from pest animals.

Domestic dogs and cats are the major threat to native fauna in the planning area, particularly birds, reptiles and small to medium-sized ground-dwelling mammals such as the yellow-footed antechinus and swamp rat. Foxes have also been trapped within Herbert Park and numbers within adjacent reserves have increased recently (S. Beckinsale pers. comm. 29 January 2008). Like dogs and cats, foxes are likely to prey upon native mammals, particularly ground-dwelling species. Once removed from a site, foxes are able to rapidly recolonise from adjacent habitat areas, such as Tallebudgera Valley. Council’s natural areas operations officers and animal management officers conduct patrols and liaise with local residents to identify and record localities of fox dens within the reserves so that appropriate management action can be taken. While animal baiting is impractical within urban interface areas such as Burleigh Green Space, humane traps and carbon monoxide poisoning are currently used to manage foxes in the reserves and a live trapping program has also been implemented in David Fleay Wildlife Park.

Council’s animal management officers currently patrol and enforce restrictions in dog prohibited areas around Burleigh Head (John Laws Park, Apex Park, Mowbray Park and Justins Park) and the foreshore beaches at Tallebudgera Creek estuary (Murlong Park and beaches adjacent to Tallebudgera Creek Park). None of the Burleigh Green Space reserves are currently listed as dog prohibited areas under Local Law 12.

Other invasive species occurring within or in the vicinity of the reserves include the cane toad and common myna. While cane toads are unlikely to have a major impact within the reserves due to the overall lack of suitable frog habitat, they are highly toxic to native predators.

Common mynas are listed by the World Conservation Union (IUCN) as amongst the worlds 100 most invasive species (Lowe et al. 2000) and compete aggressively with native wildlife for nesting hollows. They are capable of evicting large birds and small mammals from hollows and may mob larger mammals. Common mynas avoid dense bushland but are highly competitive on woodland edges (Pell and Tidemann 1997) and hence a significant threat in small or fragmented reserves with a large perimeter to area ratio. The number and distribution of common mynahs on the Gold Coast is monitored by Councils Animal Management Unit, however control techniques used elsewhere in Australia are not considered effective for control of the population densities currently existing in the area (J. Tyrer and L. Jamieson, pers. comm., 23 June 2009).

Mosquitoes and midges are not considered to be a major issue within the planning area. However, Council’s pest management officers periodically conduct fogging in the vicinity of the reserves in direct response to community complaints.
4.7.2 Desired outcomes

- Reduced impacts of pest animals on native flora and fauna.
- Planning for pest animal control is strategic, coordinated and collaborative.
- Improved public understanding of, and support for, pest animal management programs within the planning area.
- The neighbouring community is well educated with regard to responsible pet ownership.

4.7.3 Management strategy

4.7.3.1 Guidelines

**G7.1** Ensure pest animal control programs utilise best practice techniques that minimise impacts on non-target species and comply with animal welfare practices set out in the *Animal Care and Protection Act 2001*.

**G7.2** Evaluate the environmental and social acceptability of all pest animal control methods before they are adopted. Where appropriate, liaise with Council’s animal management officers and other partnering agencies to ensure that the most environmentally sensitive methods are implemented.

**G7.3** Ensure that pest animal control programs are integrated and compatible with site ecological restoration.

**G7.4** Continue to support Council’s animal management officers in undertaking existing programs for the control of pest animals within the planning area. Ensure that adequate notice is provided to natural areas operations officers prior to all pest animal control activities to enable closure of all or part of the planning area where required.

**G7.5** Wherever possible, utilise pest animal control strategies that include multiple control methods, target multiple species, and form part of a strategic and collaborative program.

**G7.6** No permits will be issued for bee keeping within the planning area. However, bee keeping will continue in lot 36 RP228768 until such time as the present owner of the hives retires.

4.7.3.2 Actions

**A7.1** Develop and implement a Pest Animal Control Plan (PACP) for the planning area that identifies pest animals present and recommends and prioritises control and monitoring programs. This plan should include:

- triggers for initiating control strategies
- a set of criteria to establish priorities for non-native animal management
- control strategies that include multiple control methods, target multiple species and form part of an ecological restoration program
- integration with relevant Commonwealth Threat Abatement Plans
- strategies for community and landholder involvement/cooperation
- monitoring techniques and regimes to help identify priority areas for feral animal control and to measure the effectiveness of control methodologies
- reporting protocols
- assignment of responsibility for tasks and activities
**Attachment 1.52**

**A7.2** Until a PACP is complete, continue to liaise with Council’s animal management officers regarding trapping and removal of pest animals from the planning area and provide assistance to Animal Management officers where resources allow.

**A7.3** Work with QPWS to develop and implement a coordinated approach to the management of pest animals within the planning area and adjacent state managed reserves.

**A7.4** Continue to record locations of pest animal dens, routes, trap sites and bait locations on Council’s natural areas incidental records database. New information pertaining to pest animal species should be regularly shared with Council’s animal management officers and uploaded to Council’s GIS database.

**A7.5** Give clear and appropriate notice to visitors and local residents during pest animal control programs. Where a perceived threat to the public exists, or is likely to exist, exclude public access to relevant reserves. Signage informing visitors of any temporary closures is to be erected at all public access points. Promote new pest animal control strategies through ranger patrols and other educational mediums to build community support.

**A7.6** Promote responsible pet ownership and community understanding of the impacts of domestic animals on native fauna through interpretive signage (refer to Section 4.12), Council’s website, local media, Council’s Good Neighbour Program, and during operational patrols.

**A7.7** Amend Council’s Subordinate Local Law 12 Number (Keeping and Control of Animals) 2007 to include all reserves within the planning area under Part 9 (54) Prohibition of cats on parks, reserves, foreshores and beaches and Part 9 (55) Prohibition of dogs on parks, reserves, foreshores and beaches. Ensure that dog prohibited areas are included in Animal Management Unit patrols.

**A7.8** Add a link from relevant Council web pages on Burleigh Greenspace to Subordinate Local Law Number 12, Schedule 3, to indicate areas where dog walking is prohibited.

**A7.9** Install signage prohibiting dogs and cats from all parts of the planning area. Signage should advise dog-owners of the location of adjacent open space areas where dog walking is permitted.

**A7.10** Liaise with DERM regarding discontinuation of apiarist licence for lot 36 RP228768 upon retirement of existing licensee.

**4.7.4 Key monitoring priorities**

- Incidental monitoring of the presence/absence of domestic or pest animals within the planning area, and where possible, distribution and abundance.
- Incidental monitoring of any native fauna fatalities caused by pest animals.
- Monitor impacts of pest animal control programs on target and non target species.
4.8 Aboriginal and European cultural heritage

4.8.1 Current management situation

No formal studies relating to Aboriginal heritage have been conducted within the reserves, therefore little is known regarding particular sites of significance, although there are historical records of canoe trees in the area (P. Gamin pers. comm., 7 January 2008). Additionally, Burleigh Head National Park, to the north east, is a significant feature in the local Yugambeh landscape and Jebbribillum bora ring is located a few kilometres north of the planning area (refer to 2.3.2).

There are currently no registered native title claims over the area (H. Best pers. comm. 18 January 2008). Previously Yugambeh people, representing Kalwun Corporation, conducted educational activities in Burleigh Head National Park under a QPWS Commercial Activity permit, but this program has recently ceased. There is currently no direct involvement of Aboriginal people in activities within Council reserves.

Council recognises that Aboriginal people often retain a strong and ongoing association with the land within conservation reserves. Indigenous Australians have economic and community development aspirations and need to maintain a customary responsibility to care for country, and to continue their close association with it. Partnerships with the local Aboriginal community are therefore considered a priority to ensure appropriate recognition, conservation and management of cultural values within the planning area.

Council also has an obligation to manage its land in accordance with the Qld Aboriginal Cultural Heritage Act 2003. This legislation places a duty of care upon Council to protect items and places of cultural heritage significance. As part of this duty of care, an assessment of cultural heritage values is required where construction or any other ground disturbance is proposed, to identify cultural heritage values and prevent the inadvertent destruction of sites and values. Cultural Heritage Surveys carried out in accordance with Aboriginal Cultural Heritage Act 2003 Section 28 – Duty of Care Guidelines, may therefore be required for construction of recreational infrastructure (refer to Section 4.9).

The relics of early European settlement across the Gold Coast provide evidence of how the current identity of the region was forged. Council actively assists in the preservation of European cultural heritage values by meeting its obligations under the Queensland Heritage Act 1992 and protecting sites that are on the State’s Heritage Register. The 1922 grave site adjacent to the Gold Coast Highway, in Burleigh Ridge Park (refer to Section 2.3.2), was restored in 1991 and is maintained by Council.

4.8.2 Desired outcomes

- Cooperative and integrated management of Aboriginal places and objects within the planning area with the Aboriginal community and relevant agencies.
- Sites, historic features, places and landscapes of cultural significance are identified, conserved and protected from damage.
- Increased public appreciation and understanding of local cultural heritage values.
4.8.3 Management strategy

4.8.3.1 Guidelines

**G8.1** Consult Aboriginal people with traditional affiliations to the planning area, Council’s indigenous cultural heritage officer, and relevant State and Commonwealth Aboriginal heritage authorities, in decisions regarding the management of Aboriginal cultural heritage, including identification of sites, and actions to protect objects, sites and landscape features.

**G8.2** Prior to any new works or development likely to impact on Aboriginal cultural heritage values, undertake an Aboriginal cultural heritage assessment of the subject area in partnership with the local Aboriginal community and Council’s indigenous cultural heritage officer. This should include a desktop search of the Cultural Heritage Database and Cultural Heritage Register. Where the desktop review reveals the presence or likelihood of significant cultural heritage values field surveys may be required.

**G8.3** Where appropriate, involve local historians or historical societies, and other interested members of the community, in the identification, assessment, planning and management of European cultural heritage values within the planning area.

**G8.4** Seek agreement and verification from local Aboriginal communities before providing interpretive information on the location of any Aboriginal sites and places, or before referring to Aboriginal stories in media or education programs.

**G8.5** Ensure that Council staff working within the planning area undertake Council’s cultural heritage awareness training when this becomes available.

**G8.6** All operations are to be carried out in accordance with the Queensland Heritage Act 1992 and Section 28 – Duty of Care Guidelines of the *Aboriginal Cultural Heritage Act 2003*, including preparation of a Cultural Heritage Management Plan or Cultural Heritage Management Agreement where recommended as the result of a cultural heritage assessment.

4.8.3.2 Actions

**A8.1** In consultation with the local Aboriginal community, provide interpretation/educational infrastructure and/or material to promote public appreciation and understanding of Aboriginal sites, landscape features and heritage values within the planning area.

**A8.2** Promote public understanding and appreciation of the planning area’s European cultural heritage values through the provision of interpretation and educational material.

**A8.3** Continue to maintain the grave site at Burleigh Ridge Park.

4.8.4 Key monitoring priorities

- Operational staff to undertake regular patrols to monitor condition of known heritage sites or areas.
4.9 Recreation opportunities

4.9.1 Current management situation

Visitor use of the planning area will be managed to maintain a high-quality nature-based recreational experience that is consistent with nature conservation and threatened species legislation, and other conservation objectives outlined in this plan. For the purposes of this management plan, nature-based recreation can be defined as activities that:

- are dependent on natural environment (i.e. the natural environment is critical to the participation and satisfaction of the participants)
- have an appreciation of nature as a key motivational factor
- do not require substantial modification to the natural environment
- are environmentally sustainable, as determined by an ongoing monitoring program of impacts.

The small size of the planning area makes Burleigh Greenspace vulnerable to degradation from high levels of visitor use. Whilst future population growth within the planning area is moderate compared with other parts of the city (Section 3.1.1.3), they are already accessible to a large number of users, including local residents and holidaymakers. The planning area is also valued highly by many local residents for its wildlife, visual amenity and natural values (Burleigh Green Space Conservation Reserves Community Consultation Report, in prep.) and thus recreational planning needs to find a balance between facilitating safe, well managed recreation and protection of existing wildlife values.

In highly urbanised reserves, lack of provision of formal public access can result in the development of uncontrolled, informal access track networks, such as those within Burleigh Ridge, Herbert Park and Skyline Terrace Reserve (see Section 4.9.1.1), which have a severe impact on the environmental values of the reserve (see Sections 4.2 and 4.4). Carefully managed formal track networks, together with interpretational signage and a regular ranger presence can help control access and provide a safe and enjoyable visitor experience, whilst mitigating against inappropriate uses such as vandalism, arson, littering, off track walking and cycling and destruction of native vegetation.

4.9.1.1 Bushwalking

Environmental Public Open Space comprises the largest precinct in the Burleigh Ridge LAP and is intended to contribute to a continuous linked area of natural vegetation. Within this network, there are significant opportunities for enhancing pedestrian amenity through repairing a selection of heavily used and informal tracks that connect adjacent reserves while closing and rehabilitating other degraded tracks that lack connectivity and are impacting on soil stability and habitat value. Whilst most visitors use the existing track network sensibly and appreciate the natural values within the reserves, incidences of disturbance do occur, including construction of informal tracks to access houses and cubby houses, dumping of garden waste along tracks, dog walking and allowing dogs to walk off-leash along tracks.

Existing walking tracks (Figure 2; Table 7) have recently been upgraded through the Eastern half of Burleigh Ridge Park, from Tabilban St and Djerral Avenue to the Gold Coast Highway, to reduce erosion and improve safety (tracks 1 and 2). Development of a concrete footpath along the Gold Coast highway to link these two tracks is currently underway. An informal footpath through part of Ocean Parade Bush Parklands (track 3) has recently been upgraded to prevent further erosion and connect Burleigh Ridge park, via Ocean Parade, with the footpath and boardwalk through Scott Derrick Place and David Fleay Wildlife Park (track 4).
Council’s Priority Infrastructure Plan (PIP) identifies a future walking linkage south of the planning area, from Martin Sheils Park, South through Schusters Park to Elanora Wetlands and the Tallebudgera Valley (see Figure 2). The Northern end of this proposed linkage has the potential to connect with the trail network in the Burleigh Green Space planning area and adjacent State-managed conservation reserves, forming a linkage all the way to the coast at Burleigh Head National Park. This linkage is currently fragmented because the wooden boardwalk through David Fleay Wildlife Park, which extends onto Council-managed land at lot 208 W311480 and adjacent road reserve (track 4a), has been closed for over two years. Council is currently liaising with QPWS regarding the repair of this track. Connectivity to the south of David Fleay Wildlife Park via a formal crossing over Oyster Creek, to connect with informal tracks in lot 36 RP228768 (track 6), is also under investigation. Further flood studies are required regarding the impact of a footbridge on flood risk upstream (refer to Section 4.2.1). In addition to contributing to the coast to hinterland linkage, this proposed track would also consolidate a walking circuit over the Tallebudgera Creek pedestrian footpath and back north along Tallebudgera Drive to Murlong and Tallebudgera Creek Parks. Burleigh also provides a suitable point at which to connect a coast to hinterland walking trail with the existing Gold Coast City Oceanway – a 36 kilometre footpath network along the Gold Coast beaches, which passes through Burleigh Head National Park and adjacent Council-managed recreational parks along the coastal strip (Figure 2).

Parks in the western half of the planning area are also part of a well used local walking circuit and provide local residents with connectivity to Reedy Creek Road, Marymount College and West Burleigh Road. An informal track through Herbert Park, ascending the prominent ridge line from the basketball court to Tanjenong Place (track 8), is in moderate condition and provides a safe linkage. This track provides a good opportunity to showcase recent restoration work carried out in the park. Quantification of the level of use through automated track counters is now necessary to ensure the appropriate level of sustainable management. The existing maintenance track (track 7) that ascends the gully to the south of track 8, also provides walker access and connectivity from West Burleigh Road to Tanjenong Place. While this track is primarily for maintenance purposes, it will continue to provide walker access.

The maintenance track that runs around the northern side of Tanjenong place (track 10) also provides good pedestrian access and investigations are underway to identify the best alignment for an extension of this track east-west through Ron Mason Park (tracks 11 and 12). In addition to facilitating fire management (refer to Section 4.5 and the Burleigh Greenspace Bushfire Management Plan, AECOM 2009), this track, together with track 13 running from Ladds Ridge Road, would allow pedestrian connectivity to Reedy Creek Road and Marymount College. At the far western end of Ron Mason Park, another informal track (track 14) is apparently used as a pedestrian linkage between Plantation Road and Fortitude Crescent and further quantification of the level of use is required to determine future management. The remainder of the informal tracks in Herbert and Ron Mason parks lack significant connectivity value and their use is causing erosion and degradation of surrounding vegetation.

Previous studies have also given consideration to the opportunities for pedestrian linkages from Burleigh to the new Reedy Creek transport interchange or Gold Coast airport, and beyond to hinterland reserves to the west of the Pacific Motorway (Aspect 2006). Pedestrian linkages across the Pacific motorway and integration with transport hubs are currently under further discussion between Council and State Government Infrastructure Providers.
Table 7. Summary of existing and new walking tracks and their maintenance requirements for Burleigh Green Space.

<table>
<thead>
<tr>
<th>Number</th>
<th>Location and Description</th>
<th>Grade and Length</th>
<th>Specific Development and Maintenance Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Formal walking track through Burleigh Ridge Park from Tabilban St to Gold Coast Highway.</td>
<td>Medium 780m</td>
<td>Monitor and maintain in current condition.</td>
</tr>
<tr>
<td>2</td>
<td>Formal walking track through Burleigh Ridge Park from Djerral Avenue to Gold Coast Highway.</td>
<td>Medium 115m</td>
<td>Monitor and maintain in current condition.</td>
</tr>
<tr>
<td>3</td>
<td>Formal walking track through Ocean Parade Bush Parklands, lot 12 RP837316 connecting Ocean Parade with the track network through David Fleay Wildlife Park (track 4).</td>
<td>Medium 85m</td>
<td>Monitor and maintain in current condition.</td>
</tr>
<tr>
<td>4 &amp; 4a</td>
<td>Formal walking track and boardwalk through Scott Derrick Place and David Fleay Wildlife Park, extending onto Council land at lot 208 W311480 (section 4a)</td>
<td>Medium 1500m</td>
<td>Boardwalk currently closed and under repair by QPWS. Liaise with QPWS regarding management of QPWS asset.</td>
</tr>
<tr>
<td>5</td>
<td>Informal pedestrian track from Loman Lane car park through lot 208 W311480 providing access to Oyster Creek and Tallebudgera Creek for fishermen.</td>
<td>Easy 100m</td>
<td>Investigate level of use and consider formalising this track to reduce erosion and minimise creation of other informal tracks across fragile saltmarsh vegetation.</td>
</tr>
<tr>
<td>6</td>
<td>Maintenance track and informal walking track through lot 36 RP228768 connecting Oyster Creek with West Burleigh Road.</td>
<td>Easy 360m</td>
<td>A formal crossing of Oyster Creek would enable a southwards extension of the Burleigh Head-Reedy Creek linkage. Continue to investigate feasibility of and funding opportunities for formalisation of this linkage, including potential flood impacts associated with locating a footbridge structure at this point.</td>
</tr>
<tr>
<td>7</td>
<td>Maintenance track and informal walking track ascending recently restored gully in southern half of Herbert Park, linking West Burleigh Road with Tanjenong Place.</td>
<td>Medium 460m</td>
<td>Track currently in good condition. Retain as a maintenance track with walker access permitted.</td>
</tr>
<tr>
<td>8</td>
<td>Informal pedestrian track in Herbert Park, ascending recently restored ridgeline above basketball court to Tanjenong place.</td>
<td>Medium 225m</td>
<td>Track currently in moderate condition. Investigate level of use using track counters and manage track to a sustainable standard for pedestrians according to level of use indicated.</td>
</tr>
<tr>
<td>9</td>
<td>Informal track through North East corner of Herbert Park.</td>
<td>Medium/ difficult 350m</td>
<td>Investigate level of use and opportunities to upgrade for sustainable use as a graded, low speed mountain bike linkage to track 10.</td>
</tr>
<tr>
<td>10</td>
<td>Maintenance track through Herbert Park, running around the ridge line of Tanjenong Place.</td>
<td>Easy 720m</td>
<td>Maintain in current condition and formalise as a shared maintenance/walking/cycling track.</td>
</tr>
</tbody>
</table>
### Number and Description

<table>
<thead>
<tr>
<th>Number</th>
<th>Location and Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>Proposed fire management and recreation track through Ron Mason Park, connecting Herbert Park and Skyline Terrace with Reedy Creek Road.</td>
</tr>
<tr>
<td>12</td>
<td>Proposed fire management track and possible recreation linkage through eastern end of Ron Mason Park, connecting with track 12 above.</td>
</tr>
<tr>
<td>13</td>
<td>Informal pedestrian track linking the western end of Ladds Ridge Road with proposed Track 12.</td>
</tr>
<tr>
<td>14</td>
<td>Informal pedestrian track through Ron Mason Park connecting Plantation Road with Fortitude Crescent.</td>
</tr>
<tr>
<td>15</td>
<td>Informal pedestrian track through mown eastern section of Skyline Terrace reserve.</td>
</tr>
</tbody>
</table>

### Grade and Length

<table>
<thead>
<tr>
<th>Number</th>
<th>Grade and Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>Medium 1200m</td>
</tr>
<tr>
<td>12</td>
<td>n/a Approx. 190m</td>
</tr>
<tr>
<td>13</td>
<td>Medium 140m</td>
</tr>
<tr>
<td>14</td>
<td>Medium 235m</td>
</tr>
<tr>
<td>15</td>
<td>Easy 475m</td>
</tr>
</tbody>
</table>

### Specific Development and Maintenance Actions

<table>
<thead>
<tr>
<th>Number</th>
<th>Development and Maintenance Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>Investigate most suitable alignment for this track and construct in accordance with requirements of Burleigh Greenspace Fire Management Plan. Formalise as a shared maintenance/walking/cycling track.</td>
</tr>
<tr>
<td>12</td>
<td>Investigate most suitable alignment for this track and construct in accordance with requirements of Burleigh Greenspace Fire Management Plan and Energex. Formalise as a shared maintenance/walking/cycling linkage if considered appropriate and subject to agreement by Energex.</td>
</tr>
<tr>
<td>13</td>
<td>Monitor level of use and consider formalising as a walking/cycling linkage if considered appropriate.</td>
</tr>
<tr>
<td>14</td>
<td>Monitor level of use and consider formalising as a walking/cycling linkage if considered appropriate.</td>
</tr>
<tr>
<td>15</td>
<td>Maintain in current condition, no further action necessary.</td>
</tr>
</tbody>
</table>

1 Tracks numbered in accordance with Figure 2.

### 4.9.1.2 Day use and nature appreciation

The densely vegetated nature of much of the planning area, and lack of parking facilities, limits opportunities for day use and the most effective means to showcase the reserves is through the walking track network described above. Use of interpretive signage along walking tracks can increase visitor awareness of the environmental values of the reserves and facilitate an understanding of conservation management issues. Within Herbert Park and Burleigh Ridge in particular, there is an excellent opportunity to use signage to showcase the effectiveness of recent restoration projects (refer to Section 4.12.1 and Action 6.8).

There is an old bench seat at Ocean Parade Bush Parklands, which is in a state of poor repair, and a bench and playground equipment in Skyline Terrace Reserve, accessed via Plantation Road. Marjorie St Henry Park, which shares boundaries with Burleigh Ridge Park, also contains seating and playground equipment. Additional low-key seating may be appropriate in cleared areas adjacent to tracks (eg. track 6 at lot 36 RP228768 and track 15 in the Southeast mown section of Skyline Terrace reserve). However, a large number of day use facilities already exist in the vicinity of the planning area, including Justins Park, John Laws Park, Kevin Gates Park, Murlong Park, Tallebudgera Creek Park, Marjorie St Henry Park, Burleigh, Martin Sheils Park and Schusters Park.
Council conducts guided wildlife spotlighting tours for children during school holidays in Burleigh Ridge Park. Tours are conducted a maximum of eight nights per year and participants remain on the track at all times, supervised by Council rangers and/or contractors (see Section 4.12.1). Potential disturbance to fauna from these activities is considered to be far outweighed by the opportunity to communicate important conservation messages to parents and children, including the value of the reserves for fauna habitat, progress with restoration programs, understanding of aboriginal cultural heritage and how the community can help to protect wildlife habitat.

4.9.1.3 Horse riding

Due to their small size and steep topography, horse riding will not be permitted within Burleigh Green Space Reserves.

4.9.1.4 Mountain biking

Use of parts of the planning area by cyclists, particularly Burleigh Ridge Park, Herbert Park, Ron Mason Park and Skyline Terrace Reserves, is resulting in deliberate tree removal and creation of new informal tracks, ramps and jumps, which present a safety hazard to other park users. The small size of these reserves makes them unsuitable for informal, off-track cycling as the disturbance and erosion caused places further limitations on already fragmented flora and fauna habitat.

However, there has been an increase in the level of mountain bike use in the area, creating a demand to provide better formal linkages for cyclists through the reserves, particularly from West Burleigh Road and the Skyline Terrace area to Marymount College and the shops and businesses on Reedy Creek Road. Upgrading of existing informal tracks through Ron Mason Park (tracks 11, 12 and 13), proposed as part of the Burleigh Green Space Bushfire Management Plan (refer to Section 4.5), provides the opportunity to create a shared fire management/pedestrian/cycling track linking Reedy Creek Road with Skyline Terrace via the existing fire track through Herbert Park (track 10). This track would be of a suitable width and grade to accommodate challenging, low-speed cycling. Additional linkages through to West Burleigh Road, Plantation Road and Bermuda Street are also being investigated.

Development of a formal bike jump park in the cleared, mown part of West Burleigh Park may, if managed appropriately, help to focus biking activities and discourage construction of informal mountain bike ramps and jumps within the vegetated parts of the planning area. However, further demand studies are required to determine the suitability of this site, or others in the local area, for such a facility, and development would only be appropriate subsequent to the construction of the proposed mixed use track through Herbert and Ron Mason Parks.

4.9.1.5 Water-based activities

Reserves adjacent to Tallebudgera Creek, including lot 206 W311480, lot 36 RP228768 and lot 3 RP864252 are accessed by recreational fishermen and also by people boating in the creek. Some members of the community have voiced concerns about the impact of boat wash in natural areas adjacent to Tallebudgera Creek (Burleigh Green Space Conservation Reserves Community Consultation Report, GCCC in prep.) and this issue is also noted in the Tallebudgera Creek Catchment Management Plan (Australian Wetlands 2009). There is evidence of creek bank erosion in the aforementioned Council managed reserves and also some trampling of mangrove and saltmarsh areas accessed by fishermen, particularly in lot 208 W311480.
The Tallebudgera Creek Catchment Management Plan (CMP) provides the most appropriate vehicle for addressing creek bank degradation issues as it looks at the entire creek system rather than treating issues on a site by site basis. While boat wash is identified in the CMP as a contributory factor to bank erosion in the estuary, other factors such as the impact of concrete retaining walls along sections of the creek are also significant. Geomorphic analyses of the entire creek system have been used to identify the most degraded sites and prioritise future bank restoration works. Additionally the CMP outlines actions for community education and surveillance to better manage water-based recreation in the estuary, a key element of which is emphasis on the value of intact mangrove systems in providing quality recreational fishing.

4.9.2 Desired outcomes

- Low impact, nature-based recreational opportunities consistent with protection, appreciation, and understanding of natural and cultural values and ecological processes in the planning area.
- New nature-based recreation opportunities complement existing opportunities within the locality and region.
- Recreational infrastructure generates community support for protection of the planning area’s natural values.
- Facilities designed and managed to provide a satisfying and safe visitor experience.

4.9.3 Management strategy

4.9.3.1 Guidelines

G9.1 Restrict development of recreational activities and infrastructure to that (existing or proposed) described within this management plan.

G9.2 Where new infrastructure or embellishments are proposed, conduct a feasibility assessment to assess site constraints, costs, environmental and cultural impacts, community demand, compliance with Local and State environmental legislation and consistency with other objectives of this plan.

G9.3 Develop walking trails as outlined in this management plan with the aim of minimising disturbance to geological features and reducing impacts on native plant and animal communities by utilising existing access and management trails and/or by avoiding ecologically significant areas. New tracks should be designed to follow natural contours and should be constructed at the minimum width necessary to facilitate access requirements.

G9.4 Construct tracks in accordance with the Australian Standards for Walking Tracks (AS 2156.1-2001 and AS 2156.2-2001), Gold Coast City Council’s Recreational Trail Design Guidelines (GCCC 2002) and relevant NAMU design and/or construction guidelines.

G9.5 Ensure that all relevant planning approvals are sought from appropriate Local and State government departments prior to the construction of any recreational infrastructure.

G9.6 Plan and construct facilities in accordance with Crime Prevention Through Environmental Design principles wherever possible.

G9.7 Close tracks and other recreational facilities during times in which repairs are required and/or where safety risks are identified.
**G9.8** Ensure access points are easy to locate and trails are well coordinated within the planning area.

**G9.9** Rubbish bins will not be provided at day use areas.

**G9.10** Commission regular arboricultural assessments of trees within the vicinity of visitor infrastructure. Prune or, where no alternative exists, remove trees which have been identified as posing an unacceptable safety risk.

**G9.11** Cycling is not permitted in the planning area except on purpose built shared pedestrian/cycling tracks (refer to Table 7).

### 4.9.3.2 Actions

**A9.1** Liaise with QPWS regarding the repair and maintenance of the track through David Fleay Wildlife Park and lot 206 W311480 (track 4) and to ensure coordinated nature-based recreation planning throughout the Burleigh linkage.

**A9.2** Investigate opportunities for extension of Burleigh Head - David Fleay Wildlife Park linkage south of David Fleay Park, via a footbridge over Oyster Creek and track upgrade through lot 36 RP228768 (track 6). Investigations should include flood studies to identify any risks of upstream flooding associated with a bridge.

**A9.3** Liaise with Council’s strategic environmental planning officers regarding possible further extensions of the Burleigh-Reedy Creek walking linkage through to the new Reedy Creek transport interchange and to Tallebudgera Valley via Elanora Wetlands.

**A9.4** Install pedestrian counters to monitor the level of use of informal pedestrian tracks through lot 208 W311480 and Ron Mason Park (track 5 and 14 respectively) and use these data to inform future use in subsequent reviews of this plan.

**A9.5** Install pedestrian counters along track 8 through Herbert Park to determine an appropriate level of sustainable management for pedestrian access.

**A9.6** Develop a shared fire management/walking/cycling linkage connecting Ron Mason Park with Ladds Ridge Road, Skyline Terrace and Reedy Creek Road (tracks 11-13), and investigate opportunities for connectivity with West Burleigh Road and Bermuda Street.

**A9.7** Close and rehabilitate all other degraded informal tracks, ramps, jumps and un-used management tracks throughout the planning area.

**A9.8** In association with Council’s recreational parks officers, investigate level of demand and opportunities for a local mountain bike jump park in the vicinity of the planning area.

**A9.9** Install interpretive signage to discourage cycling, trail bikes and dog walking on inappropriate tracks, to inform visitors of the natural values and restoration activities within the planning area and to indicate a change of use where walking/cycling tracks connect with pedestrian only or management tracks (see Section 4.12.1).

**A9.10** Provide information, including downloadable maps, on Council’s website relating to all recreational opportunities within the planning area. This should include development of a joint Council-QPWS brochure and signage to publicise the Burleigh-Tallebudgera trail network.
A9.11 Support Council’s catchment management officers in implementing actions and initiatives of the Tallebudgera Creek CMP relating to creek bank stabilisation and community education.

A9.12 Establish and implement maintenance schedules for all visitor facilities as part of operational planning.

A9.13 Undertake regular weekday and weekend patrols of the planning area to monitor visitor safety and usage along formal recreation tracks, to encourage safe and appropriate use by visitors, and to control prohibited activities.

A9.14 Maintain records of safety incidents, hazards and inappropriate use observed during ranger patrols or by the public, to inform future planning and risk management.

4.9.4 Key monitoring priorities

- Regular patrols by operational staff to monitor visitor safety, usage and disturbance along formal access tracks.
- Regular patrols by operational staff of closed and/or rehabilitated informal tracks to assess recovery and record ongoing unauthorised use.
- Monitoring of visitor numbers (through use of track counters) on aforementioned informal tracks to identify level of use and future management requirements.

4.10 Infrastructure and Access

4.10.1 Current management situation

The majority of infrastructure within the planning area comprises a network of walking and maintenance tracks (Figure 3), which are gated where necessary to prevent unauthorised vehicle access. Management of formal and informal recreational access tracks is addressed in Section 4.9.1.1. Maintenance tracks need to be managed to provide four wheel drive access for operational patrols, restoration works and fire fighting. In addition to the current track network, a number of additional access routes (bushfire protection zones) are proposed in the Burleigh Greenspace Bushfire Management Plan (Aecom 2009). Informal tracks not currently used or under investigation for recreational or maintenance purposes require closure and rehabilitation.

Several easements bisect the planning area, the majority of which are managed by Energex or Powerlink for the purpose of electrical works (refer to Table 8 and Figure 3). All management within easements is undertaken by the easement manager (Section 4.1.1) although Council operational staff will undertake minor works, such as removal of fallen trees, to provide access where necessary.
Table 8 Summary of easements located within the planning area

<table>
<thead>
<tr>
<th>Location</th>
<th>GCCC Reference</th>
<th>Manager</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ron Mason Park</td>
<td>ASP 113759</td>
<td>Energex</td>
<td>Electrical works</td>
</tr>
<tr>
<td>Ron Mason Park</td>
<td>BSP 156739</td>
<td>Energex</td>
<td>Electrical works</td>
</tr>
<tr>
<td>Skyline Terrace Reserve</td>
<td>ASP 157091</td>
<td>Energex</td>
<td>Electrical works</td>
</tr>
<tr>
<td>Skyline Terrace Reserve</td>
<td>None</td>
<td>Energex</td>
<td>Electrical works</td>
</tr>
<tr>
<td>Herbert Park</td>
<td>MRP 906332</td>
<td>South East Queensland Electricity Corporation Ltd</td>
<td>Electrical works</td>
</tr>
<tr>
<td>Ocean Parade Bush Parklands</td>
<td>BRP 183787</td>
<td>GCCC and adjacent private property owners</td>
<td>Drainage</td>
</tr>
<tr>
<td>Ocean Parade Bush Parklands</td>
<td>None</td>
<td>Energex</td>
<td>Electrical works</td>
</tr>
</tbody>
</table>

Security and safety fencing is provided on an as needs basis throughout the reserve network. Safety fences have recently been installed in parts of Herbert, Ron Mason and Burleigh Ridge parks where to prevent unauthorised vehicle access and/or restrict access to steep embankments and drainage ditches. Additional safety fencing is likely to be required in Ron Mason Park following upgrades of fire management tracks and works associated with a recent landslip above Ramly Drive.
An unused road reserve is located between David Fleay Wildlife Park (lot 504 WD5992) and lot 208 W311480, and is traversed by part of the boardwalk through David Fleay Wildlife Park. The alignment of this reserve traverses remnant mangrove and saltmarsh communities and development of a road at this point would significantly impact on this vegetation, adjacent riparian habitat and connectivity between state and Council reserves. Kabool Road and Loman Lane provide sufficient access to existing reserves and further road access at this point would be unnecessary.

Other infrastructure within the reserves includes small parking areas located adjacent to Ron Mason, Burleigh Ridge and Skyline Terrace parks, degraded seating at Ocean Parade Parklands and at Skyline Terrace Reserve (see 4.9.1.2) and a small playground structure adjacent to the car park at Skyline Terrace Reserve. The girl guide hut in Burleigh Ridge park is leased by Council to the Girl Guides Association of Australia until June 30th 2012. Under the current lease agreement the lessee is responsible for landscaping of the leased premises, keeping the site free of weeds and organising cleaning, maintenance and waste disposal.

No new stormwater infrastructure is planned within the reserves within the lifetime of this plan (P. Novy, Gold Coast Council, pers. comm. January 2010).

4.10.2 Desired outcomes

- The location, operation and maintenance of Council infrastructure is consistent with planning area values.
- Infrastructure and access routes are safe, sustainable and cost effective to operate and maintain.
- Infrastructure (and where practicable, utilities) supports the management and conservation of the planning areas biodiversity, natural systems and processes.
- Maintenance access is facilitated in appropriate and necessary locations only and environmental impact of management vehicles minimised.
- Lease arrangements do not compromise conservation values of reserves.

4.10.3 Management strategy

4.10.3.1 Guidelines

G10.1 Locate new park infrastructure and facilities on disturbed or degraded sites.

G10.2 Ensure that all relevant planning approvals are sought from appropriate Local and State government departments prior to the commencement of any works on-site.

G10.3 Design and install all new infrastructure with due consideration to the whole of life costs associated with the asset. Where practicable select durable, low-maintenance materials that are easy to source and replace, and are positioned in locations that will not expose them to unnecessary impacts or wear.

G10.4 Construction and design of all infrastructure should be in accordance with all Council guidelines, manuals and policies relevant to the provision of embellishments and infrastructure within public open space natural areas (e.g. Natural Areas Management Unit Infrastructure Design Guidelines).
G10.5 Design, construction, and appearance of all infrastructure and visitor facilities is to be of a high standard commensurate with the significance of the planning area. These facilities should create a signature appearance that is reflected across all forms of visitor infrastructure.

G10.6 Where new fencing or other infrastructure is required and where safety requirements allow, opportunities to minimise impacts to fauna movement should be considered.

G10.7 To minimise impacts on sensitive areas, management activities within these areas are to be undertaken on foot where possible and in consultation with Council’s natural areas operations officers.

G10.8 All Council staff or contractors required to access management trails within the planning area for management purposes are to be briefed by Council natural areas operations officers on their responsibilities as outlined in this management plan.

G10.9 Ensure that all access to reserves in the planning area is in accordance with Council's Parks Usage Policy – Temporary Park Occupation and Traverse for Construction Purpose, with the relevant applications made where required prior to access.

G10.10 Restrict speed limits to 20km/h on all public vehicle tracks, and 10km/h on management tracks.

G10.11 Construct and maintain fire protection zones to appropriate standards as defined by the Burleigh Greenspace Bushfire Management Plan (refer to Section 4.5).

G10.12 Activities permitted adjacent to the leased girl guide hut in Burleigh Ridge must be consistent with the conservation management objectives and restoration activities within the reserve.

4.10.3.2 Actions

A10.1 Close and rehabilitate unused maintenance tracks and degraded informal pedestrian linkages (apart from those listed in Table 7, Section 9 as requiring further investigation).

A10.2 Monitor condition of maintenance tracks and repair where necessary to provide ongoing safe, all weather vehicle access for operations and fire management.

A10.3 Regularly monitor the condition of safety and security fencing during operational patrols to ensure it functions effectively and repair promptly where required.

A10.4 Ensure that all park infrastructure retained and installed within the planning area in response to the provisions of this management plan is handed over to Council’s landscape maintenance staff for scheduled and reactive maintenance inspections.

A10.5 Implement and maintain bushfire protection zones and fire management tracks in accordance with the Burleigh Greenspace Bushfire Management Plan (AECOM 2009).

A10.6 Initiate closure of unused road reserve between lot 504 WD5992 and lot 208 W311480 Loman Lane and transfer of land into adjacent conservation reserve.

A10.7 Ensure that all management tracks and other infrastructure within the planning area are mapped and added to Council’s Geographic Information Systems (GIS) database.
A10.8 Report any breaches of lease conditions to Council’s property management officers.

4.10.4 Key monitoring priorities

- Monitor condition/safety of walking tracks and other recreational infrastructure.
- Monitor condition/safety of maintenance tracks and access gates.

4.11 Commercial activities

4.11.1 Current management situation

When managed appropriately, commercial operators can enhance the diversity of recreational, interpretive and educational opportunities available for visitors and can assist reserve management through encouraging appropriate visitor use and understanding of reserve values.

Presently, there are no formally regulated commercial operators utilising the reserves in the planning area. However, it is possible that some businesses, particularly commercial eco-tour operators, may use the reserves informally either for park-based activities or as a means of accessing the adjacent Tallebudgera Creek estuary. A recent study of the socio-economic values of the Burleigh-Springbrook Corridor (Aspect, 2006) recommends that Council gain familiarisation with commercial tourism operators present in the vicinity, and the strategic value of the reserves as a pedestrian linkage, identified in Council’s Priority Infrastructure Plan and the Burleigh Ridge Local Area Plan, is likely to lead to commercial interest in the reserves in the future.

QPWS provide permits to commercial ecotour operators using national parks in the area, including Burleigh Head National Park and Tallebudgera Creek Conservation Park. Group activity permits (for weddings) and filming permits are also issued on a case by case basis. The girl guide hut in Burleigh Ridge Park is also available for hire and may at times provide a venue for commercial operators that would also seek access to the adjacent reserve.

Currently commercial recreation activities within Council parks are regulated through Council’s Parks Usage Policy for Temporary Commercial Recreation Activities on Council and Council Local Laws 9 and 9.1. However, Council does not have specific guidelines relating to permitted use and access to natural areas. Any substantial increase in the use of the reserves by commercial operators would require the implementation of a permit system for all commercial operators to regulate the types and levels of use in the reserve system.

The film industry represents another commercial activity that is periodically undertaken on Council reserves. Film project requirements may not always be consistent with the conservation objectives for the reserves outlined in this plan and film project proposals should be carefully assessed on a case by case basis to ensure there are no negative impacts on the environmental values of the planning area.

4.11.2 Desired outcomes

- Commercial tourism activities are conducted in a sustainable, safe, environmentally sensitive and culturally appropriate manner, are compatible with other visitor uses and enhance visitor awareness of the environmental values of the planning area.
- Cooperative working relationships with commercial operators to ensure long term sustainability of the ecological values of the planning area.
4.11.3 Management strategy

4.11.3.1 Guidelines

G11.1 Ensure that all access to reserves is in accordance with Councils Parks Usage Policy – Temporary Commercial Recreation Activities on Council and Local Laws 9 and 9.1.

G11.2 Applications made for the use of the planning area for filming will be approved at the discretion of Council’s natural areas management officers based on an assessment of the ecological impacts of a proposal. Only those proposals which are considered low-impact, of short duration and unlikely to be detrimental to the values of the planning area will be considered. Filming will generally be restricted to grassland and disturbed areas and where appropriate will require an Environmental Impact Statement, commensurate with the scale of the proposal, to ensure minimal impact to the surrounding landscape. Proponents must also demonstrate compliance with all other required environmental approvals prior to commencing filming in the planning area.

G11.3 Council natural areas operational officers are to work with commercial operators to promote environmentally sensitive and sustainable economic activities on lands within and/or adjacent to the planning area.

G11.4 Only permit ecotourism accredited commercial operators that provide passive, nature-based recreational opportunities to conduct recreational activities within the planning area.

G11.5 Liaise with Council’s regulatory services, economic development and law enforcement officers and QPWS where development of further commercial activities (i.e. tourism, corporate events, filming) is proposed within the planning area.

4.11.3.2 Actions

A11.1 Liaise with recreational parks officers to update existing Council parks usage policy to incorporate a permitted use process for commercial users of natural areas. Commercial activities within the planning area should be conducted in a manner that:

- is consistent with conservation of natural and cultural resources
- is nature based and provides appropriate interpretation of park values
- involves local Aboriginal input where there is a cultural heritage component
- avoids conflict with other reserve users
- does not incur high public liability risks
- is appropriate for the level of existing infrastructure or resources
- incorporates appropriate monitoring mechanisms to assess sustainability of ecological and amenity values.

A11.2 Maintain a database of commercial operations within the planning area, including records of frequency, location, type/s and levels of use.

A11.3 Report instances of permit non-compliance to Council’s property management officers.

4.11.4 Key monitoring priorities

- Monitor the effects of commercial activities for signs of unacceptable levels of environmental impact.
- Monitor commercial activities for non-compliance with permit conditions.
4.12 Community involvement, education and interpretation

4.12.1 Current management situation

Providing interpretive services and environmental education can help orientate visitors, enhance their visit, foster an appreciation of the conservation area’s features and values, encourage appropriate visitor use and reduce potential management problems.

Interpretive signage within the planning area is currently very limited, however the Burleigh Green Space reserves are well placed to become a focal point for community environmental education in the city. The high surrounding population density, accessibility, diversity of terrestrial and estuarine ecosystems and species and proximity to other nature based attractions such as Burleigh Head National Park and David Fleay Wildlife Park provide an opportunity to showcase the city’s wildlife values and conservation activities. For example, several parts of Burleigh Ridge and Herbert Park provide accessible in situ demonstration sites for Council’s vegetation and habitat restoration program (see Action 6.8) and the reserves could also be used to highlight conservation initiatives implemented as a result of other Council environmental studies, such as the Koala Habitat and Population Assessment (Biolink 2007) and the Tallebudgera Creek Catchment Management Plan (Australian Wetlands 2009). Their urban context makes the reserves a suitable focal point for public education regarding issues such as responsible pet ownership, domestic animal restrictions within the planning area (refer to action 7.9), weeds and garden waste dumping, accidental fire and arson, littering and habitat disturbance.

New orientation signage and complementary information on Council’s website is also needed to communicate the enhanced pedestrian linkages provided by recently completed and proposed track upgrades through the Burleigh Head to Reedy Creek pedestrian linkage (refer to Section 4.9.1.1). QPWS are also currently upgrading their track network through David Fleay Wildlife Park and the adjacent Conservation Park and, because the pedestrian track network repeatedly crosses Council and QPWS land tenures, input from both organisations will be required in interpretive planning. QPWS have recently installed new interpretive signage in Burleigh Head National Park and also provide educational and interpretive information to visitors at David Fleay Wildlife Park and the information centre at the southern end of Burleigh Head National Park on the Gold Coast Highway. The information centre is staffed by volunteers and the level of use of this facility is currently under review.

Council education initiatives currently occurring within the reserves include children’s wildlife walks and adult ecological workshops demonstrating vegetation restoration techniques within Burleigh Ridge Park. These workshops have been very successful and the location provides participants with the opportunity to see restoration works in progress and compare condition of adjacent restored and unrestored sites. The children’s activities provide opportunities to learn about the City’s wildlife through guided fauna spotlighting tours during school holidays. Currently up to two night time spotlight tours are run per school holiday period. David Fleay Wildlife Park also offers a range of school holiday activities in addition to environmental education programs for school groups.

At present there are no community environmental groups operating in or adjacent to the reserves, although previously a Work for the Dole team, coordinated by GECKO (Gold Coast Hinterland Environment Council), was undertaking restoration works in Herbert Park. This work is now being undertaken by Council’s environmental restoration teams and contractors.
An individual resident is also undertaking restoration works in Ocean Parade Bush Parklands, supported by Council through the Beaches to Bushland program. However, community groups and volunteers may have a conservation role within the planning area, for example through involvement in flagship species conservation projects such as the Richmond Birdwing Recovery Network (refer to Section 4.4), fauna monitoring, and public education. A number of initiatives proposed through Council’s new Nature Conservation Strategy 2009, including the Urban Biodiversity Program and the Integrated Volunteer Program, provide opportunities to improve community involvement in conservation in the Burleigh area.

4.12.2 Desired outcomes

- Burleigh Green Space reserves become a focal point in the city for environmental education.
- The local community and visitors have appreciation, enjoyment and an understanding of the planning area’s values and support its ongoing protection.
- Good relationships are established with residents and landowners neighbouring the reserves of the planning area, and with community groups with an interest in the planning area.
- Where appropriate, community and visitor involvement in conservation and management of the planning area is encouraged.

4.12.3 Management strategy

4.12.3.1 Guidelines

G12.1 Manage educational use of the planning area according to permitted visitor uses (refer to Sections 4.9 and 4.11).

G12.2 Where volunteers or community groups express an interest in involvement in conservation activities within the reserves, manage in accordance with Council’s Integrated Volunteer Program.

4.12.3.2 Actions

A12.1 Prepare and implement an Interpretation Plan for the reserve network to ensure consistent quality of signage and effective communication of reserve activities and facilities. Interpretive signage should focus on parts of the planning area in which maintenance/restoration activities are proposed as part of this plan.

A12.2 As a minimum, install naming and regulatory signage at all formal and publicly used entrances to reserves. Where appropriate, install totems with symbols rather than signs bearing excessive text.

A12.3 Liaise with QPWS during development of the Interpretation Plan and, where possible develop joint agency interpretive material, to maximise opportunities to inform park users of the holistic ecological and recreational values of the reserve corridor.

A12.4 Liaise with Council’s catchment management officers regarding implementation of the interpretation and education initiatives proposed in the Tallebudgera Creek Catchment Management Plan 2009.
A12.5 Update Council’s website with interpretive information on new and existing walking networks and conservation initiatives occurring within the planning area.

A12.6 Continue Council’s program of educational walks and workshops in the planning area.

A12.7 Improve visitor behaviour, understanding and support of reserve management initiatives through increased operational patrols on weekends and holiday periods.

A12.8 Review and update interpretive material for the planning area on a regular basis to ensure currency and relevance of information.

A12.9 Develop and implement a permitted use and risk assessment system for all external users of Council’s natural areas, e.g. school/university or nature observation groups, to ensure that activities within the planning area are appropriate and conducted in an environmentally sensitive manner.

A12.10 Implement a good neighbour program tailored towards neighbouring residences. This program should address issues such as: planting of suitable native species, responsible disposal of household and garden waste, responsible pet ownership, a coordinated approach to pest plant and animal control, and bushfire hazard reduction strategies.

A12.11 Assist in the implementation of community initiatives proposed in Councils 2009 Nature Conservation Strategy, including the Urban Biodiversity Program and Integrated Volunteer Program.

4.12.4 Key monitoring priorities

- Conduct surveys of visitors to ascertain the effectiveness of educational and interpretive material within the planning area by assessing for an improvement in knowledge and understanding of conservation and land management issues.
- Monitor impacts and success of interpretive programs within the planning area.
- Conduct ongoing monitoring to assess the effectiveness of the Good Neighbour Program and other neighbour-based education initiatives.

4.13 Research and monitoring

4.13.1 Current management situation

The purpose of undertaking scientific research and monitoring is to provide Council with a comprehensive understanding of the natural and cultural values and ecological processes within the planning area. Monitoring and evaluation can identify developing management issues and will highlight necessary changes to existing management practices to ensure continued protection of ecological values.

It is considered essential that reserve management be based on sound scientific information and continued monitoring of ecosystem condition. Experimental design and data collection methodologies should be consistent throughout all Council-managed natural areas to enable comparison between reserves and allow land managers to make informed decisions at both the reserve and landscape scale. While research is important for guiding management, the areas involved can be sensitive and research itself may have an impact that must be appropriately managed.
There will be continuing need to monitor the impact of recreational use of the planning area over time, particularly as park users become aware of track upgrades in both Council and QPWS managed parks. Council is currently monitoring the level of usage of recently upgraded tracks through use of automated track counters in Burleigh Ridge Park and Ocean Parade Bush Parklands. Additional track counters will also be installed along informal tracks proposed for further investigation (refer to Section 4.9.1.1).

Council, together with Queensland Department of Main Roads, ENERGEX and QR Ltd is currently undertaking further surveys in the Burleigh Ridge/Reedy Creek area of the Burleigh-Springbrook Corridor to determine whether there are viable flora and fauna populations and communities that warrant the creation of a man-made link to overcome the barrier to fauna movement presented by the Pacific motorway and impending transport infrastructure. This study includes sampling sites within Burleigh Ridge, Ron Mason Park, Skyline Terrace and David Fleay Wildlife Park, in addition to sites on privately owned land to the south of the Pacific Motorway (Maunsell-AECOM 2009).

Sections 4.1-4.14 of this plan and other recent studies within the planning area make recommendations regarding further research and monitoring priorities, including baseline studies of estuarine and freshwater fish and invertebrate assemblages (Australian Wetlands 2009 and White and White 2006; refer to Section 4.2.1), changes in diversity and rare or threatened plant populations (Caddick 2006; refer to Section 4.3.3.2), comprehensive assessment of koala populations in the Burleigh Koala Habitat Area (Biolink 2007; refer to Section 4.4.1), invertebrate surveys (White and White 2006; refer to Section 4.4.1 and 4.4.4), pre and post fire vegetation and fuel hazard monitoring (refer to Section 4.5.3.2), monitoring of restoration sites (refer to Section 4.6.4) and monitoring of pest animal activity (refer to Section 4.7.3.2).

Staff at David Fleay Wildlife Park are currently developing captive breeding program for the Richmond Birdwing Butterfly to combat in-breeding depression in highly restricted and declining Sunshine Coast populations. The program is trialling active outbreeding of butterflies from the Sunshine Coast with individuals of Gold Coast origin, to create more genetically diverse offspring for release into Sunshine Coast populations. The research is also gathering information on preferred butterfly food plants and on suitable growing conditions for the larval host vine, *Pararistolochia praevenosa*.

A number of existing institutions, management agencies and research groups have, or are likely to have, an interest in ecological and threatened species research within or adjacent to the planning area, including Council’s catchment management and environmental planning officers, QPWS Conservation, Strategy and Planning Division – Wildlife Branch, the Richmond Birdwing Recovery Network, South East Queensland Catchments, Griffith University Centre for Innovative Conservation Strategies and Griffith Centre for Coastal Management. These groups may be able to assist in identifying critical gaps in current knowledge and provide direction for research priorities.

### 4.13.2 Desired outcomes

- Monitoring and research contributes to improved management of the planning area.
- Impacts of management are rapidly assessed through targeted monitoring.
- Management is adapted to effectively manage trends identified during monitoring.
- No unacceptable environmental impacts result from research and monitoring.
- Research is coordinated and integrated with strategic regional biodiversity management priorities.
4.13.3 Management strategy

4.13.3.1 Guidelines

G13.1 Undertake and support research and monitoring in the planning area which aims to:

- increase knowledge of planning area values and conservation significance
- understand the nature and rate of any change in these values
- improve knowledge about visitor demand, satisfaction, use, characteristics and impacts
- improve management practices for natural and cultural resources
- provide information that contributes to Council’s strategic planning functions and/or to the broader (e.g. regional, state, national etc) body of scientific knowledge

G13.2 Ensure that data collection and experimental design are scientifically rigorous and produce results that can be analysed statistically.

G13.3 Research projects within the planning area will be subject to a permit system implemented by Council’s natural areas management officers. Permits will be issued in accordance with the provisions of Gold Coast City Council Local Law No. 9 (Parks and Reserves) and Local Law Policy No. 9.1 (Parks and Reserves). Particular consideration should be given to Sections 17 and 18 of the Policy, which regulate scientific research within public open space.

G13.4 Researchers working within the planning area must liaise with Council’s natural areas management officers regarding access, safety, compliance with management plan objectives and handover of research findings.

G13.5 Research activities involving the taking, use, or keeping of protected wildlife for scientific purposes must demonstrate sustainability and require a permit under the Nature Conservation (Wildlife) Regulation 2006.

G13.6 Where research and monitoring activities result in environmental disturbance or degradation within the reserve, researchers will be required to undertake rehabilitation of affected areas at the completion of the project/s and/or cease projects if the impact is deemed by Council’s natural areas management officers to be unacceptable.

G13.7 Ensure that the results of research conducted within or relevant to the reserve inform the review of this management plan.

G13.8 Adapt management practices to take into account threats, changes and opportunities identified in monitoring surveys/research studies.

G13.9 Collaborate with research institutions and other relevant organisations where opportunities exist to develop a strategic approach to addressing key management questions within the region.

G13.10 All proposed monitoring projects will be conducted subject to the availability of resources and funding. In order to ensure that those projects of the highest imperative are undertaken first, all monitoring initiatives will be prioritised within the Council’s Natural Areas Monitoring Projects Database.
4.13.3.2 Actions

A13.1 Liaise with other Council sections regarding current and planned strategic research programs within the planning area.

A13.2 Regularly update the Council's Natural Areas Monitoring Projects Database when new monitoring and research projects for the planning area are identified. This database should additionally be used for assigning priorities to each of the proposed projects within the context of the planning area and the entire city.

A13.3 Develop and implement a monitoring strategy to assess the overall effectiveness of this management plan. This will be a high level monitoring strategy that will monitor and assess the overall performance of the plan and the performance of the specific management strategies included within.

A13.4 Continue to implement/assist in the implementation of existing research and monitoring programs occurring within the planning area.

A13.5 Using the Council's Natural Areas Monitoring Projects Database prepare and update a prospectus of priority research projects to be distributed to research organisations and/or tertiary institutions as a guide to preferred research projects within the reserve. Key monitoring priorities are listed in Sections 4.1-4.16 of this plan, and include:

- updates to flora and fauna inventories
- baseline studies of estuarine, freshwater and invertebrate assemblages
- monitoring of significant species and communities and further understanding of their management requirements (eg koalas, Richmond birdwing butterfly, mangrove ant blue butterfly)
- monitoring of vegetation change and succession
- the role of wildlife corridors in the area
- monitoring of fauna populations and community interactions
- management issues associated with fragmented urban bushland reserves, eg pest management issues, the role of fire in management etc.
- monitoring of the planned burn program and its effects on fuel load accumulation
- monitoring the success of restoration programs within the planning area
- cultural heritage research
- the acceptable limits of disturbance for different environments from recreational and management activities
- investigation of recreational demand within the context of the planning area and the entire city

A13.6 Continue to liaise with David Fleay Wildlife Park and Richmond Birdwing Recovery Network regarding findings of Richmond birdwing butterfly research programme.

4.13.4 Key monitoring priorities

- Monitor the number and type of research and monitoring programs undertaken each year to ensure that an adequate suite of data is being collected to inform major management decisions.
- Monitor all research and monitoring programs to ensure that they do not result in unsustainable impacts upon the values of the planning area.
- Review on-ground management actions against Desired Outcomes and Timelines at least every 5 years to assess the effectiveness of this Management Plan.
4.14 Strategic planning and estate consolidation

4.14.1 Current management situation

Many of the private lots adjacent to Burleigh Green Space reserves provide connectivity between conserved remnants and are strategically important in maintaining a viable conservation network throughout the planning area. Council is currently investigating opportunities to enhance ecological connectivity at the Reedy Creek section of the Burleigh-Springbrook Wildlife Corridor (refer to Section 4.4.1), using planning tools such as land acquisition through the Open Space Preservation Levy (OSPL), public open space dedication through development assessment, planning scheme review and use of private landholder conservation and restoration incentives. While the majority of private properties in the area are too small to be suited to initiatives such as Land for Wildlife, Council is in the process of developing an Urban Biodiversity Program to encourage ecological protection and enhancement in residential areas.

There are also a number of Council-managed properties in this area that present opportunities for habitat restoration and protection, including the Reedy Creek Transfer Station (lot 5 RP162129) and Burleigh Quarry/landfill (lot 1 RP202953), which is being replanted with native vegetation as landfill cells are filled and capped. There may also be an opportunity to rehabilitate parts of Andrews Reserve (lots 143 and 144 WD4736) which, up until recently, has been used as a motorcycle track.

Lot 13 RP114420 West Burleigh Rd is currently designated as community facilities under the Burleigh Ridge LAP. The Community Facilities precinct includes parcels of land in which existing community uses should be maintained. However this site does not have an existing community use and lacks infrastructure for such purposes. Native vegetation communities at the site have recently been restored and it is an important link in the Burleigh-Springbrook Bioregional Wildlife Corridor. Amendment of the current precinct designation to the Environmental Open Space designation, in order to give this lot the same level of protection as surrounding reserves, is currently being assessed as part of Amendment 7 to Council’s town planning scheme.

A number of factors contribute to an increased risk of private landholder encroachment into the planning area, including the high numbers of residences surrounding the reserves, lack of management access to parts of the reserves (notably Ron Mason Park and Skyline Terrace Reserve) and lack of signage to indicate the presence of a conservation reserve (particularly in smaller lots such as Ocean Parade Bush Parklands). Encroachment of residential development into the planning area threatens already highly constrained fauna and flora habitat and increases the risk of weed invasion and soil erosion.

4.14.2 Desired outcomes

- Protection and consolidation of the existing reserve network.
- Adequate protection of the planning area’s values through appropriate land tenure and Domain or Local Area Plan designation within the Gold Coast Planning Scheme.
- Acquisition of strategically positioned allotments, or portions of allotments, to improve the functionality and connectivity of Council’s natural area estate within the planning area.
- Effective use of private landholder incentives to maximise wildlife habitat and connectivity on adjacent private properties.
4.14.3 Management strategy

4.14.3.1 Guidelines

G14.1 Support the incorporation, acquisition or protection of lands adjacent to the planning area to improve the representation and connectivity of wildlife habitat, particularly in the Reedy Creek section of the Burleigh-Springbrook wildlife corridor.

G14.2 Ensure that Council’s natural areas management officers are key stakeholders in strategic land use planning in the area. A NAMU representative is to be consulted regarding all development applications on properties adjacent to conservation reserves.

G14.3 Immediately report to Council’s natural areas Coordinator any encroachments into the planning area by adjoining land owners or managers. These incidents are to be referred to Council’s law enforcement officers where required.

4.14.3.2 Actions

A14.1 Liaise with Council’s environmental planning officers regarding strategic planning of the Burleigh-Springbrook wildlife corridor and implementation of private landholder conservation incentives.

A14.2 Liaise with Council’s development assessment and recreational planning officers to deliver developer-contributed natural public open space that has safe access and protects and enhances the Burleigh-Springbrook Corridor.

A14.3 Liaise with Council’s waste management officers regarding future planning and restoration of landfill and waste transfer sites within the vicinity of the Burleigh-Springbrook wildlife corridor.

A14.4 Liaise with Council’s town planning officers regarding the transfer of Lot 13 RP114420 West Burleigh Rd from the Community Facilities precinct to the Environmental Open Space precinct under the Burleigh Ridge LAP during the next revision of the Gold Coast Planning Scheme.

A14.5 Undertake monitoring for encroachments within the planning area through operational patrols, examination of aerial photography and community feedback.

4.14.4 Key monitoring priorities

- Undertake periodic assessments to ensure that all new Council managed natural areas are designated within either the Public Open Space Domain or a conservation-based Local Area Plan designation.
- Regularly review how the location of new natural area acquisitions (OSPL, developer contributions, or other) contributes to the functionality and connectivity of Council’s natural area estate.
- Monitor the planning area for encroachments through ranger patrols, examination of aerial photography and community feedback.
4.15 Coordinated reserve management

4.15.1 Current management situation

Burleigh Green Space reserves form part of a linked network of conservation reserves, some of which are managed by Council and others by QPWS. Key state-managed reserves in this area include Burleigh Head National Park and Tallebudgera Creek Conservation Park, managed by QPWS South East Region Terrestrial Parks division and David Fleay Wildlife Park, managed by QPWS Conservation, Strategy and Planning Division (Wildlife Branch).

As noted in sections 4.4, 4.6, 4.9 and 4.12, Council officers regularly liaise with QPWS regarding a number of management issues within the Burleigh reserve network, including threatened species recovery, weed management and track maintenance. A cooperative management approach with QPWS is also required regarding catchment management (Section 4.2), fauna-friendly fencing (Section 4.4), fire management (section 4.5), pest animal management (Section 4.7) and education and interpretation (Section 4.12).

4.15.2 Desired outcomes

- Integrated and collaborative reserve management between Council and QPWS.
- Effective and efficient use of Council’s resources in managing priority reserves within the planning area.

4.15.3 Management strategy

4.15.3.1 Guidelines

G15.1 Collaborate with QPWS in the management of threatened species, fire, catchments, pest control, access and recreation in Council and State-managed conservation reserves.

4.18.3.2 Actions

A15.1 Work with QPWS on collaborative management initiatives identified in Sections 4.2-4.12 of this management plan.

4.15.4 Key monitoring priorities

- Undertake a review of the success of each collaborative management program to determine whether outcomes have been achieved and to provide feedback for the improvement of future programs.

4.16 Naming of reserves within the planning area

4.16.1 Current management situation

To date, parks within the planning area have been named in accordance with Council’s Naming of Parks and Community Facilities Policy (GCCC 2007b). Council adopts a general practice of naming parks and facilities after their street, suburb or a nearby geographical feature so parks are readily identifiable to Council staff, emergency services and the public. Applications to name or rename parks and community facilities after individuals, families, service clubs or community organisations may be suitable in some circumstances and must be assessed against the criteria outlined in Attachment A of the policy.
Some of the reserves along Tallebudgera Creek (lots 13 RP114420, 208 W311480, 36 RP228768 and 3 RP864252) have not been formally named. Because these lots occupy similar (estuarine) habitats and occur adjacent to each other, with additional linkages planned (refer to Section 4.9.1.1), it is proposed to amalgamate them into a single reserve. The local Aboriginal community has been consulted for input into suitable traditional names that reflect the cultural history of Tallebudgera Creek as an important food gathering area due to its rich natural resources (refer to Section 2.3.2). In light of the above, the name Tchoobey Reserve (mud crab) is proposed for lots 13 RP114420, 208 W311480, 36 RP228768 and 3 RP864252.

There are currently no OSPL-acquired sites in the planning area, although future acquisitions are a possibility within the lifetime of this plan. The Naming of Parks and Community Facilities Policy includes a general principle relevant to lands bought with the OSPL, and requires that such sites are named at the time of the preparation of the management plan. The policy states that these acquisitions must be given a name which describes the general location and key natural values for which the area was purchased, followed by the term ‘Conservation Area’. The policy also acknowledges the importance of identifying any cultural and natural heritage, indicating that it is appropriate to name interpretive or recreational infrastructure after historical affiliations or individual families who have made a contribution to the city or locality.

4.16.2 Desired outcomes

- The names of all reserves within the planning area are formalised.
- Reserve nomenclature is consistent within the planning area and identifies geographic location or natural or cultural history and management intent for the reserves.

4.16.3 Management strategy

4.16.3.1 Guidelines

G16.1 Naming or renaming of reserves within the planning area is carried out in accordance with Council’s Naming of Parks and Community Facilities Policy.

G16.2 Ensure that the naming of all reserves within the planning area adequately reflects their conservation status and general management intent.

G16.3 All future signage and communication materials should reflect reserve names adopted in this management plan.

4.16.3.2 Actions

A16.1 The name Tchoobey Reserve be formalised at the adoption of this management plan for lots 13 RP114420, 208 W311480, 36 RP228768 and 3 RP864252.
5 Summary of management priorities and timeframes

Table 9 provides a prioritised list of all management actions given in Section 4 of this plan, for incorporation into strategic and operational works programs for NAMU. Management actions are listed reserve by reserve to facilitate easy identification of priority actions for each reserve within the planning area. Actions that apply to the entire planning area are listed first.

High priority activities are those imperative to achievement of the objectives and desired outcomes. It is expected that they will be achieved within five years of the approval of this plan in order to avoid significant deterioration in natural, cultural or management resources. Medium priority activities are those that are necessary to achieve the objectives and desired outcomes but are not urgent. They should be completed within the lifetime of the plan (i.e. 10 years), unless otherwise specified (e.g. many high and medium priority actions have ongoing relevance throughout and beyond the lifetime of the plan). Low priority activities are desirable to achieve management objectives and should be implemented within the lifetime of the plan, but will be contingent upon the availability of resources.

Table 9. Management priorities and timeframes for Burleigh Green Space.

<table>
<thead>
<tr>
<th>Reserve</th>
<th>Theme</th>
<th>Action number</th>
<th>Action</th>
<th>Priority</th>
<th>Timeframe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole of Cluster</td>
<td>Landscape protection</td>
<td>A1.2</td>
<td>Liaise with neighbours to encourage the retention of landscape values adjoining the planning area, and support Council’s environmental planning officers in developing/promoting private landholder vegetation conservation incentives to residents in the planning area – particularly those neighbouring conservation reserves.</td>
<td>M</td>
<td>5 years</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A1.3</td>
<td>Support the acquisition of vegetated and visually prominent properties along the Burleigh ridge line through Council’s Open Space Preservation Levy.</td>
<td>H</td>
<td>Ongoing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A1.4</td>
<td>Liaise with Council’s implementation and assessment and recreational planning officers to ensure that future developments complement the natural character of the area, and protect significant scenic and landscape features adjoining, or in proximity to, the planning area.</td>
<td>M</td>
<td>Ongoing</td>
</tr>
<tr>
<td>Catchment management</td>
<td></td>
<td>A2.1</td>
<td>Liaise with Council’s catchment management officers with regards to restoration programs within riparian parts of the planning area including the use of healthy vegetation demonstration sites identified in the Tallebudgera Creek CMP (see also Section 4.12 of this plan).</td>
<td>M</td>
<td>5 years</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A2.3</td>
<td>Liaise with Council’s catchment management officers to review condition and level of use of formal and informal waterway access points within the planning area and repair/formalise access where necessary to reduce damage to riparian communities</td>
<td>M</td>
<td>5 years</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A2.5</td>
<td>Liaise with Council’s catchment management officers and other organisations including DERM and South East Queensland Catchments (SEQ Catchments) as needed in regard to catchment management initiatives required to maintain water quality within waterways of the planning area.</td>
<td>L</td>
<td>Ongoing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A2.6</td>
<td>Liaise with Council’s catchment management officers regarding future aquatic monitoring within the planning area, including incorporation of existing baseline SIGNAL data (White and White, 2006) for the reserves into future studies.</td>
<td>M</td>
<td>5 years</td>
</tr>
<tr>
<td>Reserve</td>
<td>Theme</td>
<td>Action number</td>
<td>Action</td>
<td>Priority</td>
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<td>A2.7</td>
<td>Promote responsible attitudes towards water quality management through interpretive material (eg. signage at key entry points, sites currently used by mountain bikers, along the main waterway through Herbert Park and in reserves adjacent to Tallebudgera Creek). Liaise with Council’s catchment management officers to ensure integration of new public awareness and education initiatives implemented as part of the Tallebudgera Creek Catchment Management Plan with interpretive material developed for the planning area (refer to Actions 6.8 and 12.4).</td>
<td>M</td>
<td>3 years</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A2.8</td>
<td>Liaise with Council’s implementation and assessment and recreational planning officers to ensure that development or land use proposals within or adjacent to the reserves of the planning area do not result in significant alterations to natural flow regimes and aquatic ecosystems and support the rehabilitation of the Burleigh-Springbrook Corridor.</td>
<td>M</td>
<td>Ongoing</td>
</tr>
<tr>
<td></td>
<td>Native flora</td>
<td>A3.2</td>
<td>Forward the results of all new floristic studies and incidental flora records to Council’s environmental planning officers to be updated to the Gold Coast City Nature Conservation Strategy Database.</td>
<td>M</td>
<td>Ongoing</td>
</tr>
<tr>
<td></td>
<td>Native flora</td>
<td>A3.3</td>
<td>Using existing survey data (Caddick 2006) as a baseline, in conjunction with Council’s environmental planning, conduct floristic surveys (particularly in Endangered and Of Concern vegetation communities) at regular intervals (e.g. every 5 years) to assess changes in ecological condition, floristic diversity, and rare or threatened plant populations.</td>
<td>H</td>
<td>5 years</td>
</tr>
<tr>
<td></td>
<td>Native flora</td>
<td>A3.4</td>
<td>Work with Council’s environmental planning officers to maximise opportunities to provide/retain future vegetation connectivity along the Burleigh-Springbrook corridor, eg. through land acquisition and private landholder/developer incentives.</td>
<td>M</td>
<td>Ongoing</td>
</tr>
<tr>
<td></td>
<td>Native flora</td>
<td>A3.5</td>
<td>Liaise with other land managers, particularly QPWS, to encourage restoration of native vegetation and generate support for a collaborative approach to vegetation management in the Burleigh-Springbrook corridor.</td>
<td>H</td>
<td>3 years</td>
</tr>
<tr>
<td></td>
<td>Native flora</td>
<td>A3.6</td>
<td>Support Council’s environmental planning officers in the development of private landholder conservation initiatives such as an Urban Biodiversity Program to increase resident participation in protection of native vegetation, eg. through weed control and planting of local native species in private gardens.</td>
<td>H</td>
<td>3 years</td>
</tr>
<tr>
<td></td>
<td>Native flora</td>
<td>A3.7</td>
<td>Through operational patrols and interpretive material, provide information to encourage responsible public attitudes towards vegetation protection, including control of environmental weeds, and issues such as the impacts of informal track creation on native vegetation, and of household and green waste dumping.</td>
<td>H</td>
<td>2 years</td>
</tr>
<tr>
<td></td>
<td>Native flora</td>
<td>A3.8</td>
<td>Where disturbances to native vegetation (e.g. through illegal clearing, encroachment, or garden waste dumping) are identified, implement appropriate management measures to control these activities, where necessary with the assistance of Council’s law enforcement officers.</td>
<td>M</td>
<td>Ongoing</td>
</tr>
<tr>
<td></td>
<td>Native fauna</td>
<td>A4.1</td>
<td>Minimise access in areas containing known populations of rare and threatened species (except for that required for management actions) to avoid disturbance and displacement. Where required, management measures such as information signage, closure of unnecessary tracks, and buffers should be implemented to deter inappropriate access.</td>
<td>H</td>
<td>Ongoing</td>
</tr>
<tr>
<td></td>
<td>Native fauna</td>
<td>A4.2</td>
<td>Retain and/or restore elements or areas of key indigenous fauna habitat, and maintain and enhance critical habitat corridors for fauna identified on, or adjacent to, conservation reserves.</td>
<td>M</td>
<td>3 years</td>
</tr>
<tr>
<td></td>
<td>Native fauna</td>
<td>A4.3</td>
<td>Liaise with Council’s environmental planning officers, SEQ Catchments, QPWS and the Richmond Birdwing Recovery Network (RBRN) to integrate Council operations with existing programs to restore Richmond birdwing butterfly habitat connectivity along the Burleigh-Springbrook corridor.</td>
<td>L</td>
<td>Ongoing</td>
</tr>
<tr>
<td></td>
<td>Native fauna</td>
<td>A4.4</td>
<td>Encourage the provision of habitat and food plants for native species within private residences, in particular retention of hollow-bearing trees and planting of locally sourced seed stock of significant butterfly food plants listed in 4.4.1 above.</td>
<td>L</td>
<td>Ongoing</td>
</tr>
<tr>
<td>Reserve</td>
<td>Theme</td>
<td>Action number</td>
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<td></td>
<td>A4.5</td>
<td>Liaise with QPWS to develop consistent and coordinated fauna management practices and connectivity for linked areas of fauna habitat.</td>
<td>M</td>
<td>3 years</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A4.7</td>
<td>Forward the results of all new fauna studies and incidental records to Council’s environmental planning officers to be added to the Gold Coast City Nature Conservation Strategy Database.</td>
<td>M</td>
<td>Ongoing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A4.8</td>
<td>Work with Council’s environmental planning officers to implement recommendations of the GCCC Koala Habitat and Population Assessment (Biolink 2007) and other strategic environmental plans under development in the planning area including the Burleigh-Springbrook Corridor Strategy.</td>
<td>M</td>
<td>3 years</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A4.9</td>
<td>Liaise and provide advice to Council’s environmental planning officers and State Infrastructure Providers where required to assist with development of design and construction measures to protect and enhance ecological connectivity across the Reedy Creek Transport Corridor. Liaise with Council’s environmental planning officers to implement corridor protection measures identified.</td>
<td>M</td>
<td>2 years</td>
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<tr>
<td></td>
<td></td>
<td>A4.10</td>
<td>Using existing survey data as a baseline, in conjunction with Council’s environmental planning officers, conduct fauna surveys (particularly for key animal species listed under threatened species legislation or regarded as locally significant) at regular intervals (e.g. every 5 years) to assess changes in variables such as species richness, abundance, and distribution.</td>
<td>H</td>
<td>5 years</td>
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<tr>
<td></td>
<td></td>
<td>A4.11</td>
<td>Maintain records of fauna mortality and cause of death within the planning area from Council staff and community observations and local Wildcare records. Where increased disease-related mortality is observed, implement management measures to mitigate risk of further mortality and, where relevant, manage in accordance with State and Commonwealth guidelines for threatened species and/or threatening processes.</td>
<td>L</td>
<td>Ongoing</td>
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<td>A4.12</td>
<td>Where incidences of infectious fauna diseases such as amphibian Chytridiomycosis, Koala Chlamydiosis and Cryptococcosis, and other diseases spread by pest animals are recorded within the planning area, assess the level of risk to the fauna of the planning area and where appropriate, undertake measures based on current best practice guidelines to control their spread.</td>
<td>M</td>
<td>Ongoing</td>
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<td></td>
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<td>A4.13</td>
<td>Promote public understanding and appreciation of native animals through operational patrols, interpretive programs, and materials to increase awareness of local fauna conservation and management issues.</td>
<td>H</td>
<td>2 years</td>
</tr>
</tbody>
</table>
|         | Fire  | A5.1          | Review the BMP every five years, in consultation with relevant stakeholders. Confine these reviews to amendments associated with:  
• pertinent new research findings and information  
• the results of monitoring programs, where they indicate the need for changes in management  
• where existing management strategies are not achieving stated objectives | H       | 10 years  |
|         |       | A5.2          | Develop and maintain a mapping database which establishes mapping layers for effective fire planning, including:  
• basic topographic attributes  
• vegetation communities, including information on age classes  
• threatened and significant plant species and communities  
• the habitats of rare and threatened native animal species  
• bushfire histories, including ignition sources and fire path information  
• fuel load attributes  
• management trails and fire breaks  
• water points  
• infrastructure and assets | M       | 3 years   |
<table>
<thead>
<tr>
<th>Reserve</th>
<th>Theme</th>
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<th>Action</th>
<th>Priority</th>
<th>Timeframe</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>A5.3</td>
<td>Develop and implement operational plans for implementing the Burleigh Green Space BMP, including the delivery of planned burns, maintenance of access tracks and protection and mitigation zones, all necessary ground truthing and the preparation and assessment of burn proposals to be assessed and approved by Council’s natural areas management officers.</td>
<td>H</td>
<td>10 years</td>
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<tr>
<td></td>
<td></td>
<td>A5.4</td>
<td>Where possible, prioritise and actively control all weed infestations considered to substantially increase bushfire hazard potential, bushfire intensity and the site’s capacity to carry fire (e.g. infestation of molasses grass).</td>
<td>M</td>
<td>3 years</td>
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<tr>
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<td></td>
<td>A5.5</td>
<td>Keep the public, particularly neighbours, informed of bushfire management activities through local media, Council’s website and signage at entry points to the planning area.</td>
<td>H</td>
<td>Ongoing</td>
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<td></td>
<td></td>
<td>A5.6</td>
<td>Facilitate community education (refer to Section 4.12) regarding threats posed by accidental fire and by dumping combustible garden waste in the reserves.</td>
<td>M</td>
<td>3 years</td>
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<tr>
<td></td>
<td></td>
<td>A5.7</td>
<td>Undertake vegetation and fuel hazard monitoring prior to and following all prescribed burns, and conduct similar monitoring following wildfires where time and resources permit.</td>
<td>H</td>
<td>Ongoing</td>
</tr>
<tr>
<td>Pest plants &amp; ecological restoration</td>
<td></td>
<td>A6.3</td>
<td>Regularly update Natural Areas Restoration Database with weed species observed and treated during site restoration, area covered, methodology and hours worked.</td>
<td>M</td>
<td>Ongoing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A6.4</td>
<td>Following prescribed burns or wildfires, assess weed recolonisation and undertake follow-up weed control to facilitate regeneration of naturally occurring species. Control Schima serrata prior to implementation of prescribed burns.</td>
<td>H</td>
<td>Ongoing</td>
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<td></td>
<td></td>
<td>A6.5</td>
<td>Educate neighbouring residents about the threat posed by ‘garden escapes’ on ecological values within the reserves through interpretive signage, Council’s website, local media, Council workshops, Council’s Urban Biodiversity Program (refer to Section 4.12), patrols by natural areas operational staff and the development and distribution of educational material regarding problematic garden species and suitable native garden alternatives. Identify priority streets adjacent to the reserves for targeted action (door knocks and letterbox drops).</td>
<td>H</td>
<td>3 years</td>
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<tr>
<td></td>
<td></td>
<td>A6.6</td>
<td>Install interpretive signage at visible points adjacent to restoration areas to educate park visitors about the restoration process, impact of restoration on ecological values, and how individual neighbours can help.</td>
<td>M</td>
<td>3 years</td>
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<tr>
<td></td>
<td></td>
<td>A6.7</td>
<td>Participate in the development and implementation of coordinated regional pest plant control initiatives with neighbours, community groups, and other land management agencies. Specifically: liaise with QPWS to facilitate collaborative pest plant management on adjacent Council and State managed reserves.</td>
<td>L</td>
<td>Ongoing</td>
</tr>
</tbody>
</table>
| Pest animals |       | A7.1          | Develop and implement a Pest Animal Control Plan (PACP) for the planning area that identifies pest animals present and recommends and prioritises control and monitoring programs. This plan should include:  
  - triggers for initiating control strategies  
  - a set of criteria to establish priorities for non-native animal management  
  - control strategies that include multiple control methods, target multiple species and form part of an ecological restoration program  
  - integration with relevant Commonwealth Threat Abatement Plans  
  - strategies for community and landholder involvement/cooperation  
  - monitoring techniques and regimes to help identify priority areas for feral animal control and to measure the effectiveness of control methodologies  
  - reporting protocols  
  - assignment of responsibility for tasks and activities                                                                                         | H        | 10 years   |
<table>
<thead>
<tr>
<th>Reserve</th>
<th>Theme</th>
<th>Action number</th>
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<th>Priority</th>
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<tr>
<td></td>
<td></td>
<td>A7.2</td>
<td>Until a PACP is complete, continue to liaise with Council’s animal management officers regarding trapping and removal of pest animals from the planning area and provide assistance to Animal Management officers where resources allow.</td>
<td>M</td>
<td>Ongoing</td>
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<td></td>
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<td>A7.3</td>
<td>Work with OPWS to develop and implement a coordinated approach to the management of pest animals within the planning area and adjacent state managed reserves.</td>
<td>M</td>
<td>5 years</td>
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<td></td>
<td></td>
<td>A7.4</td>
<td>Continue to record locations of pest animal dens, routes, trap sites and bait locations on Council’s natural areas incidental records database. New information pertaining to pest animal species should be regularly shared with Council’s animal management officers and uploaded to Council’s GIS database.</td>
<td>M</td>
<td>Ongoing</td>
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<td></td>
<td></td>
<td>A7.5</td>
<td>Give clear and appropriate notice to visitors and local residents during pest animal control and baiting programs. Where a perceived threat to the public exists, or is likely to exist, exclude public access to relevant reserves. Signage informing visitors of any temporary closures is to be erected at all public access points. Promote new pest animal control strategies through ranger patrols and other educational mediums to build community support.</td>
<td>H</td>
<td>Ongoing</td>
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<td></td>
<td>A7.6</td>
<td>Promote responsible pet ownership and community understanding of the impacts of domestic animals on native fauna through interpretive signage (refer to Section 4.12), Council’s website, local media, Council’s Good Neighbour Program, and during operational patrols.</td>
<td>M</td>
<td>2 years</td>
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<tr>
<td></td>
<td></td>
<td>A7.7</td>
<td>Amend Council’s Subordinate Local Law 12 (Keeping and Control of Animals) 2007 to include all reserves within the planning area under Part 9 (54) Prohibition of cats on parks, reserves, foreshores and beaches and Part 9 (55) Prohibition of cats on parks, reserves, foreshores and beaches. Ensure that dog prohibited areas are included in Animal Management Unit patrols.</td>
<td>H</td>
<td>2 years</td>
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<tr>
<td></td>
<td></td>
<td>A7.8</td>
<td>Add a link from relevant Council web pages on Burleigh Greenspace to Local Law 12, Schedule 3, to indicate areas where dog walking is prohibited.</td>
<td>H</td>
<td>2 years</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A7.9</td>
<td>Install signage prohibiting dogs and cats from all parts of the planning area. Signage should advise dog-owners of the location of adjacent open space areas where dog walking is permitted.</td>
<td>H</td>
<td>2 years</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A7.10</td>
<td>Liaise with DERM regarding discontinuation of apiarist licence for lot 36 RP228768 upon retirement of existing licensee.</td>
<td>L</td>
<td>10 years</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A8.1</td>
<td>In consultation with the local Aboriginal community, provide interpretation/educational infrastructure and/or material to promote public appreciation and understanding of Aboriginal sites, landscape features and heritage values within the planning area.</td>
<td>M</td>
<td>3 years</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A8.2</td>
<td>Promote public understanding and appreciation of the planning area’s European cultural heritage values through the provision of interpretation and educational material.</td>
<td>M</td>
<td>3 years</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A9.7</td>
<td>Close and rehabilitate all other degraded informal tracks, ramps, jumps and un-used management tracks throughout the planning area.</td>
<td>H</td>
<td>2 years</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A9.9</td>
<td>Install interpretive signage to discourage cycling, trail bikes and dog walking on inappropriate tracks, to inform visitors of the natural values and restoration activities within the planning area and to indicate a change of use where walking/cycling tracks connect with pedestrian only or management tracks (see Section 4.12.1).</td>
<td>H</td>
<td>2 years</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A9.10</td>
<td>Provide information, including downloadable maps, on Council’s website relating to all recreational opportunities within the planning area. This should include development of a joint Council-QPWS brochure and signage to publicise the Burleigh-Tallebudgera trail network.</td>
<td>M</td>
<td>3 years</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A9.11</td>
<td>Support Council’s catchment management officers in implementing actions and initiatives of the Tallebudgera Creek CMP relating to creek bank stabilisation and community education.</td>
<td>M</td>
<td>5 years</td>
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### Reserve

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<tr>
<th>Reserve</th>
<th>Theme</th>
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<th>Priority</th>
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<tr>
<td>Infrastructure &amp; Access</td>
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<td></td>
<td>A9.12</td>
<td>Establish and implement maintenance schedules for all visitor facilities as part of operational planning.</td>
<td>M</td>
<td>Ongoing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A9.13</td>
<td>Undertake regular weekday and weekend patrols of the planning area to monitor visitor safety and usage along formal recreation tracks, to encourage safe and appropriate use by visitors, and to control prohibited activities.</td>
<td>H</td>
<td>Ongoing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A9.14</td>
<td>Maintain records of safety incidents, hazards and inappropriate use observed during ranger patrols or by the public, to inform future planning and risk management.</td>
<td>H</td>
<td>Ongoing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A10.1</td>
<td>Close and rehabilitate unused maintenance tracks and degraded informal pedestrian linkages (apart from those listed in Table 7, Section 9 as requiring further investigation).</td>
<td>M</td>
<td>3 years</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A10.2</td>
<td>Monitor condition of maintenance tracks and repair where necessary to provide ongoing safe, all weather vehicle access for operations and fire management.</td>
<td>M</td>
<td>Ongoing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A10.3</td>
<td>Regularly monitor the condition of safety and security fencing during operational patrols to ensure it functions effectively and repair promptly where required.</td>
<td>H</td>
<td>Ongoing</td>
</tr>
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<td></td>
<td></td>
<td>A10.4</td>
<td>Ensure that all infrastructure retained and installed within the planning area in response to the provisions of this management plan is handed over to Council’s landscape maintenance staff for scheduled and reactive maintenance inspections.</td>
<td>M</td>
<td>Ongoing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A10.5</td>
<td>Implement and maintain bushfire protection zones and fire management tracks in accordance with the Burleigh Greenspace Bushfire Management Plan (AECOM 2009).</td>
<td>H</td>
<td>3 years</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A10.7</td>
<td>Ensure that all management tracks and other infrastructure within the planning area are mapped and added to Council’s Geographic Information Systems (GIS) database.</td>
<td>M</td>
<td>Ongoing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A10.8</td>
<td>Report any breaches of lease conditions to Council’s property management officers.</td>
<td>M</td>
<td>Ongoing</td>
</tr>
<tr>
<td></td>
<td>Commercial activities</td>
<td>A11.1</td>
<td>Liaise with recreational parks officers to update existing Council parks usage policy to incorporate a permitted use process for commercial users of natural areas. Commercial activities within the planning area should be conducted in a manner that:</td>
<td>M</td>
<td>3 years</td>
</tr>
</tbody>
</table>
| | | | - is consistent with conservation of natural and cultural resources  
- is nature based and provides appropriate interpretation of park values  
- involves local Aboriginal input where there is a cultural heritage component  
- avoids conflict with other reserve users  
- does not incur high public liability risks  
- is appropriate for the level of existing infrastructure or resources  
- incorporates appropriate monitoring mechanisms to assess sustainability of ecological and amenity values. | M | 3 years |
<p>| | | A11.2 | Maintain a database of commercial operations within the planning area, including records of frequency, location, type/s and levels of use. | L | Ongoing |
| | | A11.3 | Report instances of permit non-compliance to Council’s property management officers. | M | Ongoing |</p>
<table>
<thead>
<tr>
<th>Reserve theme</th>
<th>Action number</th>
<th>Action</th>
<th>Priority</th>
<th>Timeframe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community involvement, education &amp; interpretation</td>
<td>A12.1</td>
<td>Prepare and implement an Interpretation Plan for the reserve network to ensure consistent quality of signage and effective communication of reserve activities and facilities. Interpretive signage should focus on parts of the planning area in which maintenance/restoration activities are proposed as part of this plan.</td>
<td>H</td>
<td>4 years</td>
</tr>
<tr>
<td></td>
<td>A12.2</td>
<td>As a minimum, install naming and regulatory signage at all formal and publicly used entrances to reserves. Where appropriate, install totems with symbols rather than signs bearing excessive text.</td>
<td>H</td>
<td>1 year</td>
</tr>
<tr>
<td></td>
<td>A12.3</td>
<td>Liaise with QPWS during development of the Interpretation Plan and, where possible develop joint agency interpretive material, to maximise opportunities to inform park users of the holistic ecological and recreational values of the reserve corridor.</td>
<td>M</td>
<td>3 years</td>
</tr>
<tr>
<td></td>
<td>A12.4</td>
<td>Liaise with Council’s catchment management officers regarding implementation of the interpretation and education initiatives proposed in the Tallebudgera Creek Catchment Management Plan 2009.</td>
<td>M</td>
<td>3 years</td>
</tr>
<tr>
<td></td>
<td>A12.5</td>
<td>Update Council’s website with interpretive information on new and existing walking networks and conservation initiatives occurring within the planning area.</td>
<td>M</td>
<td>3 years</td>
</tr>
<tr>
<td></td>
<td>A12.6</td>
<td>Continue Council’s program of educational walks and workshops in the planning area.</td>
<td>H</td>
<td>10 years</td>
</tr>
<tr>
<td></td>
<td>A12.7</td>
<td>Improve visitor behaviour, understanding and support of reserve management initiatives through increased operational patrols on weekends and holiday periods.</td>
<td>M</td>
<td>Ongoing</td>
</tr>
<tr>
<td></td>
<td>A12.8</td>
<td>Review and update interpretive material for the planning area on a regular basis to ensure currency and relevance of information.</td>
<td>L</td>
<td>Ongoing</td>
</tr>
<tr>
<td></td>
<td>A12.9</td>
<td>Develop and implement a permitted use and risk assessment system for all external users of Council’s natural areas, e.g. school/university or nature observation groups, to ensure that activities within the planning area are appropriate and conducted in an environmentally sensitive manner.</td>
<td>M</td>
<td>3 years</td>
</tr>
<tr>
<td></td>
<td>A12.10</td>
<td>Implement a good neighbour program tailored towards neighbouring residences. This program should address issues such as: planting of suitable native species, responsible disposal of household and garden waste, responsible pet ownership, a coordinated approach to pest plant and animal control, and bushfire hazard reduction strategies.</td>
<td>M</td>
<td>5 years</td>
</tr>
<tr>
<td></td>
<td>A12.11</td>
<td>Assist in the implementation of community initiatives proposed in Councils 2009 Nature Conservation Strategy, including the Urban Biodiversity Program and Integrated Volunteer Program.</td>
<td>M</td>
<td>5 years</td>
</tr>
<tr>
<td>Research &amp; monitoring</td>
<td>A13.1</td>
<td>Liaise with other Council sections regarding current and planned strategic research programs within the planning area.</td>
<td>M</td>
<td>Ongoing</td>
</tr>
<tr>
<td></td>
<td>A13.2</td>
<td>Regularly update the Council’s Natural Areas Monitoring Projects Database when new monitoring and research projects for the planning area are identified. This database should additionally be used for assigning priorities to each of the proposed projects within the context of the planning area and the entire city.</td>
<td>L</td>
<td>Ongoing</td>
</tr>
<tr>
<td></td>
<td>A13.3</td>
<td>Develop and implement a monitoring strategy to assess the overall effectiveness of this management plan. This will be a high level monitoring strategy that will monitor and assess the overall performance of the plan and the performance of the specific management strategies included within.</td>
<td>M</td>
<td>5 years</td>
</tr>
<tr>
<td></td>
<td>A13.4</td>
<td>Continue to implement/assist in the implementation of existing research and monitoring programs occurring within the planning area.</td>
<td>L</td>
<td>Ongoing</td>
</tr>
<tr>
<td>Reserve</td>
<td>Theme</td>
<td>Action number</td>
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<td>Priority</td>
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</tr>
<tr>
<td>Burleigh Ridge Park</td>
<td>Strategic planning &amp; estate consolidation</td>
<td>A14.1</td>
<td>Liaise with Council’s environmental planning officers regarding strategic planning of the Burleigh-Springbrook wildlife corridor and implementation of private landholder conservation incentives.</td>
<td>M</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A14.2</td>
<td>Liaise with Council’s development assessment and recreational planning officers to deliver developer-contributed natural public open space that has safe access and protects and enhances the Burleigh-Springbrook Corridor.</td>
<td>H</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A14.3</td>
<td>Liaise with Council’s waste management officers regarding future planning and restoration of landfill and waste transfer sites within the vicinity of the Burleigh-Springbrook wildlife corridor.</td>
<td>M</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A14.5</td>
<td>Undertake monitoring for encroachments within the planning area through operational patrols, examination of aerial photography and community feedback.</td>
<td>M</td>
</tr>
<tr>
<td></td>
<td>Coordinated reserve management</td>
<td>A15.1</td>
<td>Work with QPWS on collaborative management initiatives identified in Sections 4.2-4.12 of this management plan.</td>
<td>M</td>
</tr>
<tr>
<td>Burleigh Ridge Park</td>
<td>Landscape protection &amp; catchment management</td>
<td>A1.5 &amp; 2.2</td>
<td>Close and rehabilitate informal walking and mountain bike tracks that do not form part of the strategic recreational tracks network.</td>
<td>H</td>
</tr>
<tr>
<td></td>
<td>Native flora/ Pest plants &amp; ecological restoration</td>
<td>A3.1 &amp; 6.1</td>
<td>Continue with ongoing restoration works in accordance with detailed restoration plan developed for Burleigh Ridge Park.</td>
<td>M</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A13.5</td>
<td>Using the Council’s Natural Areas Monitoring Projects Database prepare and update a prospectus of priority research projects to be distributed to research organisations and/or tertiary institutions as a guide to preferred research projects within the reserve. Key monitoring priorities are listed in Sections 4.1-4.16 of this plan, and include:</td>
<td>L</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A13.6</td>
<td>Continue to liaise with David Fleay Wildlife Park and Richmond Birdwing Recovery Network regarding findings of Richmond birdwing butterfly research programme.</td>
<td>L</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Theme</th>
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<tbody>
<tr>
<td>Using the Council’s Natural Areas Monitoring Projects Database prepare and update a prospectus of priority research projects to be distributed to research organisations and/or tertiary institutions as a guide to preferred research projects within the reserve. Key monitoring priorities are listed in Sections 4.1-4.16 of this plan, and include:</td>
<td>L</td>
<td>5 years</td>
<td></td>
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<tr>
<td>updates to flora and fauna inventories</td>
<td></td>
<td></td>
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<tr>
<td>baseline studies of estuarine, freshwater and invertebrate assemblages</td>
<td></td>
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<tr>
<td>monitoring of significant species and communities and further understanding of their management requirements (eg koalas, Richmond birdwing butterfly, mangrove ant blue butterfly)</td>
<td></td>
<td></td>
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<tr>
<td>monitoring of vegetation change and succession</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>the role of wildlife corridors in the area</td>
<td></td>
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<tr>
<td>monitoring of fauna populations and community interactions</td>
<td></td>
<td></td>
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<tr>
<td>management issues associated with fragmented urban bushland reserves, eg pest management issues, the role of fire in management etc.</td>
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<tr>
<td>monitoring of the planned burn program and its effects on fuel load accumulation</td>
<td></td>
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<tr>
<td>monitoring the success of restoration programs within the planning area</td>
<td></td>
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<tr>
<td>cultural heritage research</td>
<td></td>
<td></td>
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<tr>
<td>the acceptable limits of disturbance for different environments from recreational and management activities investigation of recreational demand within the context of the planning area and the entire city</td>
<td></td>
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</tr>
<tr>
<td>Continue to liaise with David Fleay Wildlife Park and Richmond Birdwing Recovery Network regarding findings of Richmond birdwing butterfly research programme.</td>
<td>L</td>
<td>Ongoing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liaise with Council’s environmental planning officers regarding strategic planning of the Burleigh-Springbrook wildlife corridor and implementation of private landholder conservation incentives.</td>
<td>M</td>
<td>2 years</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liaise with Council’s development assessment and recreational planning officers to deliver developer-contributed natural public open space that has safe access and protects and enhances the Burleigh-Springbrook Corridor.</td>
<td>H</td>
<td>Ongoing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liaise with Council’s waste management officers regarding future planning and restoration of landfill and waste transfer sites within the vicinity of the Burleigh-Springbrook wildlife corridor.</td>
<td>M</td>
<td>10 years</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Undertake monitoring for encroachments within the planning area through operational patrols, examination of aerial photography and community feedback.</td>
<td>M</td>
<td>Ongoing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work with QPWS on collaborative management initiatives identified in Sections 4.2-4.12 of this management plan.</td>
<td>M</td>
<td>Ongoing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Close and rehabilitate informal walking and mountain bike tracks that do not form part of the strategic recreational tracks network.</td>
<td>H</td>
<td>2 years</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continue with ongoing restoration works in accordance with detailed restoration plan developed for Burleigh Ridge Park.</td>
<td>M</td>
<td>10 years</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reserve</td>
<td>Theme</td>
<td>Action number</td>
<td>Action</td>
<td>Priority</td>
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</tr>
<tr>
<td>Aboriginal &amp; European cultural heritage</td>
<td>A8.3</td>
<td>Continue to maintain grave site at Burleigh Ridge Park.</td>
<td>L</td>
<td>Ongoing</td>
</tr>
<tr>
<td>Ocean Parade Bush Parklands</td>
<td>Pest plants &amp; ecological restoration</td>
<td>A6.2</td>
<td>Where resources allow, develop and implement a restoration plan. Investigate alternative sources for funding of restoration projects where necessary.</td>
<td>M</td>
</tr>
<tr>
<td></td>
<td>Landscape protection &amp; catchment management</td>
<td>A1.1</td>
<td>Liaise with Powerlink and Energex to ensure future vegetation management within power easements has minimal impacts on scenic amenity, particularly along prominent ridgelines.</td>
<td>M</td>
</tr>
<tr>
<td>Herbert Park</td>
<td>Native flora/ Pest plants &amp; ecological restoration</td>
<td>A1.5 &amp; 2.2</td>
<td>Close and rehabilitate informal walking and mountain bike tracks that do not form part of the strategic recreational tracks network.</td>
<td>H</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A3.1 &amp; 6.1</td>
<td>Continue with ongoing restoration works in accordance with detailed restoration plan developed for Herbert Park.</td>
<td>M</td>
</tr>
<tr>
<td>Native fauna</td>
<td></td>
<td>A4.2</td>
<td>Investigate opportunities for enhancing swamp rat habitat along the waterway in Herbert Park.</td>
<td>M</td>
</tr>
<tr>
<td>Recreation opportunities</td>
<td></td>
<td>A9.5</td>
<td>Install pedestrian counters along track 8 through Herbert Park to determine an appropriate level of sustainable management for pedestrian access.</td>
<td>M</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A9.6</td>
<td>Develop a shared fire management/walking/cycling linkage connecting Ron Mason Park with Ladds Ridge Road, Skyline Terrace and Reedy Creek Road (tracks 11-13), and investigate opportunities for connectivity with West Burleigh Road and Bermuda Street.</td>
<td>H</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A9.8</td>
<td>In association with Council’s recreation parks officers, investigate the level of demand and opportunities for a local mountain bike jump park in the vicinity of the planning area.</td>
<td>L</td>
</tr>
<tr>
<td>Landscape protection &amp; catchment management</td>
<td>A1.1</td>
<td>Liaise with Powerlink and Energex to ensure future vegetation management within power easements has minimal impacts on scenic amenity, particularly along prominent ridgelines.</td>
<td>M</td>
<td>Ongoing</td>
</tr>
<tr>
<td>Ron Mason Park</td>
<td>Native flora/ Pest plants &amp; ecological restoration</td>
<td>A1.5 &amp; 2.2</td>
<td>Close and rehabilitate informal walking and mountain bike tracks that do not form part of the strategic recreational tracks network.</td>
<td>H</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A3.1 &amp; 6.1</td>
<td>Implement existing restoration plan developed for Ron Mason Park.</td>
<td>M</td>
</tr>
<tr>
<td>Reserve</td>
<td>Theme</td>
<td>Action number</td>
<td>Action</td>
<td>Priority</td>
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<tr>
<td>Recreation opportunities</td>
<td></td>
<td>A9.4</td>
<td>Install pedestrian counters to monitor the level of use of informal pedestrian tracks through Ron Mason Park (track 14) and use these data to inform future use in subsequent reviews of this plan.</td>
<td>M</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A9.6</td>
<td>Develop a shared fire management/walking/cycling linkage connecting Ron Mason Park with Ladds Ridge Road, Skyline Terrace and Reedy Creek Road (tracks 11-13), and investigate opportunities for connectivity with West Burleigh Road and Bermuda Street.</td>
<td>H</td>
</tr>
<tr>
<td>Skyline Terrace Reserve</td>
<td>Pest plants &amp; ecological restoration</td>
<td>A1.1</td>
<td>Liaise with Powerlink and Energex to ensure future vegetation management within power easements has minimal impacts on scenic amenity, particularly along prominent ridgelines.</td>
<td>M</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A1.5 &amp; 2.2</td>
<td>Close and rehabilitate informal walking and mountain bike tracks that do not form part of the strategic recreational tracks network.</td>
<td>H</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A6.2</td>
<td>Where resources allow, develop and implement a restoration plan. Investigate alternative sources for funding of restoration projects where necessary.</td>
<td>M</td>
</tr>
<tr>
<td></td>
<td>Catchment management</td>
<td>A2.4</td>
<td>Work with Council’s catchment management officers to implement management strategies to repair existing bank erosion and mitigate causative agents in the vicinity of Lot 208 W311480 and Lot 36 RP228768.</td>
<td>M</td>
</tr>
<tr>
<td>Lot 208 W311480</td>
<td>Pest plants &amp; ecological restoration</td>
<td>A6.2</td>
<td>Where resources allow, develop and implement a restoration plan. Investigate alternative sources for funding of restoration projects where necessary.</td>
<td>M</td>
</tr>
<tr>
<td></td>
<td>Recreation opportunities</td>
<td>A9.1</td>
<td>Liaise with QPWS regarding the repair and maintenance of the track through David Fleay Wildlife Park and lot 206 W311480 (track 4) and to ensure coordinated nature-based recreation planning throughout the Burleigh linkage.</td>
<td>H</td>
</tr>
<tr>
<td></td>
<td>Infrastructure &amp; access</td>
<td>A9.4</td>
<td>Install pedestrian counters to monitor the level of use of informal pedestrian tracks through lot 208 W311480 (track 5) and use these data to inform future use in subsequent reviews of this plan.</td>
<td>M</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A10.6</td>
<td>Initiate closure of unused road reserve between lot 504 WD5992 and lot 208 W311480 Loman Lane and transfer of land into adjacent conservation reserve.</td>
<td>L</td>
</tr>
<tr>
<td></td>
<td>Naming of reserves</td>
<td>A16.1</td>
<td>The name Tchoobey Reserve be formalised at the adoption of this management plan for lots 13 RP114420, 208 W311480, 36 RP228768 and 3 RP864252.</td>
<td>M</td>
</tr>
<tr>
<td>Native flora/ Pest plants &amp; ecological restoration</td>
<td></td>
<td>A3.1 &amp; 6.1</td>
<td>Continue with ongoing restoration works in accordance with detailed restoration plan developed for lot 13 RP114420.</td>
<td>M</td>
</tr>
<tr>
<td>Reserve</td>
<td>Theme</td>
<td>Action number</td>
<td>Action</td>
<td>Priority</td>
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</tr>
<tr>
<td>Lot 13 RP114420</td>
<td>Native fauna</td>
<td>A4.6</td>
<td>Liaise with QPWS regarding opportunities for fauna friendly fencing in Tallebudgera Conservation Park adjacent to lot 13 RP114420.</td>
<td>L</td>
</tr>
<tr>
<td>Strategic planning &amp; estate consolidation</td>
<td></td>
<td>A14.4</td>
<td>Liaise with Council’s town planning officers regarding the transfer of Lot 13 RP114420 West Burleigh Rd from the Community Facilities precinct to the Environmental Open Space precinct under the Burleigh Ridge LAP during the next revision of the Gold Coast Planning Scheme.</td>
<td>L</td>
</tr>
<tr>
<td>Naming of reserves</td>
<td>A16.1</td>
<td>The name Tchoobey Reserve be formalised at the adoption of this management plan for lots 13 RP114420, 208 W311480, 36 RP228768 and 3 RP864252.</td>
<td>M</td>
<td>2 years</td>
</tr>
<tr>
<td>Catchment management</td>
<td>A2.4</td>
<td>Work with Council’s catchment management officers to implement management strategies to repair existing bank erosion and mitigate causative agents in the vicinity of Lot 208 W311480 and Lot 36 RP228768.</td>
<td>M</td>
<td>5 years</td>
</tr>
<tr>
<td>Lot 36 RP228768</td>
<td>Pest plants &amp; ecological restoration</td>
<td>A6.2</td>
<td>Where resources allow, develop and implement a restoration plan. Investigate alternative sources for funding of restoration projects where necessary.</td>
<td>M</td>
</tr>
<tr>
<td>Recreation opportunities</td>
<td>A9.2</td>
<td>Investigate opportunities for extension of Burleigh Head - David Fleay Wildlife Park linkage south of David Fleay Park, via a footbridge over Oyster Creek and track upgrade through lot 36 RP228768 (track 6). Investigations should include flood studies to identify any risks of upstream flooding associated with a bridge.</td>
<td>M</td>
<td>3 years</td>
</tr>
<tr>
<td></td>
<td>A9.3</td>
<td>Liaise with Council’s strategic environmental planning officers regarding possible further extensions of the Burleigh-Reedy Creek walking linkage through to the new Reedy Creek transport interchange and to Tallebudgera Valley via Elanora Wetlands.</td>
<td>L</td>
<td>10 years</td>
</tr>
<tr>
<td>Naming of reserves</td>
<td>A16.1</td>
<td>The name Tchoobey Reserve be formalised at the adoption of this management plan for lots 13 RP114420, 208 W311480, 36 RP228768 and 3 RP864252.</td>
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<tr>
<td>Pest plants &amp; ecological restoration</td>
<td>A6.2</td>
<td>Where resources allow, develop and implement a restoration plan. Investigate alternative sources for funding of restoration projects where necessary.</td>
<td>M</td>
<td>10 years</td>
</tr>
<tr>
<td>Lot 3 RP864252</td>
<td>Naming of reserves</td>
<td>A16.1</td>
<td>The name Tchoobey Reserve be formalised at the adoption of this management plan for lots 13 RP114420, 208 W311480, 36 RP228768 and 3 RP864252.</td>
<td>M</td>
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</table>
6 References

AECOM 2009. *Burleigh Greenspace Conservation Reserves Bushfire Management Plan* 2009. ENSR Australia, 57 Berwick St, PO Box 720, Fortitude Valley, Qld 6006, Australia.


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Table of contents

1 Introduction ..................................................................................................................... 115
  1.1 Burleigh Green Space Conservation Reserves Management Plan ............................ 115
  1.2 Purpose of consultation ......................................................................................... 115
2 Methodology .................................................................................................................. 115
  2.1 Phase one: preliminary input ................................................................................ 115
  2.2 Phase two: comments on the draft ....................................................................... 116
3 Results and discussion .................................................................................................. 116
  3.1 Phase one: preliminary input ................................................................................ 116
  3.2 Phase two: comments on the draft ....................................................................... 119
    3.1.1 Domains and Local Area Plans .................................................................... 119
Appendices ..................................................................................................................... 124
  Appendix 1 Have Your Say flyer for first phase consultation .................................. 125
  Appendix 2 Have Your Say flyer distribution area .................................................... 127
1 Introduction

1.1 Burleigh Green Space Conservation Reserves Management Plan

In July 2009 a draft management plan was prepared for Burleigh Green Space Conservation Reserves (the planning area). The planning area encompasses a network of public environmental open space areas extending along Tallebudgera Creek from Burleigh Head to the Pacific Motorway, including Burleigh Ridge Park, Ocean Parade Bush Parklands, Herbert Park, Ron Mason Park and Skyline Terrace Reserve.

The management plan provides a strategic framework for the protection, restoration and use of the reserves. It lists guidelines and actions to conserve and enhance the natural and cultural values of the planning area, whilst promoting these values through nature-based recreation, interpretation and community involvement.

1.2 Purpose of consultation

Community consultation was conducted by Gold Coast City Council (GCCC), firstly to gain a greater understanding of the values and aspirations the community have for the reserve and secondly to obtain input into the management strategies presented within the plan.

Community consultation on the Burleigh Green Space Draft Management Plan was carried out in accordance with Council’s Management Guidelines for Sites Acquired with the Open Space Preservation Levy (November 2004), which require that management plans for OSPL lands be prepared with community input.

2 Methodology

A two phase consultation process was used to obtain both preliminary input to assist with the drafting of the plan and, subsequently, comments on the management strategies presented within the draft plan.

2.1 Phase one: preliminary input

The initial consultation phase was conducted over a four week period, from 17 November to 17 December 2007.

An information flyer and feedback form (Appendix 1) was distributed to 20,000 residents living in the vicinity of the planning area (Appendix 2).

Consultation was opened to the broader Gold Coast community through an advertisement in the Gold Coast Sun newspaper. Flyers were also made available at all GCCC Libraries and Administration Centres, and were electronically available on the Have Your Say section of the GCCC website.

Letters were sent out to all respondents to the first phase in January 2008. Respondents were thanked for their input and their contact details recorded so that they could be advised of the phase two consultation process.
2.2 Phase two: comments on the draft

Second phase community consultation was conducted over a six week period from 18 January to 28 February 2010. During the second phase members of the public were given the opportunity to comment on the issues and management strategies presented in the draft plan, including management of flora and fauna, cultural heritage, bushfire, pest plants and animals, nature-based recreation, infrastructure and reserve access.

The community was advised that the draft plan was available for comment via the Have Your Say section of the GCCC website, advertisements in the Gold Coast Sun and Gold Coast Bulletin newspapers and information on Council’s phone hold message.

Letters were also sent out to all those that had responded to the first phase consultation and indicated that they would like to be kept informed of subsequent consultation. In total 44 letters were sent.

3 Results and discussion

3.1 Phase one: preliminary input

A total of 43 responses were received from residents of the surrounding area and beyond. The majority of responses were received from residents in nearby suburbs, including Palm Beach (21), Elanora (5), Varsity Lakes (4), Reedy Creek (1), Tallebudgera (1), Robina (1) and Currumbin (1). However, surprisingly, only three responses were received from residents of Burleigh Heads. Two responses were also received from residents of Coomera, and two from Upper Coomera.

Respondents were generally supportive of Council’s intent to develop a management plan for the reserves and there was strong support for protection and enhancement of the reserve network, both for its ecological function as a wildlife corridor, its importance for community health and wellbeing and for future generations.

Other issues raised included management of pest plants, maintenance of a walking track network, creek bank erosion, illegal activities and use of adjacent QPWS conservation parks by vagrants, the need to provide better connectivity between reserves and the importance of coordinated management with Queensland Parks and Wildlife Service. One respondent noted that they walked a dog in the reserves, however another raised concerns about the presence of domestic animals within the reserves, and over a quarter of respondents raised native wildlife protection as a key issue. Table 1 summarises the key issues raised during phase one consultation, and lists how these issues are addressed in the draft management plan. A more detailed summary of the comments received on the plan is available on request from the Natural Areas Management Unit.
**Table 1 Summary of key issues raised during Phase 1 consultation and their treatment in the Draft Management Plan for Burleigh Green Space Reserves**

<table>
<thead>
<tr>
<th>Theme</th>
<th>How this is addressed in the plan</th>
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</thead>
<tbody>
<tr>
<td>Protection and enhancement the reserve network.</td>
<td>Section 3.2 states that the overall management objective for the planning area is to maximise its connectivity and ecological viability, with the conservation and protection of its environmental, scenic, catchment and cultural heritage values paramount. Protection and enhancement of the reserve network is further addressed throughout the plan, particularly in Sections 4.1 to 4.15.</td>
</tr>
<tr>
<td>Protection of the ecological values of the Burleigh-Springbrook wildlife corridor</td>
<td>Protection of the values of the wildlife corridor is a key theme in the draft management plan, and is addressed in detail in Section 4.4, with management strategies including habitat restoration, use of fauna-friendly fencing, coordinated management with neighbouring land managers, development of conservation incentives for private landholders, public education and development of appropriate fauna management strategies for the new Reedy Creek transport corridor.</td>
</tr>
<tr>
<td>Protection of the green space for community health and wellbeing</td>
<td>The recreational and socio-economic values of the planning area are identified in Sections 2.3.3 and 2.3.5 of the draft management plan. Landscape protection measures, including rehabilitation of degraded areas, environmental controls during essential works, private landholder conservation incentives and land acquisition are addressed in Section 4.1.3 of the plan.</td>
</tr>
<tr>
<td>Improved linkage of reserves</td>
<td>Section 4.9 of the draft management plan addresses pedestrian linkage through the planning area, with a number of upgrades to existing tracks proposed to improve connectivity. From an ecological perspective, enhanced connectivity of the wildlife corridor is addressed in Sections 4.3 and 4.4 (see above). Section 4.14 describes strategic planning opportunities to improve linkage between reserves, including land acquisition, NAMU involvement in the developer contributions process, private landholder conservation incentives and planning scheme amendments. The draft management plan also places considerable emphasis on coordinated management between Council and QPWS (Section 4.15) to ensure that Council and state owned reserves are managed as an integrated natural system.</td>
</tr>
<tr>
<td>Maintenance of walking track network</td>
<td>Management of the walking track network is addressed in Section 4.9. A number of track closures are proposed where informal tracks, with little or no connectivity, are causing environmental degradation and wildlife disturbance. However, where existing formal or informal tracks are safe, stable and provide connectivity between reserves, track upgrades and interpretive signage will be used to create a linked pedestrian network that showcases the reserves. Again, coordinated management between Council and QPWS (sections 4.12 and 4.15) is proposed to ensure provision of a viable walking network that links through Council and state managed reserves.</td>
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<tr>
<td>Theme</td>
<td>How this is addressed in the plan</td>
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<tr>
<td>Control of pest plants</td>
<td>Control and management of pest plants is addressed in Section 4.6. Management strategies proposed include development and implementation of restoration plans for all reserves within the planning area, education of neighbours and other park users and regular collection and updating of records regarding pest plants. It should be noted that Council is not responsible for weed management on neighbouring state managed reserves, which are managed by QPWS. However Council’s Natural Areas Management Unit (NAMU) is liaising with QPWS regarding restoration of adjoining reserves.</td>
</tr>
<tr>
<td>Control of domestic animals/dog walking</td>
<td>Dog walking will not be permitted in reserves due to the impact on native fauna including koalas and ground dwelling mammals (Section 4.4). Numerous other Council managed parks near to the planning area provide space for dog walking, including off-leash exercise areas, and signage will direct dog walkers to these areas.</td>
</tr>
<tr>
<td>Safety risks and illegal activities</td>
<td>Illegal activities in the planning area will be managed through ranger patrols and public education. Section 4.12 of the plan identifies the importance of interpretation and education in encouraging appropriate visitor behaviour. Closure of degraded informal tracks and formalisation of safe, functional linkages, coupled with interpretive signage and an increased ranger presence at peak times, are proposed to help provide a safe environment for the public.</td>
</tr>
<tr>
<td>Erosion of Tallebudgera Creek</td>
<td>Issues relating to creek bank erosion were raised by two people during this consultation and were also raised by respondents to community consultation carried out during development of the Tallebudgera Creek Catchment Management Plan (CMP). The CMP is a more appropriate instrument to address this issue as it takes on a whole of river, rather than a site by site, approach. Section 4.2.3 of the Burleigh Green Space Draft Management Plan identifies opportunities for Councils Natural Areas Management Unit to work together with Councils Catchment Management Unit in the implementation of initiatives proposed within the CMP, including public education and vegetation restoration.</td>
</tr>
<tr>
<td>Community partnerships</td>
<td>To date, the level of community interest in the planning area has been relatively low. Section 4.12.3 of the draft management plan describes methods proposed to engage the community, including development of an interpretation plan, use of educational programs such as Walk on the Wild Side, a Good Neighbour Program and an Urban Biodiversity Program.</td>
</tr>
<tr>
<td>Involvement of Aboriginal community</td>
<td>Section 4.8 of the draft management plan addresses issues relating to the Aboriginal community. Consultation with Aboriginal people with traditional affiliations to the planning area is recommended relating to decisions regarding the management of Aboriginal cultural heritage. Additionally consultation with the Aboriginal community will be sought during development of the interpretation plan (section 4.12.3).</td>
</tr>
<tr>
<td>Coordinated management with QPWS</td>
<td>Coordinated management with QPWS is a recurring theme of the draft management plan, because of the high level of connectivity between neighbouring Council and state managed reserves. A cooperative management approach with QPWS is proposed with regards to management of fauna, flora, catchments, fire, pest plants and animals, recreation and education/interpretation (Section 4.15).</td>
</tr>
<tr>
<td>Speed limits along Tallebudgera Drive</td>
<td>A speed limit of 50 kilometres per hour along Tallebudgera Drive was requested by one respondent, however issues relating to Council roads are outside the scope of this plan, which relates to Council-managed natural areas.</td>
</tr>
</tbody>
</table>
3.2 Phase two: comments on the draft management plan

Four hard copies of the draft management plan were requested by members of the community. No new responses were received on the draft plan; however one respondent to the first phase consultation re-sent a previous submission (from the first consultation phase). Table two details how the key points of this submission are addressed in the management plan.

This low level of public interest was somewhat surprising given the high ecological values of the planning area and the large number of residents living in the vicinity, but possibly reflects the positive nature of the management plan.

Table 2 Summary of key issues raised during Phase 2 consultation and their treatment in the Draft Management Plan for Burleigh Green Space Reserves

<table>
<thead>
<tr>
<th>Theme</th>
<th>How this is addressed in the plan</th>
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</thead>
<tbody>
<tr>
<td>Guarantee of green space connections for all time for all generations.</td>
<td>3.1.1.1 Domains and Local Area Plans The Gold Coast Planning Scheme designates the majority of Burleigh Green Space reserves as Environmental Public Open Space within the Burleigh Ridge Local Area Plan (LAP), or as Tallebudgera Creek and Environs within the West Burleigh LAP. The management intent for these precincts is to maintain land a natural state, with extensive vegetation cover and development limited to passive recreation facilities to maintain the generally natural profile and character of Burleigh Ridge and/or protection of land in public ownership for nature conservation, outdoor recreation, landscape preservation, environmental buffers and natural resource management, and natural hazard management purposes.</td>
</tr>
<tr>
<td>Survey of local residents.</td>
<td>Resident perceptions and input has been sought through the two-phase planning process conducted during development of the Burleigh Green Space Conservation Reserves Management Plan (see Section 2 above). Further opportunities for public consultation and/or education are identified in the Burleigh Green Space Reserves Bushfire Management Plan (AECOM 2009) (see Section 4.5.3 of Burleigh Green Space Conservation Reserves Management Plan) and in the following actions listed within the Burleigh Green Space Conservation Reserves Management Plan: A6.5 Educate neighbouring residents about the threat posed by ‘garden escapes’ on ecological values within the reserves through interpretive signage, Council’s website, local media, Council workshops, Council’s Urban Biodiversity Program (refer to Section 4.12), patrols by natural areas operational staff and the development and distribution of educational material regarding problematic garden species and suitable native garden alternatives. Identify priority streets adjacent to the reserves for targeted action (door knocks and letterbox drops). A7.6 Promote responsible pet ownership and community understanding of the impacts of domestic animals on native fauna through interpretive signage (refer to Section 4.12), Council’s website, local media, Council’s Good Neighbour Program, and during operational patrols. A9.15 Undertake regular weekday and weekend patrols of the planning area to monitor visitor safety and usage along formal recreation tracks, to encourage safe and appropriate use by visitors, and to control prohibited activities.</td>
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<tr>
<td>Theme</td>
<td>How this is addressed in the plan</td>
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<tr>
<td>A12.1 Prepare and implement an Interpretation Plan for the reserve</td>
<td>Prepare and implement an Interpretation Plan for the reserve network to ensure consistent quality of signage and effective communication of reserve activities and facilities. Interpretive signage should focus on parts of the planning area in which maintenance/restoration activities are proposed as part of this plan.</td>
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<tr>
<td>network to ensure consistent quality of signage and effective</td>
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<tr>
<td>communication of reserve activities and facilities. Interpretive</td>
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<tr>
<td>signage should focus on parts of the planning area in which</td>
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<tr>
<td>maintenance/restoration activities are proposed as part of this plan.</td>
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<tr>
<td>A12.6 Continue Council’s program of educational walks and workshops</td>
<td>Continue Council’s program of educational walks and workshops in the planning area.</td>
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<tr>
<td>in the planning area.</td>
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<tr>
<td>A12.7 Improve visitor behaviour, understanding and support of reserve</td>
<td>Improve visitor behaviour, understanding and support of reserve management initiatives through increased operational patrols on weekends and holiday periods.</td>
</tr>
<tr>
<td>management initiatives through increased operational patrols on</td>
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<td>weekends and holiday periods.</td>
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<tr>
<td>A12.10 Implement a good neighbour program tailored towards</td>
<td>Implement a good neighbour program tailored towards neighbouring residences. This program should address issues such as: planting of suitable native species, responsible disposal of household and garden waste, responsible pet ownership, a coordinated approach to pest plant and animal control, and bushfire hazard reduction strategies.</td>
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<tr>
<td>neighbouring residences. This program should address issues such</td>
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<td>as: planting of suitable native species, responsible disposal of</td>
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<td>household and garden waste, responsible pet ownership, a coordinated</td>
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<td>approach to pest plant and animal control, and bushfire hazard</td>
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<td>reduction strategies.</td>
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<tr>
<td>A12.11 Assist in the implementation of community initiatives proposed</td>
<td>Assist in the implementation of community initiatives proposed in Council's 2009 Nature Conservation Strategy, including the Urban Biodiversity Program and Integrated Volunteer Program.</td>
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<tr>
<td>in Council's 2009 Nature Conservation Strategy, including the Urban</td>
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<tr>
<td>Biodiversity Program and Integrated Volunteer Program.</td>
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<tr>
<td>Protection of a green space connection through Reedy Creek, Bonogin</td>
<td>Protection of linkages through the suburbs of Reedy Creek, Bonogin and Austinville are beyond the scope of this report, which addresses the management of conservation parks within the suburb of Burleigh Heads. However, the management plan acknowledges the importance of the Burleigh Green Space reserves within this corridor (refer to Sections 2.2, 4.3.1 and 4.4.1), and the following actions are relevant to this:</td>
</tr>
<tr>
<td>and Austinville.</td>
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<tr>
<td>A3.4 Work with Council’s environmental planning officers to</td>
<td>Work with Council’s environmental planning officers to maximise opportunities to provide/retain future vegetation connectivity along the Burleigh-Springbrook corridor, eg. through land acquisition and private landholder/developer incentives.</td>
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<tr>
<td>maximise opportunities to provide/retain future vegetation</td>
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<td>connectivity along the Burleigh-Springbrook corridor, eg. through</td>
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<td>land acquisition and private landholder/developer incentives.</td>
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<tr>
<td>A3.5 Liaise with other land managers, particularly QPWS, to</td>
<td>Liaise with other land managers, particularly QPWS, to encourage restoration of native vegetation and generate support for a collaborative approach to vegetation management in the Burleigh-Springbrook corridor.</td>
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<tr>
<td>encourage restoration of native vegetation and generate support for</td>
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<tr>
<td>a collaborative approach to vegetation management in the Burleigh-</td>
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<tr>
<td>Springbrook corridor.</td>
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<td>A4.2 Retain and/or restore elements or areas of key indigenous fauna</td>
<td>Retain and/or restore elements or areas of key indigenous fauna habitat, and maintain and enhance critical habitat corridors for fauna identified on, or adjacent to, conservation reserves. In particular, investigate opportunities for enhancing swamp rat habitat along the waterway in Herbert Park.</td>
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<tr>
<td>habitat, and maintain and enhance critical habitat corridors for</td>
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<tr>
<td>fauna identified on, or adjacent to, conservation reserves. In</td>
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<td>particular, investigate opportunities for enhancing swamp rat habitat</td>
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<td>along the waterway in Herbert Park.</td>
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<tr>
<td>A4.3 Liaise with Council’s environmental planning officers, SEQ</td>
<td>Liaise with Council’s environmental planning officers, SEQ Catchments, QPWS and the Richmond Birdwing Recovery Network (RBRN) to integrate Council operations with existing programs to restore Richmond birdwing butterfly habitat connectivity along the Burleigh-Springbrook corridor.</td>
</tr>
<tr>
<td>Catchments, QPWS and the Richmond Birdwing Recovery Network (RBRN)</td>
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<td>to integrate Council operations with existing programs to restore</td>
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<tr>
<td>Richmond birdwing butterfly habitat connectivity along the Burleigh-</td>
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<tr>
<td>Springbrook corridor.</td>
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<tr>
<td>The Burleigh-Springbrook ecological corridor was one of five critical</td>
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<tr>
<td>corridors identified in Council’s 2009-2019 Nature Conservation</td>
<td>The Burleigh-Springbrook ecological corridor was one of five critical corridors identified in Council’s 2009-2019 Nature Conservation Strategy, and has recently been the subject of the Burleigh to Springbrook Bioregional Corridor Study, which was endorsed by Council in November 2009.</td>
</tr>
<tr>
<td>Strategy, and has recently been the subject of the Burleigh to</td>
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<tr>
<td>Springbrook Bioregional Corridor Study, which was endorsed by</td>
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<tr>
<td>Council in November 2009.</td>
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<td>Theme</td>
<td>How this is addressed in the plan</td>
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<tr>
<td>Opportunities for a passive transit path in the area.</td>
<td>Sections 4.9.1.1 and 4.9.1.4 identify opportunities for recreational tracks within the planning area. Track upgrades have been identified to maximise connectivity with other open space areas and key community infrastructure (e.g. schools), whilst minimising degradation of the ecological values of the reserve through fragmentation or erosion. Proposed actions for pedestrian connectivity include track upgrades and systematic monitoring to identify where further connectivity may be needed (refer to Section 4.9.3.2)</td>
</tr>
</tbody>
</table>
| Coordination with Griffith University and Queensland Parks and Wildlife Service (QPWS) | A coordinated management approach with QPWS is a key objective of the management plan, due to the extensive shared boundaries between Council and State managed reserves. Coordinated reserve management is addressed in Section 4.15 and also in the actions and guidelines listed below:  
  
  **A3.5** Liaise with other land managers, particularly QPWS, to encourage restoration of native vegetation and generate support for a collaborative approach to vegetation management in the Burleigh-Springbrook corridor.  
  
  **A4.3** Liaise with Council’s environmental planning officers, SEQ Catchments, QPWS and the Richmond Birdwing Recovery Network (RBRN) to integrate Council operations with existing programs to restore Richmond birdwing butterfly habitat connectivity along the Burleigh-Springbrook corridor.  
  
  **A4.5** Liaise with QPWS to develop consistent and coordinated fauna management practices and connectivity for linked areas of fauna habitat.  
  
  **A4.6** Liaise with QPWS regarding opportunities for fauna friendly fencing in Tallebudgera Conservation Park adjacent to lot 13 RP114420.  
  
  **G5.19** Liaise with QPWS regarding fire management planning on reserves adjacent to the planning area.  
  
  **A6.7** Participate in the development and implementation of coordinated regional pest plant control initiatives with neighbours, community groups, and other land management agencies. Specifically: liaise with QPWS to facilitate collaborative pest plant management on adjacent Council and State managed reserves.  
  
  **A7.3** Work with QPWS to develop and implement a coordinated approach to the management of pest animals within the planning area and adjacent state managed reserves.  
  
  **A9.1** Liaise with QPWS regarding the repair and maintenance of the track through David Fleay Wildlife Park and lot 206 W311480 (track 4) and to ensure coordinated nature-based recreation planning throughout the Burleigh linkage.  
  
  **A9.12** Provide information, including downloadable maps, on Council’s website relating to all recreational opportunities within the planning area. This should include development of a joint Council-QPWS brochure and signage to publicise the Burleigh-Tallebudgera trail network. |
<table>
<thead>
<tr>
<th>Theme</th>
<th>How this is addressed in the plan</th>
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<tbody>
<tr>
<td><strong>G11.5</strong> Liaise with Council’s regulatory services, economic development and law enforcement officers and QPWS where development of further commercial activities (i.e. tourism, corporate events, filming) is proposed within the planning area.</td>
<td></td>
</tr>
<tr>
<td><strong>A12.3</strong> Liaise with QPWS during development of the Interpretation Plan and, where possible develop joint agency interpretive material, to maximise opportunities to inform park users of the holistic ecological and recreational values of the reserve corridor.</td>
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</tr>
<tr>
<td><strong>G15.1</strong> Collaborate with QPWS in the management of threatened species, fire, catchments, pest control, access and recreation in Council and State-managed conservation reserves.</td>
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<tr>
<td><strong>A15.1</strong> Work with QPWS on collaborative management initiatives identified in Sections 4.2-4.12 of this management plan.</td>
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Collaboration with other research institutes is also identified in the plan, through the following guidelines and actions:

<p>| G13.9 | Collaborate with research institutions and other relevant organisations where opportunities exist to develop a strategic approach to addressing key management questions within the region. |
| A13.5 | Using the Council’s Natural Areas Monitoring Projects Database prepare and update a prospectus of priority research projects to be distributed to research organisations and/or tertiary institutions as a guide to preferred research projects within the reserve. Key monitoring priorities are listed in Sections 4.1-4.16 of this plan, and include: |
| - updates to flora and fauna inventories |
| - baseline studies of estuarine, freshwater and invertebrate assemblages |
| - monitoring of significant species and communities and further understanding of their management requirements (e.g. koalas, Richmond birdwing butterfly, mangrove ant blue butterfly) |
| - monitoring of vegetation change and succession |
| - the role of wildlife corridors in the area |
| - monitoring of fauna populations and community interactions |
| - management issues associated with fragmented urban bushland reserves, e.g., pest management issues, the role of fire in management etc. |
| - monitoring of the planned burn program and its effects on fuel load accumulation |
| - monitoring the success of restoration programs within the planning area |
| - cultural heritage research |
| - the acceptable limits of disturbance for different environments from recreational and management activities |
| - investigation of recreational demand within the context of the planning area and the entire city. |</p>
<table>
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<tr>
<th>Theme</th>
<th>How this is addressed in the plan</th>
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<tbody>
<tr>
<td>Creation of a community bushcare group.</td>
<td>As described in Section 4.12.1 of the plan: At present there are no community environmental groups operating in or adjacent to the reserves, although an individual resident is undertaking restoration works in Ocean Parade Bush Parklands, supported by Council through the Beaches to Bushland program. Community groups and volunteers may have a conservation role within the planning area, for example through involvement in flagship species conservation projects such as the Richmond Birdwing Recovery Network (refer to Section 4.4), fauna monitoring, and public education. A number of initiatives proposed through Council’s new Nature Conservation Strategy 2009-2019, including the Urban Biodiversity Program and the Integrated Volunteer Program, provide opportunities to improve community involvement in conservation in the Burleigh area. Community education initiatives in the planning area include children’s wildlife walks and adult ecological workshops demonstrating vegetation restoration techniques within Burleigh Ridge Park. These workshops have been very successful and the location provides participants with the opportunity to see restoration works in progress and compare condition of adjacent restored and unrestored sites. The children’s activities provide opportunities to learn about the City’s wildlife through guided fauna spotlighting tours during school holidays. Currently up to two night time spotlight tours are run per school holiday period. David Fleay Wildlife Park also offers a range of school holiday activities in addition to environmental education programs for school groups. Relevant actions and guidelines include: <strong>G12.2</strong> Where volunteers or community groups express an interest in involvement in conservation activities within the reserves, manage in accordance with Councils Integrated Volunteer Program. <strong>A12.6</strong> Continue Council’s program of educational walks and workshops in the planning area. <strong>A12.10</strong> Implement a good neighbour program tailored towards neighbouring residences. This program should address issues such as: planting of suitable native species, responsible disposal of household and garden waste, responsible pet ownership, a coordinated approach to pest plant and animal control, and bushfire hazard reduction strategies. <strong>A12.11</strong> Assist in the implementation of community initiatives proposed in Councils 2009 Nature Conservation Strategy, including the Urban Biodiversity Program and Integrated Volunteer Program.</td>
</tr>
</tbody>
</table>
Appendices

Appendix 1. Have your say flyer for first phase consultation.

Appendix 2. Map showing area in which flyers were distributed.
Appendix 1 Have Your Say flyer for first phase consultation

Have your say:
Burleigh Greenspace Conservation Reserves

Gold Coast City Council is preparing a management plan for reserves along the Burleigh ridgeline, known collectively as Burleigh Greenspace. Your feedback on how we manage these reserves is important. Please become involved.

Delivery Address:
PO Box 5042
GOLD COAST MC QLD 9729

Attention: Burleigh Conservation Planning Officer
Natural Areas Management Unit
Carrara Sporting complex

Chief Executive Officer (011)
Gold Coast City Council
Reply Paid 5042
GOLD COAST MC QLD 9729

Burleigh Green Space Have Your Say
Feedback form November 2007
goldcoastcity.com.au

Gold Coast City Council
PO Box 5042
GCMC QLD 9729

Burleigh Conservation Planning Officer
Gold Coast City Council
Tel: 07 5581 1523

FOLD AND POST
Location
Burleigh Greenspace reserves cover nearly 90 hectares of the prominent ridge extending west above Tallebudgera Creek, from Burleigh Headland to the Pacific Motorway, and include Burleigh Ridge Park, Ocean Parade Parklands, Herbert Park, Ron Mason Park and Skyline Terrace Reserve.

Regional significance
Burleigh Greenspace forms an important link between the coastal forests of Burleigh Headland and higher altitude rainforests of Springbrook. Coast to hinterland corridors like this are rare, and are critical in allowing native wildlife to migrate and access seasonal food resources throughout the year.

The reserves contain eucalypt forest, vine forest, mangroves and estuarine communities. Despite the surrounding urbanisation, these habitats support a surprising number of native animals including koalas, flying foxes, the yellow-footed antechinus and more than 60 native bird species.

Burleigh has long held significance for the Gold Coast’s traditional owners, as evidenced by middens and bora rings in the vicinity. Today, the green refuge of Burleigh Greenspace still contributes to the health and lifestyle of residents, offering a space for daily exercise and relaxation and attracting native birds to residents’ backyards. The reserves also add to the beauty of tourist destinations such as Burleigh Heads and Palm Beach, by providing a scenic backdrop to the coastal strip.

Management planning
The management plan will provide strategies to protect and enhance the natural, scenic, recreational and cultural values of Burleigh Greenspace, based on sound scientific information. Your input into the planning process is essential to make sure the plan reflects the needs of the community.

Registration of interest form (submissions close 17 December 2007)
To register your interest in future updates or make a submission, please complete and return the form below.

1. Applicant details
   Name: 
   Residential address: 
   Postal address: 
   Home phone: 
   Mobile: 
   Organisation (if any): 
   Post Code: 
   Work phone: 
   Email: 

2. Your feedback (attach additional information separately)
   Please do not provide originals as Council is unable to return supplied information or photographs

[Blank space for feedback]

Do you wish to be kept informed of the planning process? □ Yes □ No (please tick)

Thank you for your feedback. Council will notify you when the draft management plan is available for public comment.
Appendix 2 Have Your Say flyer distribution area

Flyer distribution area shown in pink
ITEM 2 ECONOMIC DEVELOPMENT & MAJOR PROJECTS
DESIGN PRINCIPLES FOR NEW VEGETATION FOR GOLD COAST CITY COUNCIL RETURNED WORKS WITHIN THE GOLD COAST RAPID TRANSIT CORRIDOR
TT1173/46/01/01(P6)
Refer 24 page attachment

1 BASIS FOR CONFIDENTIALITY

Not Applicable.

2 EXECUTIVE SUMMARY

Not Applicable

3 PURPOSE OF REPORT

The purpose of this report is to seek Council’s approval of the attached Design Principles for New Vegetation for Gold Coast City Council (GCCC) Returned Works within the Gold Coast Rapid Transit (GCRT) Corridor.

The design principles specifically relate to broad vegetation issues within the GCRT GCCC Returned Works areas and are supported by the current Council Policy documents - GCCC Land Development Guidelines and the GCCC Landscape Strategy Part 1 & Part 2.

To balance the GCRT corridor spatial restrictions and operational issues with amenity and safety issues, it is important for GCCC to clearly articulate key principles supported by current Council policy for the GCCC Returned works. This will enable the State and bidding proponents to install vegetation that is maintainable and sustainable within and outside corridor ‘vegetation clear zones’, whilst being mindful of the Concept Design Impact Management Plan (CDIMP) “green boulevard” strategy for the corridor.

4 PREVIOUS RESOLUTIONS

Minute No G08.0904.003 (in part) -

1 That Council supports the decision of the Qld Government to prefer Light Rail as the mode for the Gold Coast Rapid Transit project.

2 a That Council supports the staged delivery of the Light Rail System from Helensvale to Coolangatta

   i The first stage from Griffith University & Hospital to Broadbeach to be operational by 30 June 2013.

   ii The next sections from Griffith University & Hospital to Helensvale and Broadbeach to Burleigh Heads to be operational by 30 June 2015.

b i To give effect to 2 a (i) above Council will commit direct cash and other contributions to a total value of $120m to the project from Griffith University & Hospital to Broadbeach, to be paid over the period July 2009 to June 2013

   ii To give effect to 2 a (ii) above Council will commit a further $30m of direct cash contribution to the project for the sections Griffith University & Hospital to Helensvale and Broadbeach to Burleigh
5 DISCUSSION

Note: For the purpose of this document, vegetation refers to all native and exotic trees, palms, shrubs, ground covers and turf.

Background

Operational management and maintenance of Section 2 and Section 3 of the GCRT Corridor will be returned to the GCCC after the construction of the light rail. This includes the road and verge pavements, lighting, vegetation and street furniture and other structures outside the legal lease area of the Operator Franchise.

Vegetation is an important element that will contribute to the project, with the CDIMP vision for the GCRT road corridor promoting a “Green Boulevard”. This is also important within the GCCC returned works areas, particularly from a city image and local character perspective, safe movement of traffic, visual access and amenity, ongoing maintenance, underground and above ground services impacts, adequate growing room for sustainable plant growth and user amenity such as shade and visual amenity.

There have been discussions and requests for resolution from the GCRT Project team regarding conflicting GCCC policy on what is an acceptable ‘vegetation clear zone’ setback and how such relates to the planting of new vegetation along the GCRT corridor.

Design Principles for New Vegetation

Currently Council generally utilises:

- In planting of new vegetation within ‘clear zones’ and other parts of the road verge, the adopted ‘GCCC Land Development Guidelines’ primarily for greenfield sites, eg. new subdivision or new roads where there is a consistent corridor for services, footpaths and kerb setbacks etc.

- Council’s Landscape Strategy Part 1 and 2 to guide decisions about the planting of new vegetation (species selection and location) in road verges from a new private development perspective or by in-house Council operations and design.

- The Landscape Strategy Part 2 to identify performance criteria addressing issues such as city image and local character, safe movement of traffic, visual access and amenity, ongoing maintenance, underground and above ground services impacts, adequate growing room for sustainable plant growth, and user amenity such as shade and visual amenity.

The ‘Design Principles for New Vegetation for GCCC Returned Works – GCRT Corridor’ clearly define the overall principles for vegetation in road verges and medians outlined in the above documents within the GCRT corridor Returned Works Area.
Design Principles for New Vegetation for Gold Coast City Council
Returned Works within the Gold Coast Rapid Transit Corridor
TT1173/46/01/01(P6)

The Design Principles document makes reference to the following general principles, all of which are further explained in the above Council documents:

- Vegetation Characteristics
- Appropriateness to Use an Amenity
- Maintenance
- Services/Utilities
- Disability Discrimination Act
- Retention of Significant Vegetation
- Crime Prevention through Environmental Design (CPTED)

Clear Zones for Vegetation

Note:

A travel lane is defined as that part of the road made available to vehicles travelling in a particular direction. May consist of one or two running lanes.

A clear zone is defined as an area adjacent to the traffic lane that could be kept free from features that would be potentially hazardous to errant vehicles. The clear zone is a compromise between the recovery area for an errant vehicle, the cost of providing that area and the probability of an errant vehicle encountering a hazard. The clear zone should be kept free of non-frangible hazards where economically and environmentally possible. Alternatively hazards within the clear zone should be treated to make them safe or be shielded by a safety barrier.

Currently Council generally utilises:

- the Austroad 2009 requirements when undertaking road design within the city, including designation of ‘clear zones’.

The existing GCRT Corridor for Section 2 and 3 is primarily located in a ‘brownfield area,’ i.e. it has existing infrastructure under and above the ground located in varying alignments and depths, existing significant vegetation, varying verge levels, varying road configurations and alignments, varying adjacent uses such as commercial, residential, tourist and park land, tight and varying verge widths. As such it cannot be viewed in the same way as a new highway construction or a subdivision road.

The road verges and some (very few) median strips identified in the Reference Design for Early and Enabling Works (EEW) for Sections 2 and 3 are typically of the following widths:

- Gold Coast Highway – typically 3.5m from kerb to property boundary
- Nerang Street – typically 3.5m with some areas 4.5m from kerb to property boundary
- Queen Street – typically 3.5m from kerb to property boundary
- Parklands Drive – typically between 4.0m and 6.0m, with some areas 11.0m from kerb to property boundary
ITEM 2 (Continued)
DESIGN PRINCIPLES FOR NEW VEGETATION FOR GOLD COAST CITY COUNCIL
RETURNED WORKS WITHIN THE GOLD COAST RAPID TRANSIT CORRIDOR
TT1173/46/01/01(P6)

Median strips are generally around 2.0m (where they occur – not a significant number).

The road verge will need to accommodate elements such as the following within its width
(excluding conflict with underground infrastructure)

- A concrete footpath varying from 2.0 – 3.0m approx. depending on location
- Adequate and appropriate setbacks from back of kerb for ‘vegetation’ (including trees, palms and garden beds of shrubs and ground covers) to accommodate safe movement of pedestrians and vehicular traffic
- Adequate and appropriate setbacks from footpath edges and kerb edges to allow adequate growing space and depth for the vegetation to be sustainable in the short and long term (eg. longevity)
- Adequate and appropriate setbacks from footpath edges and kerb edges to reduce maintenance in the long term as a result of the vegetation growth impact on footpaths and kerbs
- Adequate and appropriate setbacks to allow safe ongoing maintenance by maintenance personnel without disrupting travel lanes
- Turf
- Street lighting
- Street furniture in some areas

Medians will need to accommodate elements such as the following within their width
(excluding conflict with underground infrastructure):

- Adequate and appropriate setbacks from back of kerb for ‘vegetation’ (including trees, palms and garden beds of small shrubs and ground covers) to accommodate safe movement of pedestrian and vehicular traffic
- Adequate and appropriate setbacks from footpath edges and kerb edges to allow adequate growing space and depth for vegetation to be sustainable in the short and long term (eg. longevity)
- Adequate and appropriate setbacks to allow safe ongoing maintenance by maintenance personnel without disrupting travel lanes
- Turf
- Possible street lighting

The location of vegetation within the road verge or median identified in GCRT Sections 2 and 3 cannot be made without considering the site as a ‘brownfield’ site and consideration of the issues of city image and local character, safe movement of traffic, visual access and amenity, ongoing maintenance, underground and above ground services impacts, adequate growing room for sustainable plant growth and user amenity such as shade and visual amenity.

This is particularly important from a risk and cost perspective if Council is to be responsible for the ongoing management and maintenance of the road pavement, kerbs, footpaths, lighting and vegetation within the GCRT corridor Section 2 and 3.

The Manager Traffic Management has undertaken research and has advised:

“Current Council Standard Drawings indicate that trees can be planted at a distance of 1m from the face of kerb on 2 lane and 4 lane Urban roads. However, this is on a typical cross section with a 2m bike/breakdown lane which results in a clear zone of 3m from the traffic running lane. Therefore, this would apply to all roads with this clearance.”
ITEM 2 (Continued)
DESIGN PRINCIPLES FOR NEW VEGETATION FOR GOLD COAST CITY COUNCIL
RETURNED WORKS WITHIN THE GOLD COAST RAPID TRANSIT CORRIDOR
TT1173/46/01/01(P6)

However, for the Gold Coast Highway the vehicle running lane is next to the kerb. My research indicates for these roads (4 lane arterial @ 60kph design speed) the QDMR Road Planning and Design Manual indicates a Clear Zone of approx. 4m. Other Road Authorities such as RTA and SA Main Roads indicate a Min Clear Zone of 3m.

Therefore I would have no objection to a clear zone of 3m minimum from the travel lane.”

Technical Services civil engineers also state in normal circumstances a 60 kph regulatory speed zone would have a design speed of 70 kph. Austroads 2009 identifies in these circumstances that the clear zone would be between 3.5m for flat land with low usage, and 5.0m for steep land with high usage.

For a road corridor like the Gold Coast Highway, it is generally agreed that the design speed can be reduced to accommodate the regulatory speed and as such a 3.0m clear zone is appropriate due to the existing infrastructure located in the current verge areas and spatial restrictions of the corridor.

Based on the specialist advice, the following vegetation clear zones for GCCC returned Works within the GCRT corridor were consulted on and endorsed by Council’s Gold Coast Rapid Transit Steering Committee:

- Vegetation clear zones for a **60kph regulatory** speed zone = **3.0m** from the outside edge of the travel lane
- Vegetation clear zones for a **50kph regulatory** speed zone = **2.0m** from the outside edge of the travel lane
- Vegetation clear zones for a **60kph and less regulatory** speed zone = **1.0m** from the outside edge of the travel lane

**Planting of frangible and non-frangible species within ‘vegetation clear zones’**

The applied clear zones for the GCRT corridor do not constrain the planting of some vegetation such as shrub planting to a maximum mature height of 900mm off the road pavement and the planting of frangible tree species in the ‘vegetation clear zone’.

Main Roads identify frangible species as those with a mature trunk diameter of 80mm. Due to precedents along several Gold Coast roads, the lower speed environments within the corridor, and considering the amenity issues required by the CDIMP, it is generally agreed by Council specialists in relation to the various ‘vegetation clear zones’ that in:

- regulatory speed zones of 60kph a mature trunk diameter of 100mm is acceptable
- regulatory speed zones 50kph or less a mature trunk diameter of up to a maximum of 150mm would be acceptable

All Council documentation identifies that the minimum general setback area within the road verge from nominal kerb line to the centre line of the tree is 1.0m depending on the clear zone requirements (for frangible and non-frangible species)
ITEM 2 (Continued)
DESIGN PRINCIPLES FOR NEW VEGETATION FOR GOLD COAST CITY COUNCIL
RETURNED WORKS WITHIN THE GOLD COAST RAPID TRANSIT CORRIDOR
TT1173/46/01/01(P6)

6 ALIGNMENT TO BOLD FUTURE VISION, CORPORATE PLAN, OPERATIONAL PLAN

Corporate Plan 2009-2014

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<th>Key Focus Area</th>
<th>Outcome</th>
<th>Action</th>
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<tr>
<td>3 A city connecting people and places</td>
<td>3.1 There is a choice of transport systems serving the city</td>
<td>3.1.3 Manage traffic in and around commercial centres to ensure the safety of pedestrians and cyclists; give priority to public transport and recognise that the success of commercial centres results in a degree of congestion and vitality in and near the centres</td>
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<td>3.1.4 Lead the strategic planning of the transport network and major transport initiatives as a priority for the city, working cooperatively with State and Federal Governments</td>
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<td>3.1.6 Ensure that the transport, accessibility and safety impacts of major events are well planned and managed</td>
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</table>

Corporate Strategy

The Gold Coast City Transport Plan proposes the introduction of a light rail or busway technology in at least three major corridors, to link the coastal centres with the existing Gold Coast Railway. The various stages of the Gold Coast Rapid Transit Project will deliver on that strategy.

Operational Plan 2010-2011

12. Gold Coast Rapid Transit Project:

Work with State and Federal agencies and a private sector partner (yet to be chosen) to deliver a world-class light rail public transport system for the city. Early works will focus on planning and preparation for construction of the light rail system including a partly underground station, adjustment of roads and relocation of infrastructure services. Construction is expected to commence in 2010.
ITEM 2 (Continued)

DESIGN PRINCIPLES FOR NEW VEGETATION FOR GOLD COAST CITY COUNCIL
RETURNED WORKS WITHIN THE GOLD COAST RAPID TRANSIT CORRIDOR
TT1173/46/01/01(P6)

7 FUNDING AND RESOURCING REQUIREMENTS

Not applicable.

8 RISK MANAGEMENT

No corporate risk is documented or in effect for the design and delivery of the GCRT Project (Stage 1) within GCCC, including requirements for vegetation and vegetation clear zones.

The Design Principles offer mitigation of potential risks associated with the planting of new vegetation in the GCRT corridor, together with mitigation of associated funding risks that could be experienced as a result of poor design and installation.

9 STATUTORY MATTERS

Not applicable

10 COUNCIL POLICIES

- GCCC Land Development Guidelines
- GCCC Landscape Strategy Part 1 & Part 2

No change is proposed to the above policies. The Design Principles take the relevant sections within these documents and identify them in a supporting document that clarifies Council’s requirements to the State and bidding proponents to enable costing of appropriate design solutions.

11 DELEGATIONS

Not applicable

12 COORDINATION & CONSULTATION

<table>
<thead>
<tr>
<th>Name and Title of the Stakeholder Consulted</th>
<th>Directorate or Organisation</th>
<th>Is the Stakeholder Satisfied With Content of Report and Recommendations (Yes/No) (comment as appropriate)</th>
</tr>
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<tbody>
<tr>
<td>Darren Scott – Director Economic Development &amp; Major Projects</td>
<td>Economic Development &amp; Major Projects, GCCC</td>
<td>Yes</td>
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<tr>
<td>Warren Rowe – Director Planning Environment &amp; Transport</td>
<td>Planning Environment &amp; Transport, GCCC</td>
<td>Yes</td>
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<tr>
<td>Warren Day – Director Engineering Services</td>
<td>Engineering Services, GCCC</td>
<td>Yes</td>
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<tr>
<td>David Montgomery – City Solicitor, Legal Services</td>
<td>City Governance, GCCC</td>
<td>Yes</td>
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<tr>
<td>David Corkill - Manager Strategic &amp; Environmental Planning &amp; Policy</td>
<td>Planning Environment &amp; Transport, GCCC</td>
<td>Yes</td>
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<tr>
<td>Wayne Cooper – Manager IDG</td>
<td>Engineering Services, GCCC</td>
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ITEM 2 (Continued)
DESIGN PRINCIPLES FOR NEW VEGETATION FOR GOLD COAST CITY COUNCIL
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</thead>
<tbody>
<tr>
<td>Katrina Giudice - Project Manager</td>
<td>Economic Development &amp; Major Projects, GCCC</td>
<td>Yes</td>
</tr>
<tr>
<td>Gold Coast Rapid Transit Implementation Team</td>
<td></td>
<td></td>
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<tr>
<td>Michael Farrell – Legal and Interface Team Leader</td>
<td>Gold Coast Rapid Transit</td>
<td>Yes</td>
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<tr>
<td>Jennie Graham – Executive Coordinator Urban Design</td>
<td>Engineering Services, GCCC</td>
<td>Yes</td>
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<tr>
<td>Chris Gee – City Architect</td>
<td>Planning Environment &amp; Transport, GCCC</td>
<td>Yes</td>
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<tr>
<td>Graham Bilton - Manager Traffic Management &amp; Operations</td>
<td>Engineering Services, GCCC</td>
<td>Yes</td>
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<tr>
<td>Paul Hart – Acting Executive Coordinator Parks &amp; Landscape Maintenance</td>
<td>Engineering Services, GCCC</td>
<td>Yes</td>
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<tr>
<td>Colin Brown – Coordinator</td>
<td>Community Services, GCCC</td>
<td>Yes</td>
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<tr>
<td>Citywide Greening Program</td>
<td></td>
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<tr>
<td>Richard Pascoe – Executive Coordinator Recreation Plan/Serv</td>
<td>Community Services, GCCC</td>
<td>No. Significant changes requested, minor amendments made. Further meeting in July 2010 to clarify outstanding concerns</td>
</tr>
<tr>
<td>Geoff Clemence – Contractor (EAP representative)</td>
<td>Engineering Services, GCCC</td>
<td>Yes</td>
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<tr>
<td>Tony Cockram – Senior Arboricultural Planning Officer</td>
<td>Planning Environment &amp; Transport, GCCC</td>
<td>Yes</td>
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<tr>
<td>Craig Connelly – Graduate Landscape Architect</td>
<td>Planning Environment &amp; Transport, GCCC</td>
<td>Yes</td>
</tr>
<tr>
<td>Darren Anthes – Senior Landscape Planner</td>
<td>Planning Environment &amp; Transport, GCCC</td>
<td>Yes</td>
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<tr>
<td>Bruce Bailey – Coordinator Parks Services – South</td>
<td>Engineering Services, GCCC</td>
<td>Yes</td>
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<tr>
<td>Peter Gamble – Coordinator Parks Services – North</td>
<td>Engineering Services, GCCC</td>
<td>Yes</td>
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<tr>
<td>Michael Chang – GCCC Design &amp; Construction Team leader</td>
<td>Gold Coast Rapid Transit</td>
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DESIGN PRINCIPLES FOR NEW VEGETATION FOR GOLD COAST CITY COUNCIL RETURNED WORKS WITHIN THE GOLD COAST RAPID TRANSIT CORRIDOR
TT1173/46/01/01(P6)

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<tr>
<td>Lara Solyma – Senior Open Space Design Officer</td>
<td>Community Services, GCCC</td>
<td>No. Significant changes requested, minor amendments made. Further meeting in July 2010 to clarify outstanding concerns</td>
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<tr>
<td>Kym Briese – Project Officer/Landscape Architect</td>
<td>Engineering Services, GCCC</td>
<td>Yes</td>
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<tr>
<td>Aleks Wierzbicki – Senior Landscape/Architectural Design Drafter</td>
<td>Engineering Services, GCCC</td>
<td>Yes</td>
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</tbody>
</table>

13 STAKEHOLDER IMPACTS

The Design Principles have been negotiated with all relevant stakeholders and generated to ensure the protection of community amenity and the operational and maintenance interests of GCCC. They further strengthen GCCC’s commitment to good design solutions that promote the “green boulevard” strategy in a key urbanised area within the City.

The Design principles provide direction and key requirements for GCCC returned vegetation assets to both the State and the bidding proponents to ensure that obligations are met across the project.

14 TIMING

The Design Principles for New Vegetation for GCCC Returned Works – GCRT Corridor will become effective from the date of endorsement by Council and will remain effective for the life of the project.

15 CONCLUSION

The Design Principles for New Vegetation for GCCC Returned Works – GCRT Corridor provide a clear and concise direction to both the State and the bidding proponents to ensure that GCCC requirements from a design, construction and operations and maintenance perspective are met.

The Design principles take into account all constraints within the corridor and ensure that all elements in relation to urban design and safety are considered during the design phase. By giving clear direction to the GCRT project, GCCC is ensuring commitment to the green boulevard vision while balancing the community safety requirements in a key public transport corridor.
16 RECOMMENDATION

It is recommended that Council resolves as follows:

1 That the Design Principles for New Vegetation for GCCC Returned Works GCRT Corridor are adopted and that the principles precedes all supporting documentation relevant to new vegetation in the corridor.

2 That the recommended clear zones are adopted for the GCRT Corridor Section 2 & 3:
   a Vegetation clear zones for a 60kph regulatory speed zone = 3.0m from the outside edge of the travel lane
   b Vegetation clear zones for a 50kph regulatory speed zone = 2.0m from the outside edge of the travel lane
   c Vegetation clear zones for a 40kph and less regulatory speed zone = 1.0m from the outside edge of the travel lane;

3 That the recommended increase in mature tree diameter for vegetation clear zones within the GCRT Corridor Section 2 and 3 of up to a maximum mature trunk diameter of 100mm for 60kph regulatory speed zones and maximum mature trunk diameter of 150mm for regulatory speed zones of 50kph or less is adopted.

Author:
Katrina Giudice
Project Manager Gold Coast Rapid Transit Implementation Team
6 July 2010

Authorised by:
Darren Stewart
Acting Director Economic Development & Major Projects
6 July 2010

TRACKS REF: #28071732
ITEM 2 (Continued)
DESIGN PRINCIPLES FOR NEW VEGETATION FOR GOLD COAST CITY COUNCIL
RETURNED WORKS WITHIN THE GOLD COAST RAPID TRANSIT CORRIDOR
TT1173/46/01/01(P6)

COMMITTEE RECOMMENDATION SC10.0713.002
moved Cr Shepherd seconded Cr Wayne

1 That the Design Principles for New Vegetation for GCCC Returned Works GCRT Corridor are adopted and that the principles precedes all supporting documentation relevant to new vegetation in the corridor.

2 That the recommended clear zones are adopted for the GCRT Corridor Section 2 & 3:
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CARRIED
Design Principles for New Vegetation for GCCC Returned Works GCRT Corridor

June 2010

Prepared by the Technical Services Branch, Engineering Services Directorate for the GCRT Implementation Team
### Internal Stakeholder Group:

<table>
<thead>
<tr>
<th>Group Name</th>
<th>Contact Person</th>
<th>Endorsement Date</th>
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<tbody>
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<td>Gold Coast City Council</td>
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<tr>
<td>Enrolment Issue 1</td>
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<tr>
<td>GCCC - GORT Steering Committee</td>
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<td>GCCC - Maintenance Services (ES)</td>
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<td>City Wide Greening/Parks (Gold Coast)</td>
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<td>Parks &amp; Recreational Services</td>
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<td>Technical Services Branch (ES)</td>
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<td>Planning, Environment &amp; Transport (EAP)</td>
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<td>Technical and Environmental Programs (PET)</td>
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<td>Centre Improvement Program - CIP (PET)</td>
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<tr>
<td>Office of the City Architect</td>
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#### Project Team

<table>
<thead>
<tr>
<th>Role</th>
<th>Contact Person</th>
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</thead>
<tbody>
<tr>
<td>Economic Development &amp; Major Projects</td>
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<tr>
<td>Technical Services Branch (TIB)</td>
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<td>Engineering Services Directorate</td>
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<tr>
<td>Traffic Management &amp; Operations</td>
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<td>Recreation &amp; Planning Services</td>
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### Workshop 30/6/2010

- Attendees: Daren Armishaw (Infrastructure & Assessment-PET), Bruce Riley (Maintenance Services-ES), Graham Milton (Traffic Management & Operations-ES), Colin Brown (Parks & Recreation Services-CS), Geoff Clements (Engineering Assets & Planning-EAP), Tony Collinson (Implementation & Assessment-PET), Craig Connolly (Centre Improvement Program-PET), Peter Gardiol (Maintenance Services-ES), Chris Gee (Technical Services-ES), Michael Chong (SCC), Lara Sylva (Parks & Recreation Services-CS), Jennifer Graham (Technical Services-ES), Ayn Bristow (Technical Services-ES), Alex Wells (Technical Services-ES)

### Apologies

- Rose Greenwood (Parks & Recreation Services-CS) (nominated Colin Brown as representative), Bryan Johnson (Engineering Assets & Planning-EAP)

### Document Issue Status Record

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<th>Revision</th>
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<td>A2</td>
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</table>

**PROJECT:** Design Principles for New Vegetation for GCCC Retained Works - GORT Corridor

**REVISION:** NOT APPLICABLE

**DATE:** 25.06.2010

**DESCRIPTION:** (with minor amendments)
CONTENTS

1.0 INTRODUCTION
  1.1 Introduction
  1.2 Purpose of this Report

2.0 DESIGN PRINCIPLES
  2.1 BACKGROUND ISSUES
  2.2 CLEAR ZONES FOR VEGETATION
  2.3 DESIGN PRINCIPLES FOR NEW VEGETATION FOR GCCC RETURNED WORKS - GCRT CORRIDOR

3.0 APPLICATION PROCESS FOR LANDSCAPE WORKS

4.0 APPENDICES
  4.1 Steering Committee Briefing Note 100421.05 - 21.04.2010
  4.2 Endorsement by Steering Committee 04.06.2010 (Issue A)
  4.3 Workshop Outcomes with Internal Stakeholders 23 June 2010
  4.4 Final Endorsement of the Design Principles for New Vegetation for GCCC Return Works - GCRT Corridor by GCCC Steering Committee - 28.06.2010 (Issue B)
1.0 INTRODUCTION

1.1 Introduction

Gold Coast City Council will be responsible for the operational management and maintenance of Section 2 and 3 of the GCRT Corridor. This includes the road, lighting, vegetation and street furniture outside the PPP Maintenance corridor. Vegetation is an important element within the GCCC Returned Works areas, particularly from a city image and local character perspective. Safe movement of traffic, visual access and amenity, ongoing maintenance, underground and above ground services impacts, adequate growing room for sustainable plant growth and use amenity such as shade and visual amenity.

It is important to clearly articulate key issues for the GCCC Returned works related to clear zones widths for vegetation and the appropriate installation of vegetation which is sustainable within those clear zones. It is also important to articulate the overriding design principles for vegetation for areas outside the corridor clear zones.

1.2 Purpose of this Report

This document is specifically related to vegetation issues associated the GCRT GCCC Returned Works areas and is NOT to be used as overarching principles for other Gold Coast City Council works. These design principles are the overriding principles for vegetation within the corridor and are supported by the GCCC Land Development Guidelines and the GCCC Landscape Strategy Part 1 and 2.

For the purpose of this document vegetation refers to all native and exotic trees, palms, shrubs, ground covers and turf.

The General Design Principles on pages 4 - 7 are intended to articulate the following:

- Design Principles - the purpose is to identify a broad issues for action during the design phase & additionally through the GCCC GCRT Design Review team.

- Supporting Policy Reference - Denotes current primary Council policy, or documents to be referenced in address the design principles.

- Comment - Explanatory notes for information only.
2.0 DESIGN PRINCIPLES

2.1 BACKGROUND ISSUES

As the existing GCRT Corridor for Section 2 and 3 is primarily located in a ‘brownfield area’ e.g. has existing infrastructure under and above the ground located in varying alignments and depths, existing significant vegetation, varying verge levels, varying road configurations and alignments, varying adjacent uses such as commercial, residential, industrial and past land, light and varying verge widths and as such cannot be viewed with respect to a new highway construction or a subdivision road.

The road verges and some median strips (very few) are typically 3.0 – 3.5, 4.0 and some exceeding 6.0m.

Median strips generally around 2.0m (where they occur – not a significant number).

The road verge width will need to accommodate elements such as the following within the width of the road verge (excluding conflict with underground infrastructure):

- A concrete footpath varying from 2.0 – 3.5m approx., depending on location.
- Adequate and appropriate setbacks from footpath for ‘vegetation’ (including trees, palms and garden beds of shrubs and ground covers) to accommodate safe movement of pedestrians and vehicular traffic.
- Adequate and appropriate setbacks from footpath edges and kerb edges to allow adequate growing space and depth for the vegetation to be sustainable in the short and long term (e.g. longevity).
- Adequate and appropriate setbacks from footpath edges and kerb edges to reduce maintenance in the long term as a result of the vegetation growth impact on footpaths and kerbs.
- Adequate and appropriate setbacks to allow safe ongoing maintenance by maintenance personnel without disrupting travel lanes
  - Turf:
  - Street lighting:
  - Shaded furniture in some areas.

Median widths will need to accommodate elements such as the following within the width of the median (excluding conflict with underground infrastructure):

- Adequate and appropriate setbacks from footpath for ‘vegetation’ (including trees, palms and garden beds of shrubs and ground covers) to accommodate safe movement of pedestrians and vehicular traffic.
- Adequate and appropriate setbacks from footpath edges and kerb edges to allow adequate growing space and depth for vegetation to be sustainable in the short and long term (e.g. longevity).
- Adequate and appropriate setbacks to allow safe ongoing maintenance by maintenance personnel without disrupting travel lanes.
- Turf:
- Possible street lighting.

The location of vegetation within the road verge or median cannot be made without considering the site as a ‘brownfield site’ and consideration of the issues of City image and local character, safe movement of traffic, visual access and amenity, ongoing maintenance, underground and above ground services impacts, adequate growing room for sustainable plant growth and user amenity such as shade and visual amenity.

This is particularly important from a risk and cost perspective if Council is to be responsible for the ongoing management and maintenance of the road pavement, kerbs, footpaths, lighting and vegetation within the GCRT corridor including the PIP corridor, whilst trying to achieve the CDW vision of a ‘Green Boulevard’.

It should be noted that Council’s current standards for clear zones for new road design utilise the Auspactra 2009 clear zone designations.

The following clear zones widths in Clause 2.2 are a relaxation of the current standards required by Council for vegetation.

The following max. tree diameters in Clause 2.2 are a relaxation of the current standards for frangible species for vegetation.

Diagram 1: Typical 3.0m Clearance Zone for Vegetation in a 60 km/h Regulatory Speed Zone
2.0 DESIGN PRINCIPLES

2.2 CLEAR ZONES FOR VEGETATION

As described by Austroads 2003

A Travel Lane is defined as that part of the road made available to vehicles travelling in a particular direction.

May consist of one or two running lanes.

A Clear Zone is defined as an area adjacent to the traffic lane that should be kept free from features that would be potentially hazardous to errant vehicles. The clear zone is a compromise between the recovery area for an errant vehicle, the cost of providing that area and the probability of an errant vehicle encountering a hazard. The clear zone should be kept free of non-flammable hazards where economically and environmentally possible. Alternatively hazards within the clear zone should be treated to make them safe or be shielded by a safety barrier.

Therefore vegetation clear zones for GCCC Return Works only are:

- Vegetation clear zones for a 60km/h regulatory speed zone is ≈ 1.0m from the outside edge of the travel lane (Refer Diagrams 1 and 3).
- Vegetation clear zones for a 100km/h regulatory speed zone is ≈ 2.4m from the outside edge of the travel lane.
- Vegetation clear zones for a 140km/h regulatory speed zone is ≈ 3.0m from the outside edge of the travel lane.

New vegetation design principles specifically for clear zones are:

ROAD VERGES:

- Strips and ground covers - shrub vegetation must only attain a maximum mature height of 500mm above the road pavement.
- Vertical vegetation - if trees and shrubs are required within the clear zone, then such will be a single stemmed species able to attain a clear height of 2000 mm in nature or a mature trunk dia. of maximum 100mm for 60km/h regulatory speed zones and maximum mature trunk dia. of 150mm for regulatory speed zones less than 60km/h. The centre line of the tree trunk is to be located a minimum setback of 0.5m from the nominal kerb line. If there is any proposed increase in the trunk diameter it must be demonstrated through alternate solutions that such would be of a low or an acceptable safety and maintenance risk to Council.
- Hard surfaced road verges - in areas where all of the road verge is at a hard surface, planting pits of a minimum of 1.2m sq. are to be utilised to ensure adequate growing room for planting. These may be a combination of tree, shrub and ground covers or incorporate an appropriate tree grate or决心 metal flange up against the hard surface.
- Where plantings are used the tree location still needs to be off-set to achieve the minimum tree setback of 0.5m from the nominal kerb line. (Refer Diagram 3). Structural Soil Zones MUST be considered to provide the best practice solutions when planting individual trees with a growth of the 1.2m x 1.2m x 0.4m. Where Structural Soil zones are required must be discussed with Council & solutions acceptable to Council.
- General vegetation design - the vegetation design is to also address the general design principles in Sustainable Vegetation in the GCCC Return Works – GCRT Corridor.
2.0 DESIGN PRINCIPLES

2.3 GENERAL DESIGN PRINCIPLES FOR NEW VEGETATION FOR GCCC RETURN WORKS - GCRT CORRIDOR

<table>
<thead>
<tr>
<th>DESIGN PRINCIPLE</th>
<th>SUPPORTING POLICY REFERENCE</th>
<th>COMMENTS</th>
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<tbody>
<tr>
<td><strong>CHARACTER</strong></td>
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<tr>
<td>The vegetation complements the local character of the site and surrounding area (natural, urban, suburban).</td>
<td>The vegetation design addresses the intent of the GCCC Landscape Strategy Part 3: Landscape Character - Building the Image of the City.</td>
<td>- Planting sequences address natural or semi-natural vegetation; fire tolerant species such as in Subtropical Rainforest - but rather vegetation that reflects the local or natural character. - Native species in highly urbanised areas are not necessarily an appropriate choice for character, largely due to maintenance - aviation may well reflect the character of the urban area and endure the harsh growing conditions of the urban environment.</td>
</tr>
<tr>
<td><strong>SET BACKS &amp; HEIGHT CLEARANCES</strong></td>
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<tr>
<td>The centre line of grange banded central planting outside the clear zone areas has a minimum setback of 1.5m from the nominal kerb line, as long as other conflicts within that setback are not apparent. (Refer Diagram 4).</td>
<td>The vegetation design addresses the intent of the GCCC Land Development Guidelines.</td>
<td>- Does the vegetation comply with above and below ground infrastructure, pedestrian access?</td>
</tr>
<tr>
<td>Sufficient planting outside the clear zone located within the road verge area of 3.0m from the kerb line to obtain a maximum height of 900mm from the road pavement surface. (Refer Diagram 4).</td>
<td>GCCC Landscape Strategy Part 4 and Part 2 - Landscape Documentation Manual.</td>
<td>- Does the vegetation comply with above and below ground infrastructure, pedestrian access?</td>
</tr>
<tr>
<td>- In areas outside the clear zone where all the road verge is hard surfaced, planting pits of at least 1.0m sq are to be utilised to ensure adequate growing room for planting. These may be a combination of live and low ground covers or incorporate an appropriate tree grate or smaller mulch/flush with the hard surface. Where stormwater pits are used in this location, they need to be offset to achieve a minimum 1.5m setback from the nominal kerb line. (Refer Diagram 3). Note: Structural soil zones MUST be considered to provide best practice solutions and healthy, street tree growth. Structural soils zones need to be discussed with Council 6 solutions acceptable to Council.</td>
<td>- Are the vegetation parts shaded? the soft movement within the travel lane or along the footpath, eg species with a horizontal form with a low canopy?</td>
<td></td>
</tr>
<tr>
<td>All trees within the road verge area 3.0m from the back of hards, and medians to have a minimum clear tree height of 2.300mm. Planting is to have a minimum mature height clear tree height of 7.0m. (Refer Diagram 4).</td>
<td>- Does the vegetation comply with above and below ground infrastructure, pedestrian access?</td>
<td></td>
</tr>
<tr>
<td>Where ‘green’ strip (but low shrub planting or appropriate low profile planting dependent on clear zone requirements) are located along the road verge area then such ‘green’ strips are to be a minimum 1.5m from the back of hards. (Refer Diagram 4).</td>
<td>- Are the vegetation parts shaded? the soft movement within the travel lane or along the footpath, eg species with a horizontal form with a low canopy?</td>
<td></td>
</tr>
<tr>
<td>Trees or medium shrubs outside the clear zone are to be setback a minimum of 1.5m from the back of the median kerb line.</td>
<td>- Does the vegetation comply with above and below ground infrastructure, pedestrian access?</td>
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</table>

**Diagram 3: Typical Tree Pit/Grate**

**Diagram 4: Centre line of grange banded central planting outside the clear zone areas has a minimum setback of 1.5m from the nominal kerb line.**

**Diagram 5: Structural soil zones MUST be considered to provide best practice solutions and healthy street tree growth.**
2.0 DESIGN PRINCIPLES

2.3 GENERAL DESIGN PRINCIPLES FOR NEW VEGETATION FOR GCCC RETURN WORKS - GCRT CORRIDOR

<table>
<thead>
<tr>
<th>DESIGN PRINCIPLE</th>
<th>SUPPORTING POLICY REFERENCE</th>
<th>COMMENTS</th>
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<tbody>
<tr>
<td><strong>VEGETATION CHARACTERISTICS</strong></td>
<td>The vegetation design addresses the intent of GCCC Landscape Strategy Part 2: Landscape Documentation Manual</td>
<td>- If vegetation is required to provide shade, the species should have an evergreen canopy form, with a single mature clean trunk of 7.000 mm or multiple trunks, as opposed to a conical, pyramid or rounded form which has no meaningful shade at pedestrian/street level.</td>
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<td>- Vegetation is not too big for the space allocated eg, putting in a large tree when the space allocated is too small to allow responsible growth, or the form of the vegetation has an invasive root system and may cause significant root damage to kerbs, underground services and footpath infrastructure requiring repair and high maintenance.</td>
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<td></td>
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<td>- Vegetative parts do not obstruct the safe movement within the travel lanes or along the footpath eg, species with a horizontal forms with low overhanging.</td>
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**APPROPRIATENESS TO USE AN AMENITY**

- The vegetation is appropriate for the site, user activity and amenity.

The vegetation design addresses the intent of GCCC Landscape Strategy Part 2: Landscape Documentation Manual

- Does the vegetation prevent access from an adjacent car park or bikelane or setback from a driveway or crossing point with respect to visual access and safety?
- Does the vegetation block visual access from the travel lane to the adjacent road verge?
- Does the parts of the vegetation conflict with large trunks or branches eg, canopy overhanging?
- Does the vegetation regularly drop limes, leaf litter or other parts that may cause slippery surfaces?
- Does the vegetation complement the character of the area?
- Does the vegetation impact on the effectiveness of the cone of light from street lighting?

DIAGRAM 4: TYPICAL SET BACKS & CLEARANCES

- Centre line of road setback 1.0m from nominal kerb line.
- ‘Green strip’ area setback a min. 1.5m from back of kerb line.
- Low shrub zone - max. mature height 900mm above road pavement. Street trees min. clear trunk 2200mm.
- Eucalyptus spp. & Corymbia spp. ‘FREE ZONE’: Obstructive Shrub zones must be considered for street trees in this area.
- Opportunity to provide a variety of vegetation subject to CPTED, spatial requirements, services, access and character.
### 2.0 DESIGN PRINCIPLES

#### 2.3 GENERAL DESIGN PRINCIPLES FOR NEW VEGETATION FOR GCCC RETURN WORKS - GCRT CORRIDOR

<table>
<thead>
<tr>
<th>DESIGN PRINCIPLE</th>
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<th>COMMENTS</th>
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</thead>
<tbody>
<tr>
<td><strong>MAINTENANCE</strong></td>
<td></td>
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<tr>
<td>The design of the vegetation considers maintenance requirements throughout the whole-of-life cycle.</td>
<td><a href="#">GCCC Landscape Strategy Part 2 - Landscape Documentation Manual</a></td>
<td>Gold Coast City Council do not recommend large areas of formalised hedging in public road reserves – except where such is required to prevent particular hazards such as on a CCC, or where such is deemed potentially beneficial in smaller areas for safety reasons, e.g. block access to raised railway line without fencing.</td>
</tr>
<tr>
<td>Council at its special budget committee meeting of 17 May 2009 resolved that the following service level changes be endorsed and that includes increasing its hedge removal proposal to 2% per annum.</td>
<td><a href="#">WH and BB Legislation</a></td>
<td>Gold Coast City Council also recommend the use of low-height and tall hedging species as a depth buffer within the road reserve zone. 3 m from the base of the road on the median strip less than 4.8 m from the back of kerb and vehicle on slide – due to the soil pruning characteristics (regularly into drop) and leaf litter (please Design 4).</td>
</tr>
<tr>
<td><a href="#">WH and BB Legislation</a></td>
<td></td>
<td>Vegetation location must be designed to allow easy access for maintenance staff for on-going maintenance without closing off busy streets and footpaths. (WH and BB regulated).</td>
</tr>
<tr>
<td><a href="#">Water Sensitive Urban Design Principles</a></td>
<td></td>
<td>Water Sensitive Urban Design Principles are to be adhered to whenever practicable &amp; solutions acceptable to Council. Refer to Gold Coast City Council’s <a href="#">WSUD S/stu</a> guidelines.</td>
</tr>
<tr>
<td>[Vegetation must not rely on regular irrigation from the city potable water supply to survive. Refer to Gold Coast City Council’s <a href="#">Vegetation Specification</a> for information on irrigation in general.](#)</td>
<td></td>
<td>Vegetation must not rely on regular irrigation from the city potable water supply to survive. Refer to Gold Coast City Council’s <a href="#">Vegetation Specification</a> for information on irrigation in general.</td>
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<table>
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<tr>
<th>SERVICES/UTILITIES</th>
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<tbody>
<tr>
<td>Vegetation must not cause potential risk to the functional operation and capital aspects of infrastructure and above-ground infrastructure.</td>
<td><a href="#">Jet-black standards are to be developed that consider infrastructure conflicts due to access, OPR &amp; maintenance issues (particularly watering).</a></td>
<td>Home owners will not be considered as an alternative to address infrastructure conflict issues as OPR &amp; maintenance issues (particularly watering).</td>
</tr>
<tr>
<td>Setbacks must be in accordance with current utility standards and setbacks and above-ground infrastructure.</td>
<td><a href="#">Jet-black standards are to be developed that consider infrastructure conflicts due to access, OPR &amp; maintenance issues (particularly watering).</a></td>
<td>Home owners will not be considered as an alternative to address infrastructure conflict issues as OPR &amp; maintenance issues (particularly watering).</td>
</tr>
<tr>
<td>Water</td>
<td><a href="#">Jet-black standards are to be developed that consider infrastructure conflicts due to access, OPR &amp; maintenance issues (particularly watering).</a></td>
<td>Home owners will not be considered as an alternative to address infrastructure conflict issues as OPR &amp; maintenance issues (particularly watering).</td>
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<tr>
<td>Grease</td>
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<tr>
<td>Electricity/Infrastructure</td>
<td><a href="#">Jet-black standards are to be developed that consider infrastructure conflicts due to access, OPR &amp; maintenance issues (particularly watering).</a></td>
<td>Home owners will not be considered as an alternative to address infrastructure conflict issues as OPR &amp; maintenance issues (particularly watering).</td>
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<tr>
<td>Traffic Light/Carriageway</td>
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<tr>
<td>Gas</td>
<td><a href="#">Jet-black standards are to be developed that consider infrastructure conflicts due to access, OPR &amp; maintenance issues (particularly watering).</a></td>
<td>Home owners will not be considered as an alternative to address infrastructure conflict issues as OPR &amp; maintenance issues (particularly watering).</td>
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<tr>
<td>Stormwater</td>
<td><a href="#">Jet-black standards are to be developed that consider infrastructure conflicts due to access, OPR &amp; maintenance issues (particularly watering).</a></td>
<td>Home owners will not be considered as an alternative to address infrastructure conflict issues as OPR &amp; maintenance issues (particularly watering).</td>
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<td>Sub soil</td>
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<td>Lighting</td>
<td><a href="#">Jet-black standards are to be developed that consider infrastructure conflicts due to access, OPR &amp; maintenance issues (particularly watering).</a></td>
<td>Home owners will not be considered as an alternative to address infrastructure conflict issues as OPR &amp; maintenance issues (particularly watering).</td>
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**Design Principles for New Vegetation for GCCC Returned Works - GCRT Corridor**

- **Project No:** E041
- **Scale:** NA
- **Date:** 28.06.2010
- **Issue:** 1

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**Gold Coast City Council**
2.0 DESIGN PRINCIPLES

2.3 GENERAL DESIGN PRINCIPLES FOR NEW VEGETATION FOR GCCC RETURN WORKS - GCRT CORRIDOR

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<td>CDA</td>
<td>The vegetation design addresses the intent of:</td>
<td>RDA, DDA, GDA.</td>
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<td>Disability Discrimination Act, Relevant Australian Standards for DDA</td>
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<td></td>
<td>Appropriately transposed tree removal and relocation.</td>
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<tr>
<td></td>
<td>Gold Coast Planning Scheme for tree removal and relocation in private land, Relevant Local Government Tree Removal and Relocation Code.</td>
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<tr>
<td></td>
<td>GCCTC Vegetation Assessment &amp; Recommendations for the GCRT Corridor (undertaken by GCCC Parks &amp; Recreational Services)</td>
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<tr>
<td></td>
<td>Appropriate stake tree related to tree removal and relocation.</td>
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<tr>
<td></td>
<td>GCCTC Vegetation Assessment &amp; Recommendations for the GCRT Corridor (undertaken by GCCC Parks &amp; Recreational Services)</td>
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</table>

3.0 APPLICATION PROCESS FOR LANDSCAPE WORKS

Refer to GCCC Planning Scheme in general and specifically Code 21 - Landscape Works Code.
4.0 APPENDICIES

4.1 Steering Committee Briefing Note 100421.05 - 21.04.2010

4.2 Endorsement by Steering Committee 04.06.2010 (Issue A)

4.3 Workshop Outcomes with Internal Stakeholders 23 June 2010

4.4 Final Endorsement of the Design Principles for New Vegetation for GCCC
   Returned Works - GCRT Corridor by GCCC Steering Committee -
   28.06.2010 (Issue B)
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APPENDIX

4.1

Briefing Note 100421.05
GCRT Implementation Project Steering Committee

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<th>ISPOT Ref No:</th>
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<td>21 April 2010</td>
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<tr>
<td>Topic</td>
<td>Planting of Non-Frangible Trees within Clear Zones</td>
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<tr>
<td>Additional Attachments</td>
<td>Streetscape Guidelines.pdf Tree safety clearance zone.pdf</td>
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Background

As part of the implementation of the Green boulevard vision set out in the CDIMP, the project is looking at every reasonable opportunity to plant street trees, in the footpath or in large medians along the GCRT corridor. Beyond the visual amenity they bring, street trees in the footpath have an essential role in providing shade for the benefit of pedestrians and cyclists.

The engaged GCRT Engineering Design firm (Aurecon) are trying to achieve this outcome by adhering to adopted engineering standards and guidelines.

To enable the retrofit of the GCRT infrastructure within a reasonable footprint, the kerbside parking lanes along significant sections of the route have been removed, placing the through traffic lanes directly adjacent to the verge. This is where the clear zones with respect to planting of trees issue comes into play.

Impact on design

- This is a major issue along most of the corridor, where strict application of the clearance zone guidelines would mean that no new street trees could be planted in the footpath or median. (to make things worse, significant existing tree removal will occur on a large scale, as part of road widening)
- This is a critical input into the design of the EEW sections, in particular in the section of the GC Highway between Fern St and Australia Av and has a potential to significantly modify the design outcome. (i.e. Green Boulevard or “naked” arterial road). EEW sections road design is currently being developed, and need to be finalised early May.
- Urgent advice is also required to ensure the appropriate requirement is placed in the RFP annexures for areas within PPP scope. Completion of the annexures is targeted for end of April.

Contradicting guidelines/standards in use within GCCC

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- Austroads 2009 Part 6: Roadside Design, Safety and Barriers Table 4.1 indicates a clear zone distance from edge of travel lane for:
  1) a design speed of 70 - 80 kph with a traffic ADT of >600 vpd = 6.5m
  2) a design speed of 60 kph or less with traffic ADT of > 600 vpd = 5.0m and for ADT 1501 - 6000 vpd = 4.5m

- the roads section of Technical Services refers to the Department of Main Roads road design manual and interprets / applies a 3 meter safety clearance zone between travel lane and tree trunk.

- Council’s Policy 12 – Landscape Documentation Manual indicates that a 1 meter clearance zone between edge of kerb and tree trunk is acceptable.

Note: Design according to Council’s Policy 12 may allow the creation of a significant section of Green Boulevard (and these opportunities are extremely rare in GCRT stage 1).

**Benefits to the Project**

- Achievement of the standing urban design principals of the project
- Provision of shade to pedestrians and cyclist, whose numbers are expected to significantly increase along the corridor (access to stations and general increased activity through precinct regeneration)
- Increased greenery and providing visually pleasing road corridors, mitigating the accommodation of a significant infrastructure in the streetscape
- Improving the roadside environment by reducing the visual impacts of the road and contributing to air pollution
- Provision of natural barriers along roadsides

**Aurecon’s advice**

For large trees to be planted within this zone either one of the following would need to occur:

(i) suitable barrier treatments would need to be designed considering site distance and allowable deflections etc; or

(ii) GCCC accept the higher risk but attempt to minimise risk - we could investigate calculating a risk score for various options.

(eg certain tree size at 3m, 4m, with soft impact absorbing garden beds in front to attempt to slow down before impact - (Indy style).)

(iii) A study of crash history may be required.

**Internal Engineering Services Advice**

Engineering has reviewed this requirement and undertaken research and has advised as follows:

- On Urban Roads – apply the 1m clearance zone between edge of kerb and tree trunk

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- On arterial roads, apply the 3m clearance zone between edge of kerb and tree trunk.

Project Recommendation

- That the adoption of 1m clearance zone between edge of kerb and tree trunk on an Urban Roads be adopted as per Council's Policy 12.

- That the Steering Committee consider the relaxation of the 3m clearance zone within arterial roads to 1 – 1.5m based on precedents already set across the City.

- If the Steering Committee feel enough data is not available for this decision to be made, allow the project team to research and provide further analysis for an informed decision and/or refer the matter to Council for a decision.

- That the project team be authorised to look at alternate strategic options for delivering city green boulevard outcomes within the corridor through future Council's capital programs and edge conditions on future developments along the corridor.

Steering Committee Decision 100421.05.

<table>
<thead>
<tr>
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<th>Action Officer</th>
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<tbody>
<tr>
<td>1. That a report be brought forward to Council before the end of May seeking confirmation of the relaxation of the 3m clearance zone within arterial roads to 1 – 1.5m based on precedents already set across the city.</td>
<td>Katrina Giudice</td>
</tr>
<tr>
<td>2. That the report to Council</td>
<td></td>
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<tr>
<td>- detail the changes to visual amenity</td>
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<td>- make it clear whether the relaxation applies to the light rail corridor only or the entire city</td>
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<td>- detail any other policies that require amendment to align with the relaxation</td>
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<tr>
<td>3. That the report is prepared in collaboration with Graham Bilton and referred to Legal Services and Steering Committee members prior to submission to Council.</td>
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## Briefing Note 100604.08
### GCRT Implementation Project Steering Committee

<table>
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<tr>
<th>ISOTP Ref No:</th>
<th>#27952824</th>
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<tbody>
<tr>
<td>Meeting Date:</td>
<td>4 June 2010</td>
</tr>
<tr>
<td>Topic:</td>
<td>Design Principles for New Vegetation for Returned Works in GCRT Corridor</td>
</tr>
<tr>
<td>Additional Attachments</td>
<td>Draft Design Principles for New Vegetation for Returned Works in the GCRT Corridor</td>
</tr>
<tr>
<td>Previous Steering Committee Decisions</td>
<td>100421.05.</td>
</tr>
<tr>
<td></td>
<td>1. That a report be brought forward to Council before the end of May seeking confirmation of the relaxation of the 3m clearance zone within arterial roads to 1 - 1.5m based on precedents already set across the city.</td>
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<td>2. That the report to Council</td>
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<td>- detail the changes to visual amenity</td>
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<td>- make it clear whether the relaxation applies to the light rail corridor only or the entire city</td>
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<td>- detail any other policies that require amendment to align with the relaxation</td>
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<td>3. That the report is prepared in collaboration with Graham Elton and referred to Legal Services and Steering Committee members prior to submission to Council.</td>
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<tr>
<td>Background:</td>
<td><strong>Note:</strong> For the purpose of this report vegetation refers to all native and exotic trees, palms, shrubs, ground covers and turf.</td>
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<tr>
<td></td>
<td>The ‘clear zone’ referenced in this report refers to discussions and recommendations for ‘clear zones’ with respect to the location of vegetation within the ‘clear zone’ and outside the clear zone within Section 2 and 3 of the GCRT corridor. This does not detail in depth traffic engineering requirements.</td>
</tr>
<tr>
<td></td>
<td>There have been discussion and requests from the GCRT Project team regarding conflicting GCCC policy on ‘clear zone’ setbacks and how that relates to the planting of new vegetation along the GCRT corridor. The CDMP vision for the GCRT road corridor is for a ‘Green Boulevard’ and as such there has been a request to reduce the clear zone distance from Austroads standards of between 3.0m and 5.0m on 70 kph design speed (60 kph regulatory speed) zones to 1.00 - 1.50m. The request also suggested that certain precedents have been set in the city for 0.6m setback from hedges. The important issue here is to provide the best result for the GCRT corridor that satisfies the corridor spatial restrictions and operational issues with the amenity issues.</td>
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PROTECTED

Currently Council generally utilises the *Austroad 2009* requirements when undertaking road design within the city, including designation of ‘clear zones’.

In planting of new vegetation within ‘clear zones’ and other parts of the road verge, Council also utilises the adopted *GCCC Land Development Guidelines* primarily for greenfield sites eg. new subdivision or new roads where there is a consistent corridor for services, footpaths and kerb setbacks etc. Additionally Council’s *Landscape Strategy Part 1 and 2* can be used to guide decisions about the planting of new vegetation (species selection and location) in road verges from a new private development perspective or by in house Council operations and design. The *Landscape Strategy Part 2* identifies performance criteria addressing issues such as City image and local character, safe movement of traffic, visual access and amenity, ongoing maintenance, underground and above ground services impacts, adequate growing room for sustainable plant growth and user amenity such as shade and visual amenity.

**Discussion**

The existing GCRT Corridor for Section 2 and 3 is primarily located in a ‘brownfield area’ eg has existing infrastructure under and above the ground located in varying alignments and depths, existing significant vegetation, varying verge levels, varying road configurations and alignments, varying adjacent uses such as commercial, residential, tourist and parkland, tight and varying verge widths and as such cannot be viewed with respect to a new highway construction or a subdivision road.

The road verges and some median strips (very few) identified in the Reference Design for EEW for Section 2 and 3 are typically the following widths:

- **Gold Coast Highway** — typically 3.5m from kerb to property boundary
- **Nerang Street** — typically 3.5m with some areas 4.5m from kerb to property boundary
- **Queen Street** — typically 3.5m from kerb to property boundary
- **Parklands Drive** — typically between 4.0m and 6.0m, with some areas 11.0m from kerb to property boundary

Median strips generally around 2.0m (where they occur — not a significant number).

The road verge width will need to accommodate elements such as the following within the width of the road verge (excluding conflict with underground infrastructure):

- A concrete footpath varying from 2.0 – 3.0m approx. depending on location;
- Adequate and appropriate setbacks from back of kerb for ‘vegetation’ (including trees, palms and garden beds of shrubs and ground covers) to accommodate safe movement of pedestrians and vehicular traffic;
- Adequate and appropriate setbacks from footpath edges and kerb edges to allow adequate growing space and depth for the vegetation to be sustainable in the short and long term (eg longevity);
- Adequate and appropriate setbacks from footpath edges and kerb edges to reduce maintenance in the long term as a result of the vegetation growth impact on footpaths and kerbs;
- Adequate and appropriate setbacks to allow safe ongoing maintenance by maintenance personnel without disrupting travel lanes;
- Turf;
- Street lighting;
- Street furniture in some areas

PROTECTED
PROTECTED

Median widths will need to accommodate elements such as the following within the width of the median (excluding conflict with underground infrastructure):

- Adequate and appropriate setbacks from back of kerb for vegetation (including trees, palms and garden beds of small shrubs and ground covers) to accommodate safe movement of pedestrian and vehicular traffic.
- Adequate and appropriate setbacks from footpath edges and kerb edges to allow adequate growing space and depth for vegetation to be sustainable in the short and long term (e.g. longevity).
- Adequate and appropriate setbacks to allow safe ongoing maintenance by maintenance personnel without disrupting travel lanes.
- Turf.
- Possible street lighting.

The location of vegetation within the road verge or median identified in the Reference Design for EEW for the GCRT Section 2 and 3 cannot be made without considering the site as a 'brownfield' site and consideration of the issues of City image and local character, Safe movement of traffic, visual access and amenity, ongoing maintenance, underground and above ground services impacts, adequate growing room for sustainable plant growth and user amenity such as shade and visual amenity.

This is particularly important from a risk and cost perspective if Council is to be responsible for the ongoing management and maintenance of the road pavement, kerbs, footpaths, lighting and vegetation within the GCRT corridor Section 2 and 3, whilst trying to achieve the GDIMP vision of a ‘Green Boulevard.

Graham Bilton has undertaken some research and has advised: “Current Council Standard Drawings indicate that trees can be planted at a distance of 1m from the face of kerb on 2 lane and 4 lane Urban roads. However, this is on a typical cross section with a 2m bike/breakdown lane which results in a clear zone of 3m from the traffic running lane. Therefore, this would apply to all roads with this clearance.

However, for the Gold Coast Highway the vehicle running lane is next to the kerb. My research indicates for these roads (4 lane arterial @ 60kph design speed) the QDMR Road Planning and Design Manual indicates a Clear Zone of approx. 4m. Other Road Authorities such as RTA and SA Main Roads indicate a Min Clear Zone of 3m.

Therefore I would have no objection to a clear zone of 3m minimum from the travel lane.”

It should be noted that Council’s current standard for clear zones for new road design utilises the Austroads 2009 clear zone designations.

Technical Services civil engineers also state in normal circumstances a 60 kph regulatory speed zone would have a design speed of 70 kph. Austroads 2009 identifies in these circumstances that the clear zone would be between 3.5m for flat land with low usage, and 5.0m for steep land with high usage.

For a road corridor like the Gold Coast Highway, it is generally agreed that the design speed can be reduced to accommodate the regulatory speed and as such a 3.0m clear zone is appropriate due to the existing infrastructure located in the current verge areas and spatial restrictions of the corridor.

Therefore, in 60 kph regulatory speed zones within the urban area, it is generally agreed that 3.0m would be the minimum clear zone width. This does not however constrain the planting of some vegetation such as shrub planting to 900mm of the road pavement and the planting of flammable tree species in the clear zone. Main Roads identify flammable species as those with a mature trunk...
### PROTECTED

circa 80mm. Due to precedents along several Gold Coast roads, and
considering the amenity issues required by the CDIMP it is generally agreed that
a mature tree dia of up to a maximum of 150mm would be acceptable in the
clear zones along the GCRT Corridor Section 2 and 3.

Graham Bilton has advised that in his opinion for 80kph regulatory speed
environment the clear zone can be further relaxed to a 2.0m clear zone from the
travel lane.

Similarly, in 40 kph and less regulatory speed zones the clear zone can be
further relaxed to a 1.0m clear zone from the travel lane.

All Council documentation identifies that the general setback area in the road
verge from nominal kerb line to the centre line of the tree is 1.0m depending on
the clear zone requirements (for frangible and non frangible species).

### PROPOSAL

It is considered important to simply and clearly define the overall principles for
vegetation in road verge areas and medians within the GCRT corridor Returned
Works Area. Attached is a set of design principles for the planting of new
vegetation within the GCRT Corridor GCCC Returned Works Area and should be
read with the supporting documentation of the GCCC land Development
Guidelines and the GCCC Landscape Strategy Part 1 and 2.

The following is a set of Design Principles for the planting of new vegetation
within the GCCC Returned Works area and should be read in conjunction with
the GCCC Land Development Guidelines and the GCCC Landscape
Strategy Part 1 and 2.

### Project Recommendation

1. That the Steering Committee endorse a relaxation to Council's
   standard clear zone widths for new vegetation to a 3.0m clear zone
   width for all 80 kph speed zones along with the relevant vegetation
design principles for clear zones within the GCCC Returned Works
area of the GCRT corridor only.

2. That the Steering Committee endorse a relaxation to Council's
   standard clear zone widths for new vegetation to a 2.0m clear zone
   width for all 80 kph speed zones along with the relevant vegetation
design principles for clear zones within the GCCC Returned Works
area of the GCRT corridor only.

3. That the Steering Committee endorse a relaxation to Council's
   standard clear zone widths for new vegetation to a 1.0m clear zone
   width for all 40 kph speed zones along with the relevant vegetation
design principles for clear zones within the GCCC Returned Works
area of the GCRT corridor only.

4. That the Steering Committee endorse the draft proposal titled
   'General Design Principles for New Vegetation for GCCC Returned
   Works – GCRT Corridor' for further development and workshopping
   with Engineering Services (Maintenance Services, Traffic
   Management and Operation, EAP and Technical Services),
   Community Services – Parks & Recreational Services (City
   Greening, Parks Gold Coast, Recreation Planning and Services),
   PET (Office of the City Architect, Implementation & Assessment –
   Tree Management Officer and Landscape Assessment Officer).

5. On finalisation of the 'General Design Principles for New Vegetation
   for GCCC Returned Works – GCRT Corridor' a report be brought
   back to the Steering Committee for final endorsement prior to
   submitting to the GCRT Project team for incorporation into the PPP

### PROTECTED
File Note

APPENDIX
4.3

FROM : Sue Chaunavel, Project Support Officer, GCRT Implementation Project

SUBJECT : Outcomes of Workshop on Design Principles for New Vegetation for Returned Works in the GCRT Corridor held 23 June 2010

DATE : 23 June 2010

FILE NO : TT1173/46/01/01(P6) #28027779

Attendance
See attachment

TRACKS-#28030141-ATTENDANCE_SHEET - DESIGN PRINCIPLES FOR NEW VEGETATION FOR RETURNED WORKS - 23 JUNE 2010

Purpose
To get agreement to the Design Principles prior to reporting back to Steering Committee.

See attached draft principles.

TRACKS-#27981245
-DRAFT-V1_DRAFT

Background
See attached Briefing Note and Decision – GCRT Implementation Project Steering Committee meeting of 6 June 2010.

TRACKS-#27952824
-BRIEFING NOTE 100

- Original Steering Committee decision 100421.05
- Feedback on Urban Design Annexure 6
- Conflicting requirements in the annexure vs. Council’s current policy
- Consideration of the overall issues in coordination
- Note road verges and what they are required to achieve
- Note clear zones
Design Principles for New Vegetation for Returned Works in the GCRT Corridor   Page 2
TT1173/46/01/01(P6)   23 June 2010

- Put draft design principles together drawing on and clarifying information from the Land Development Guidelines etc
- Reported back to Steering Committee 4 June – decision to workshop with all parties

Outcomes

The following changes were agreed

2.1 Clear Zones for Vegetation

- Vertical vegetation in Road verges and Median Strips
  - Maximum trunk diameters
  - 100 mm in 60 kph zones
  - 150 mm in 50 kph zones

- Hard surfaced road verges
  - Amend to include structured soils and associated standard
  - Jennie Graham and Graham Bilton to agree any further change

2.2 General Design Principles for new Vegetation for GCCC Returned Works – GCRT Corridor

- Maintenance
  - Refer to Geoff Clemence’s specification for irrigation under Comments

- Services/Utilities
  - Under Comments include words to the effect
    - Where there are conflicts negotiations must be undertaken with the appropriate authorities to accommodate vegetation planting along the corridor
    - No planter boxes

- Retention of Significant Vegetation
  - Replace ‘appropriate Asset Custodian’ and ‘Vegetation Custodian’ with GCCC and reflect a joint approach between Council & State Government
  - Delete comments

Next Steps

- Jennie Graham to update document with changes and circulate to participants for response by no later than COB Monday 28 June
**BRIEFING NOTE 100628.01**
GCRT Implementation Project Steering Committee

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<td>26 June 2010</td>
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<tr>
<td>Topic</td>
<td>DESIGN PRINCIPLES FOR NEW VEGETATION FOR RETURNED WORKS IN THE GCRT CORRIDOR – FINAL ENDORSEMENT</td>
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<tr>
<td><strong>Previous Steering Committee Decisions</strong></td>
<td><strong>10421.05. and 10604.11</strong></td>
</tr>
<tr>
<td>1.</td>
<td>Steering Committee endorses a relaxation to Council’s standard clear zone widths for new vegetation to a 3.0m clear zone width for all 60 kph speed zones along with the relevant vegetation design principles for clear zones within the GCCC Returned Works area of the GCRT corridor only.</td>
</tr>
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<td>2.</td>
<td>Steering Committee endorses a relaxation to Council’s standard clear zone widths for new vegetation to a 2.0m clear zone width for all 50 kph speed zones along with the relevant vegetation design principles for clear zones within the GCCC Returned Works area of the GCRT corridor only.</td>
</tr>
<tr>
<td>3.</td>
<td>Steering Committee endorses a relaxation to Council’s standard clear zone widths for new vegetation to a 1.0m clear zone width for all 40 kph speed zones along with the relevant vegetation design principles for clear zones within the GCCC Returned Works area of the GCRT corridor only.</td>
</tr>
<tr>
<td>4.</td>
<td>Steering Committee endorses the draft proposal titled ‘General Design Principles for New Vegetation for GCCC Returned Works – GCRT Corridor’ for further development and workshopping with Engineering Services (Maintenance Services, Traffic Management and Operation, EAP and Technical Services), Community Services – Parks &amp; Recreational Services (City Greenspace, Parks Gold Coast, Recreation Planning and Services), PET (Office of the City Architect, Implementation &amp; Assessment – Tree Management Officer and Landscape Assessment Officer).</td>
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<tr>
<td>5.</td>
<td>On finalisation of the ‘General Design Principles for New Vegetation for GCCC Returned Works – GCRT Corridor’ a report be brought back to the Steering Committee for final endorsement prior to submitting to the GCRT Project team for incorporation into the PPP documentation.</td>
</tr>
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</table>

**Background**

As per the above Steering Committee decision, a workshop was held to further develop the design principles with representatives...
from the following areas:

- Engineering Services (Maintenance Services, Traffic Management and Operation, EAP and Technical Services)
- Community Services – Parks & Recreational Services (City Greening, Parks Gold Coast, Recreation Planning and Services)
- PET (Office of the City Architect, Implementation & Assessment – Tree Management Officer and Landscape Assessment Officer)

Outcomes of Workshop

The following changes were agreed:

2.1 Clear Zones for Vegetation

- **Vertical vegetation in Road verges and Median Strips**
  - Maximum trunk diameter
    - 100 mm in 50 kph zones
    - 150 mm in 50 kph zones
  - **Hard surfaced road verges**
    - Amend to include structured soils and associated standard
    - Jennie Graham and Graham Bilton to agree any further change

2.2 General Design Principles for new Vegetation for GCCC Works – GCRT Corridor

- **Maintenance**
  - Refer to Geoff Clemence’s specification for irrigation under Comments

- **Services/Utilities**
  - Under Comments include words to the effect:
    - Where there are conflicts negotiations must be undertaken with the appropriate authorities to accommodate vegetation planting along the corridor
    - No planter boxes

- **Retention of Significant Vegetation**
  - Replace ‘appropriate Asset Custodian’ and ‘Vegetation Custodian’ with GCCC and reflect a joint approach between Council & State Government
  - Delete comments

Confirmation of changes and additional feedback is required from the participants by 3pm today, 28 June 2010. However, due to time constraints and the release of the RFP on Tuesday 29 June 2010, we are seeking endorsement of the principles for placement in the GCRT data room and reference into the annexures (Part 1 of the contract).
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Project Recommendation

- That the Steering Committee endorse the Design Principles for New Vegetation for GCCC Returned Works GCRT Corridor.
- That the Steering Committee authorise that this document proceeds all supporting documentation relevant to new vegetation in the corridor.
- That the Steering Committee authorise the Project Manager to place the Design Principles in the Data Room and ensure reference to same in the annexures (Part 1 of the Contract).

Steering Committee Decision 100628.01.

<table>
<thead>
<tr>
<th>Action Officer</th>
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</thead>
<tbody>
<tr>
<td>Katrina Giudice</td>
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</table>

1. That the Steering Committee endorses the Design Principles for New Vegetation for GCCC Returned Works GCRT Corridor for submission to the next meeting of the Sustainable City Future Committee as a starred item.

2. That the Steering Committee authorises that this document, once adopted by Council, proceeds all supporting documentation relevant to new vegetation in the corridor.

3. That the Steering Committee authorises the Project Manager to place the Design Principles in the Data Room (once adopted by Council) and ensure reference to same in the annexures (Part 1 of the Contract).
<table>
<thead>
<tr>
<th>Steering Committee Decision 100604.11.</th>
<th>Action Officer</th>
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<td>2. Steering Committee endorses a relaxation to Council’s standard clear zone widths for new vegetation to a 2.0m clear zone width for all 50 kph speed zones along with the relevant vegetation design principles for clear zones within the GCCC Returned Works area of the GCRT corridor only.</td>
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<td>3. Steering Committee endorses a relaxation to Council’s standard clear zone widths for new vegetation to a 1.0m clear zone width for all 40 kph speed zones along with the relevant vegetation design principles for clear zones within the GCCC Returned Works area of the GCRT corridor only.</td>
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<td>4. Steering Committee endorses the draft proposal titled ‘General Design Principles for New Vegetation for GCCC Returned Works – GCRT Corridor’ for further development and workshopping with Engineering Services (Maintenance Services, Traffic Management and Operation, EAP and Technical Services), Community Services – Parks &amp; Recreational Services (City Greening, Parks Gold Coast, Recreation Planning and Services), PET (Office of the City Architect, Implementation &amp; Assessment – Tree Management Officer and Landscape Assessment Officer).</td>
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<td>5. On finalisation of the ‘General Design Principles for New Vegetation for GCCC Returned Works – GCRT Corridor’ a report be brought back to the Steering Committee for final endorsement prior to submitting to the GCRT Project team for incorporation into the PPP documentation.</td>
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</table>
ITEM 3 PLANNING ENVIRONMENT & TRANSPORT
PLANNING SCHEME REVIEW PROGRAM COMMUNITY AND STAKEHOLDER ENGAGEMENT PLAN
PD98/1132/02/03(P1)

Refer 9 page attachment

1 BASIS FOR CONFIDENTIALITY
Not Applicable.

2 EXECUTIVE SUMMARY
Not Applicable.

3 PURPOSE OF REPORT
The purpose of this report is for Council to consider and endorse the Community and Stakeholder Engagement Plan for the Planning Scheme Review Program.

4 PREVIOUS RESOLUTIONS
Council, at its meeting of 2 March 2009 resolved as follows (SCO9.1117.008):

That Council’s objective be to implement the new Planning Scheme before September 2012.

5 DISCUSSION
Gold Coast City Council has established the Planning Scheme Review Program (Program) to review the organisation’s current planning scheme, and develop and implement an updated and simplified planning scheme.

An appropriate Community and Stakeholder Engagement Plan (Plan) has been developed for the Program (see attached).

This Plan acknowledges the significant engagement activities that have been carried out over recent years and which have significantly informed the Program. In light of these previous engagement campaigns the strategic approaches under this Plan are to ensure that all activities:

- Are targeted, simple, personable and in plain English
- Make it very easy for people to provide feedback and converse with the Program
- Provide people with an opportunity to be involved at a time and location convenient to them
- Use existing Council communication channels to minimise costs
- Draw clear linkages between the Bold Future and the new planning scheme

As stated above, the Plan will build on and complement previous and existing Council communication activities such as City News, Council’s newspaper and radio feature advertisements, Council’s ratepayers newsletter, Council’s on-hold message and e-newsletters.

This Plan is also cognisant that since the development of Council’s last planning scheme there has been a significant shift in the community’s preferred interaction with government, including local government, to the online environment. As such this Plan incorporates a shift in engagement activities to more widely incorporating the online environment.
ITEM 3 (Continued)  
PLANNING SCHEME REVIEW PROGRAM COMMUNITY AND STAKEHOLDER ENGAGEMENT PLAN  
PD98/1132/02/03(P1)

Through these strategic approaches the Program is seeking to improve the balance, accuracy and meaningfulness of community and stakeholder feedback during the various development phases of the new planning scheme.

6 ALIGNMENT TO BOLD FUTURE VISION, CORPORATE PLAN, OPERATIONAL PLAN

- Bold Future Vision 3 – A City Connecting People and Places
- Corporate Plan 1.2.1 - Actively involve Gold Coast citizens in shaping the decisions and actions which will impact on the city now and in the future
- Operational Plan 6 – Planning Scheme Review Program

7 FUNDING AND RESOURCING REQUIREMENTS

Budget/Funding Considerations
The funding of the activities included in this Plan for the 2010/2011 financial year are covered by the approved Program budget.

Human Resources
Human resourcing to implement the activities in this Plan will be met by existing Program staff including a dedicated resource to manage the marketing, communication and engagement activities over the life of the Program. In the event that this Plan is not approved and additional engagement activities are requested then additional human resourcing may be required.

8 RISK MANAGEMENT

The Program has detailed that ineffectual engagement is a risk for the Program. It is mitigating this risk by implementing a detailed Plan and incorporating a dedicated resource to manage the marketing, communication and engagement activities over the life of the Program.

9 STATUTORY MATTERS

The Queensland Government’s *Integrated Planning Act* and *Sustainable Planning Act* stipulate mandatory public notification periods for the development of new planning schemes.

10 COUNCIL POLICIES

- Gold Coast City Council’s Community Consultation Policy

11 DELEGATIONS

Not applicable.
12 COORDINATION & CONSULTATION

<table>
<thead>
<tr>
<th>Name and Title of the Stakeholder Consulted</th>
<th>Directorate or Organisation</th>
<th>Is the Stakeholder Satisfied With Content of Report and Recommendations (Yes/No) (comment as appropriate)</th>
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<tbody>
<tr>
<td>Mayor Cr Ron Clarke</td>
<td>Mayor</td>
<td>Requested changes made, deemed to be satisfied</td>
</tr>
<tr>
<td>Cr Peter Young</td>
<td>Chair, Sustainable City Future Committee</td>
<td>Requested changes made, deemed to be satisfied</td>
</tr>
<tr>
<td>Cr Greg Betts</td>
<td>Deputy Chair, Sustainable City Future Committee</td>
<td>Requested changes made, deemed to be satisfied</td>
</tr>
<tr>
<td>Warren Rowe</td>
<td>Director, Planning Environment and Transport (Program Sponsor)</td>
<td>Yes</td>
</tr>
<tr>
<td>David Corkill</td>
<td>Manager, Strategic &amp; Environmental Planning &amp; Policy (Business Owner)</td>
<td>Yes</td>
</tr>
<tr>
<td>David Hood</td>
<td>Executive Coordinator, City Plan Unit (Program Director)</td>
<td>Yes</td>
</tr>
<tr>
<td>Kerry Heldon</td>
<td>Manager, Corporate Communication</td>
<td>Yes</td>
</tr>
<tr>
<td>Colin Russo</td>
<td>Coordinator, Community Consultation</td>
<td>Yes</td>
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13 STAKEHOLDER IMPACTS

See the stakeholder and community groups detailed in the attached Plan. The Program will provide regular updates to the Sustainable City Future Committee on its effectiveness to engage with these groups.

14 TIMING


15 CONCLUSION

The Program is required to undertake an appropriate engagement campaign as it develops the new planning scheme. The Program’s Community and Stakeholder Engagement Plan builds on and complements previous and existing Council communication activities.
ITEM 3 (Continued)
PLANNING SCHEME REVIEW PROGRAM COMMUNITY AND STAKEHOLDER ENGAGEMENT PLAN
PD98/1132/02/03(P1)

16 RECOMMENDATION

It is recommended that Council resolves as follows:

1 That the Planning Scheme Review Program's Community and Stakeholder Engagement Plan be endorsed.

2 That the Sustainable City Future Committee be provided with regular updates on the execution of this Plan.

Author: Mark Lawlor, Change Manager, Planning Scheme Review Program
Authorised by: Matthew Hulse
Acting Director, Planning Environment & Transport

Nathalie Sengers, Marketing, Communication and Engagement Officer, Planning Scheme Review Program

COMMITTEE RECOMMENDATION SC10.0713.003
moved Cr Robbins seconded Cr Betts

1 That the Planning Scheme Review Program's Community and Stakeholder Engagement Plan be endorsed.

2 That the Sustainable City Future Committee be provided with regular updates on the execution of this Plan.

CARRIED
Planning Scheme Review Program
Community and Stakeholder Engagement Plan
Planning, Environment & Transport Directorate
June 2010
27683929v8
Community and Stakeholder Engagement Plan

Author: Nathalie Sengers
Program Marketing, Communication and Community Engagement Officer

Project sponsor: Warren Rowe
Director, Planning Environment and Transport

Business owner: David Corkill
Manager, Strategic Environment Planning Policy

Project details

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Planning Scheme Review Program</th>
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<tr>
<td>Project Number</td>
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<tr>
<td>Cost Centre</td>
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<td>Project Code</td>
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<tr>
<td>Program Director</td>
<td>David Hood, Executive Coordinator, City Plan Unit</td>
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Version history

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<th>Version</th>
<th>Comments/Change</th>
<th>Changed by &amp; date</th>
<th>Reviewed by &amp; date</th>
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<td>Steering Committee report</td>
<td>Feb 2010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Updated draft incorporating comments from Corporate Communication</td>
<td>March 2010</td>
<td></td>
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<tr>
<td>3</td>
<td>Updated draft incorporating comments from Program Director</td>
<td>April 2010</td>
<td></td>
<td></td>
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<tr>
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<td>Updated draft incorporating comments from Director, PET</td>
<td>April 2010</td>
<td></td>
<td></td>
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<tr>
<td>5</td>
<td>Updated draft incorporating final comments from Corporate Communications</td>
<td>April 2010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Updated draft incorporating comments from Program Director</td>
<td>April 2010</td>
<td></td>
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</tr>
<tr>
<td>7</td>
<td>Ispot check in following technical issue</td>
<td>May 2010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Updated draft incorporating comments from the Mayor and Councillors Young and Betts</td>
<td>June 2010</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Associated documents

<table>
<thead>
<tr>
<th>Document #</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intranet</td>
<td>Bold Future Vision – GCCC Corporate Plan (2009-2013)</td>
</tr>
<tr>
<td>Intranet</td>
<td>GCCC Community Consultation Policy</td>
</tr>
<tr>
<td>22718033</td>
<td>Planning Scheme Review Program - Program Management Plan</td>
</tr>
<tr>
<td>24803183</td>
<td>Planning Scheme Review Program - Change Management Strategy</td>
</tr>
<tr>
<td>27520437</td>
<td>Planning Scheme Review Program - Internal Communication Plan</td>
</tr>
</tbody>
</table>

Endorsement

The Planning Scheme Review Program’s Steering Committee has previously provided in-principle endorsement of the engagement activities to be carried out by the Program over 2010-2012.

Distribution list

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Directorate</th>
<th>Branch</th>
</tr>
</thead>
<tbody>
<tr>
<td>Warren Rowe</td>
<td>Director, PET (Program Sponsor)</td>
<td>PET</td>
<td></td>
</tr>
<tr>
<td>David Corkill</td>
<td>Manager, SEPP (Business Owner)</td>
<td>PET</td>
<td></td>
</tr>
<tr>
<td>David Hood</td>
<td>Executive Coordinator, CPU</td>
<td>PET</td>
<td></td>
</tr>
<tr>
<td>Kerry Heldon</td>
<td>Manager, Corporate Communication</td>
<td>CG</td>
<td></td>
</tr>
<tr>
<td>Colin Russo</td>
<td>Coordinator, Community Consultation</td>
<td>CG</td>
<td></td>
</tr>
<tr>
<td>Sally Bornholt</td>
<td>Advisor, Media Engagement</td>
<td>CG</td>
<td></td>
</tr>
<tr>
<td>Bernice Jones</td>
<td>Communication Strategist</td>
<td>CG</td>
<td></td>
</tr>
<tr>
<td>Robin Earley</td>
<td>Marketing Strategist</td>
<td>PET</td>
<td></td>
</tr>
</tbody>
</table>
1. Introduction

Gold Coast City Council has established and funded the Planning Scheme Review Program (Program) to review the organisation’s current planning scheme, and develop and implement an updated and simplified planning scheme.

The development and implementation of the new Gold Coast planning scheme is important for two significant reasons, namely:

- it is a key Bold Future deliverable and as a statutory instrument will provide Council with the force of law to enforce its vision for the Gold Coast as it relates to new development
- it aligns Council’s planning framework with updated Queensland Government legislation and associated state and regional planning policies

2. Purpose

The purpose of this Community and Stakeholder Engagement Plan (Plan) is to outline the strategic approach in which the Program will engage with the community and stakeholders as it develops and implements an updated and simplified planning scheme.

3. Objectives

This Plan will:

- provide information to the community and stakeholders on the development of the new planning scheme as well as key development issues facing the Gold Coast
- involve the community and stakeholders and enable them to have their say at a time and place convenient to them
- consult and collaborate with key subject matter experts
- assist the community and stakeholders to support the new planning scheme following implementation

4. Community and stakeholder identification

Community and stakeholders who may have an interest or could be affected by the development and implementation of the new planning scheme are:

- community
  - rate payers and residents
    - individual residents, resident associations
  - stakeholder groups
    - key subject matter experts
      - architects and landscape architects, builders, civil engineers, developers, planning and environment lawyers, private certifiers, surveyors, town planners/planning consultants, transport planners / engineers, urban designers etc
5. Key messages

The development of the new planning scheme is a key Bold Future deliverable. As such it is appropriate that key messages to be communicated to the community and stakeholders are aligned to the Bold Future Vision.

In particular, key messages will address the Bold Future themes, namely:

- A city leading by example
- A city loved for its green, gold and blue
- A city connecting people and places
- A city with a thriving economy
- A safe city where everyone belongs
- A city shaped by clever design

5. Strategic approach

The strategic approaches adopted in this Plan are complementary and build on the significant engagement activities that have been previously conducted by Council as illustrated overleaf.
In light of these previous engagement campaigns the strategic approaches under this Plan are to ensure that all activities:

- Are targeted, simple, personable and in plain English
- Make it very easy for people to provide feedback and converse with the Program
- Provide people with an opportunity to be involved at a time and location convenient to them
- Use existing Council communication channels to minimise costs
- Draw clear linkages between the Bold Future and the new planning scheme

This Plan is cognisant that since the development of Council’s last planning scheme there has been a significant shift in the community’s preferred interaction with government, including local government, to the online environment. As such this Plan incorporates a shift in engagement activities to more widely incorporating the online environment.

Through these strategic approaches the Program is also seeking to significantly improve the balance, accuracy and meaningfulness of community and stakeholder feedback during the various development phases of the new planning scheme.

6. Proposed engagement activities

The activities included in this Plan will be delivered over 2010-2012. This period of time will include extensive ongoing engagement activities as well as three peak delivery periods, namely:

- the release of the new planning scheme’s draft strategic framework in 2010 – Peak 1
- the public exhibition of the draft planning scheme in 2011 – Peak 2
- the implementation of the new planning scheme in 2012 – Peak 3

This Plan includes the development of an online community forum as a key engagement tool for the community, as well as the delivery of targeted and in-depth information at meetings and forums for stakeholder groups.
The development of an online community forum is in response to data released by the Australian Government Information Management Office which shows that:

- the internet is now the most common way people make contact with government
- since 2007 the internet has been their most preferred way to contact government
- the proportion of people who use the internet to contact local government has increased by over 150 per cent since 2004

Similarly this Plan also takes into account the findings of this year’s survey by the Queensland Government titled *Social Research on Population Growth and Liveability in South East Queensland* which showed that the community had two clear preferences for involvement or having a say. These preferences were either through online surveys or by accessing a website to provide feedback.

These reputable findings support a general shift in engagement activities by governments to more widely incorporating the online environment. As such this Plan advocates the development of an online community forum through which residents and other stakeholders can have their say. The advantages of this forum include:

- residents and stakeholders will be able to engage with Council in the comfort of their own home and at a time that suits them, and importantly when they’ve thought about the issue and feel ready
- residents and stakeholders have the ability to express their opinions and feedback easily via online forum topics and online surveys
- the often “silent majority” will be able to have input with ease and reserved people who usually don’t speak up at public meetings can have their say
- Council will be able to streamline other less targeted engagement strategies such as advertising
- Council will be able to reduce the quantity of printed material by providing these in an electronic format online

With regard to key stakeholders and subject matter experts this Plan advocates that these groups are engaged through a series of “open house” forums and meetings. The objective of these activities are to provide more in-depth and targeted information and to solicit expert feedback and comment on the development of the draft strategic framework and subsequently the draft planning scheme.

To summarise this Plan advocates the delivery of the following engagement activities:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Audience</th>
<th>Desired result</th>
<th>Engagement peak</th>
</tr>
</thead>
</table>
| **Online community forum** | Community and stakeholders | To provide a simple tool through which the community and stakeholders can provide feedback | - Launch of draft strategic framework  
- Launch of draft planning scheme  
(Peaks 1 and 2) |
| **Media**         | Community and stakeholders | To obtain media exposure for key engagement phases | - Launch of draft strategic framework  
- Launch of draft planning scheme  
- Implementation of new planning scheme  
(Peaks 1, 2 and 3) |
<table>
<thead>
<tr>
<th>Activity</th>
<th>Audience</th>
<th>Desired result</th>
<th>Engagement peak</th>
</tr>
</thead>
</table>
| **Meetings and forums**        | Stakeholders                  | To provide targeted information to industry groups and to consult key subject matter experts | - Launch of draft strategic framework  
- Launch of draft planning scheme  
- Implementation of new planning scheme  
(Peaks 1, 2 and 3) |
| - open house                   |                               |                                                                               |                 |
| - subject matter expert meetings |                               |                                                                               |                 |
| **Displays**                   | Community and stakeholders    | To provide static information and/or the ability for people to converse with Program staff at key events and to ask the community to provide feedback through the online community forum | - Launch of draft strategic framework  
- Launch of draft planning scheme  
- Implementation of new planning scheme  
(Peaks 1, 2 and 3) |
| - static displays in Council offices and libraries |                               |                                                                               |                 |
| - staffed displays             |                               |                                                                               |                 |
| **Utilisation of Council’s communication channels** | Community                     | To provide information to the community and to ask the community to provide feedback through the online community forum | - Launch of draft strategic framework  
- Launch of draft planning scheme  
(Peaks 1 and 2) |
| - City News (newspaper and radio advertisements) |                               |                                                                               |                 |
| - Ratepayers newsletter        |                               |                                                                               |                 |
| - On-hold message              |                               |                                                                               |                 |
| - Council’s e-newsletters      |                               |                                                                               |                 |
| **Online information and tools** | Community                     | To provide information on all aspects of the new planning scheme, as well as easy to use multi-media tools to graphically illustrate the new planning scheme | - Launch of draft strategic framework  
- Launch of draft planning scheme  
- Implementation of new planning scheme  
(Peaks 1, 2 and 3) |
| - GCCC website                 |                               |                                                                               |                 |
| - Multi-media tools            |                               |                                                                               |                 |
| **Advertising**                | Community                     | To advertise the release of the draft strategic framework and the draft plan and to ask the community to provide feedback through the online community forum | - Launch of draft strategic framework  
- Launch of draft planning scheme  
(Peaks 1 and 2) |
<p>| - Print                        |                               |                                                                               |                 |
| - Radio                        |                               |                                                                               |                 |
| - Online                       |                               |                                                                               |                 |</p>
<table>
<thead>
<tr>
<th>Activity</th>
<th>Audience</th>
<th>Desired result</th>
<th>Engagement peak</th>
</tr>
</thead>
</table>
| **Marketing and communication**| Community and stakeholders         | To provide plain English printed information on the draft strategic framework, the draft planning scheme, as well as the new planning scheme                                                                              | - Launch of draft strategic framework  
- Launch of draft planning scheme  
- Implementation of new planning scheme  
(Peaks 1, 2 and 3)                                      |
| - Community information papers  |                                   |                                                                                                                        |                                                                                                        |
| - Printed material              |                                   |                                                                                                                        |                                                                                                        |

### 7. Roles and responsibilities

<table>
<thead>
<tr>
<th>Role</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program Marketing, Communication and Community Engagement Officer</td>
<td>Marketing, Communication and Community Engagement</td>
</tr>
<tr>
<td>Program Change Manager</td>
<td>Change Management</td>
</tr>
<tr>
<td>Coordinator, Community Consultation</td>
<td>Advisor, Community Engagement</td>
</tr>
<tr>
<td>Manager, Communication Corporate</td>
<td>Advisor, Corporate Communication</td>
</tr>
<tr>
<td>Communication Strategist</td>
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<td>Communication Strategist</td>
<td>Advisor, Corporate Communication</td>
</tr>
<tr>
<td>Marketing Strategist</td>
<td>Advisor, Marketing</td>
</tr>
<tr>
<td>Lead Planner/Program Manager</td>
<td>Technical Advisor, Planning Scheme Content</td>
</tr>
<tr>
<td>Program Director</td>
<td>Final sign-off and quality check</td>
</tr>
</tbody>
</table>

### 8. Measure of success

The measures of success listed below relate to the peak engagement periods of the Program and are a cumulative measure.

<table>
<thead>
<tr>
<th>Objective</th>
<th>Measure of success</th>
</tr>
</thead>
<tbody>
<tr>
<td>Awareness</td>
<td>Online community forum successfully established and 500 people have participated</td>
</tr>
<tr>
<td></td>
<td>3 media launches</td>
</tr>
<tr>
<td></td>
<td>3 open houses successfully executed</td>
</tr>
<tr>
<td></td>
<td>15 static displays successfully executed</td>
</tr>
<tr>
<td></td>
<td>10 staffed displays successfully executed</td>
</tr>
<tr>
<td></td>
<td>50 per cent increase in visitor numbers to the Program’s pages on the Gold Coast City Council website</td>
</tr>
<tr>
<td>Quality input</td>
<td>Quality and accuracy of feedback obtained is significantly higher than in previous planning scheme development programs</td>
</tr>
</tbody>
</table>

iSPOT: #27406467 v8
1 BASIS FOR CONFIDENTIALITY

Not Applicable.

2 EXECUTIVE SUMMARY

Not Applicable.

3 PURPOSE OF REPORT

The purpose of this report is to discuss the inclusion of the subject site in the South East Queensland (SEQ) Regional Plan urban footprint.

4 PREVIOUS RESOLUTIONS

SC10.0511.005

“That a report be brought to the Sustainable City Future Committee addressing the inclusion of Lot 26 RP170765 and Lot 18 W3168 at 52 and 110 Waverley Drive, Willow Vale in the SEQ Regional Plan Urban Footprint and the criteria considered supporting their inclusion.”

5 DISCUSSION

The first regional plan was released by the Queensland Government as a draft document in 2004 and published as the SEQ Regional Plan 2005-2026 in 2005.

The regional plan promotes a compact settlement pattern and defines an urban footprint. The subject site is within the urban footprint, with the western boundary of Lot 18 forming the urban footprint boundary.

The Queensland Government determines the urban footprint. Although the criteria are not explicitly published, the urban footprint broadly follows the principles of the regional plan including compact settlement and protection of the natural environment and rural production areas.

Government officials consult with local government and undertake public consultation in preparing the regional plan, and refer to local government planning schemes, including mapping of domains and Local Area Plan (LAP) precincts.

At the time that the first regional plan was prepared in 2004, all of Lot 26 and the majority of Lot 18, excluding the western portion adjoining Hotham Creek, were included in the Coomera Residential Precinct in the Coomera LAP in the Gold Coast Planning Scheme 2003.

It is believed that mapping of the urban footprint will have followed the LAP mapping, with a preference for following cadastral boundaries of lots, rather than including part lots.

It is also noted that at the City Planning Committee, 11 May 2010, there was some discussion about the higher density RD2 node included on part of Lot 18 in the LAP residential density maps in the planning scheme.
ITEM 4 (Continued)
THE INCLUSION OF LOT 18 W3168 AND LOT 26 RP170765 AT 52 AND 110 WAVERLEY DRIVE, WILLOW VALE IN THE SOUTH EAST QUEENSLAND REGIONAL PLAN URBAN FOOTPRINT
PN136359/123/DA1(P12)

The history of this and other RD2 nodes in the Coomera LAP can be traced to the Coomera Charette Planning Study which was undertaken in 1995/96. The nodes were placed on intended bus routes, reflecting the intention to develop walkable neighbourhoods, serviced by local neighbourhood facilities. Waverley Drive is shown in the Charette maps as being on a proposed bus route.

6 ALIGNMENT TO BOLD FUTURE VISION, CORPORATE PLAN, OPERATIONAL PLAN

Not Applicable.

7 FUNDING AND RESOURCING REQUIREMENTS

Not Applicable.

8 RISK MANAGEMENT

Not Applicable.

9 STATUTORY MATTERS

The SEQ Regional Plan 2009-2031 is a statutory instrument under the Statutory Instruments Act 1992 and has the force of law as provided for in the Sustainable Planning Act 2009.

10 COUNCIL POLICIES

Not Applicable.

11 DELEGATIONS

Not Applicable.

12 COORDINATION & CONSULTATION

<table>
<thead>
<tr>
<th>Name and Title of the Stakeholder Consulted</th>
<th>Directorate or Organisation</th>
<th>Is the Stakeholder Satisfied With Content of Report and Recommendations (Yes/No) (comment as appropriate)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Christopher Davis, Team Leader Local Area Planning</td>
<td>PET</td>
<td>Yes</td>
</tr>
</tbody>
</table>

13 STAKEHOLDER IMPACTS

Not Applicable.

14 TIMING

Not Applicable.
ITEM 4 (Continued)
THE INCLUSION OF LOT 18 W3168 AND LOT 26 RP170765 AT 52 AND 110 WAVERLEY DRIVE, WILLOW VALE IN THE SOUTH EAST QUEENSLAND REGIONAL PLAN URBAN FOOTPRINT
PN136359/123/DA1(P12)

15 CONCLUSION

It is believed that the inclusion of the subject site in the urban footprint in the SEQ Regional Plan by the Queensland Government would have followed mapping of the Coomera Residential Precinct in the Coomera LAP.

16 RECOMMENDATION

It is recommended that Council resolves as follows:

That Council notes the contents of this report.

Author: Julie Harris
Team Leader Regional Planning
22 June 2010

Authorised by: Matthew Hulse
Acting Director Planning Environment & Transport

COMMITTEE RECOMMENDATION SC10.0713.004
moved Cr Shepherd seconded Cr Wayne

That Council notes the contents of this report.

CARRIED
1 BASIS FOR CONFIDENTIALITY

1.1 I recommend that the attachments be considered in Closed Session pursuant to section 72(1) of the Local Government (Operations) Regulation 2010 for the reason that the matter involves business for which public discussion would be likely to prejudice the interests of Council or someone else, or enable a person to gain financial advantage.

1.2 I recommend that the attachments be deemed a confidential document and be treated as such in accordance with sections 171 (3) and 200 (9) of the Local Government Act 2009 and that the document remain confidential unless Council decides otherwise by resolution.

2 EXECUTIVE SUMMARY

Not Applicable.

3 PURPOSE OF REPORT

Following on from Council recommendation G10.0322.004 this report provides a summary of the public submissions received on proposals to enter twenty eight places in the Gold Coast Local Heritage Register and makes recommendation that twenty one of these places be formally adopted by Council into that register.

4 PREVIOUS RESOLUTIONS

Council at its meeting on 22 March 2010 resolved ex minute in part (G10.0322.004)

“2 That the interim Gold Coast Local Heritage Register be formalised by the entering of those places, identified in Attachment 1 to the report, as currently subject to the Cultural Heritage (Historic) Constraint Code in the Gold Coast Planning Scheme 2003 and assessed as having local or state heritage significance according to section 35(1) of the Queensland Heritage Act 1992 into that register, with the exception of the following properties:

Kirrabelle Hotel (now Coolangatta Sands)
Thompson House, 13 – 15 Griffith Street
Shop 17 Griffith Street
Shop 23 Griffith Street
Shop 25 Griffith Street
St Augustine’s Church

And that those properties be included in the Proposed Additions to the Gold Coast Local Heritage Register.”

“3 That those places identified in Attachment 2 to the report as having local heritage significance with the addition of those properties identified above be added to the interim Gold Coast Local Heritage Register in accordance with the Queensland Heritage Act 1992.”
5 DISCUSSION

Background

Council recommendation G10.0322.004 proposed that twenty eight places be entered in the Gold Coast Local Heritage Register. These places were:

- ANZAC Memorial, Coolangatta
- Bauer Street Precinct Tree Plantings, Southport
- Benowa Post Office (Former)
- Burleigh Heads Caravan Park and Caretakers Residence
- Carey Park Fig and Paperbark Plantings, Southport
- Ceramic House (Relocated), Nerang
- Grave of Sarah Duncan, Burleigh Heads
- Kirrabelle Hotel (Former), Coolangatta
- Merrimac Drains Historic Landscape
- Miami State High School Sign
- Molendinar Railway Tunnel and Former Railway Alignment
- Nerang Hall
- Norfolk Pines Burleigh Foreshore
- Norfolk Pines Coolangatta Foreshore
- Pink Poodle Motel Sign, Surfers Paradise
- Preece House (Relocated), Nerang
- Remains of Jack Evans’ Porpoise Pool, Coolangatta
- St Augustine’s Church, Coolangatta
- St Margaret’s Church (Relocated), Surfers Paradise
- Southport Sea Wall
- Springbrook Community Hall
- Walton Street Precinct Fig Trees, Southport
- Welch Pioneer Park Grave Site, Wongawallan
- Wreck of the Coolangatta Fragment, Coolangatta
- 13-15 Griffith Street, Coolangatta (Thompson House)
- 17 Griffith Street, Coolangatta (Alberosa House)
- 23 Griffith Street, Coolangatta
- 25 Griffith Street, Coolangatta

In accordance with section 117 of the Queensland Heritage Act 1992 ‘Notice of Proposal’ was given to each of the owners of those twenty eight places and also published in the Gold Coast Bulletin on 27 March 2010.

Any person or other entity may give the local government a written submission about any one or more of the proposed entries in the local heritage register. Submissions must be made on the basis that the place is or is not a place of cultural heritage significance for the local government’s area.

Section 118 of the Act states that a local government must have regard to submissions received under section 117 about the proposal to enter or remove the place from its local heritage register and that the local government may have regard to other information the local government considers relevant to the application.
This report contains a discussion of the proposal to enter the above places in the Gold Coast Local Heritage Register, summary of submissions, independent review of technical information supplied in submissions, and other relevant information received in regards to the entry of those places in the Gold Coast Local Heritage Register, and recommendations on the adoption by Council of the above places in the Gold Coast Local Heritage Register.

Submissions Received

Thirteen submissions were received on the twenty eight proposed entries in the Gold Coast Local Heritage Register. Of these submissions:

- two supported or had no objection to the proposed entry of a place in the Gold Coast Local Heritage Register (one submission also provided additional information about a proposed entry);
- eight opposed the proposed entry of a place in the Gold Coast Local Heritage Register (one submission also contained significant relevant information about a proposed entry); and
- three were solely concerned with providing either additional information about a proposed entry in the Gold Coast Local Heritage Register or providing significant relevant information which may affect Council’s decision to proceed with the entry of a place in that Register at this time.

A detailed summary of these submissions are contained in Attachment 1.

Independent Review

An independent review was commissioned of those submissions that contained specialist information about whether the place is or is not a place of cultural heritage significance for the Gold Coast. These reviews are contained in Attachment 2.

Discussion of Proposed Additions to the Gold Coast Local Heritage Register

**ANZAC Memorial, Coolangatta (HER0034)**

No submissions were received on the proposal to enter the ANZAC Memorial, Coolangatta, in the Gold Coast Local Heritage Register. It is recommended that the ANZAC Memorial, Coolangatta, be entered in the Gold Coast Local Heritage Register.

**Bauer Street Precinct Tree Plantings, Southport (HER0071)**

Information supplied during the submissions process suggested that further investigation is required prior to the possible entry of the Bauer Street Precinct Tree Plantings, Southport, in the Gold Coast Local Heritage Register. It is recommended that the Bauer Street Precinct Tree Plantings, Southport, not be entered in the Gold Coast Local Heritage Register until further investigations are completed.

**Benowa Post Office (Former) (HER0053)**

No submissions were received on the proposal to enter the Benowa Post Office (Former) in the Gold Coast Local Heritage Register. It is recommended that the Benowa Post Office be entered in the Gold Coast Local Heritage Register.
ITEM 5 (Continued)
GOLD COAST LOCAL HERITAGE REGISTER ADOPTIONS JULY 2010
CE116/60/24(P1)

Burleigh Heads Caravan Park and Caretakers Residence (HER0048)

No submissions were received on the proposal to enter the Burleigh Heads Caravan Park and Caretakers Residence in the Gold Coast Local Heritage Register. It is recommended that the Burleigh Heads Caravan Park and Caretakers Residence be entered in the Gold Coast Local Heritage Register.

Carey Park Fig and Paperbark Plantings, Southport (HER0065)

No submissions were received on the proposal to enter the Carey Park Fig and Paperbark Plantings, Southport, in the Gold Coast Local Heritage Register. It is recommended that the Carey Park Fig and Paperbark Plantings be entered in the Gold Coast Local Heritage Register.

Ceramic House (Relocated), Nerang (HER0359)

No submissions were received on the proposal to enter Ceramic House, Nerang, in the Gold Coast Local Heritage Register. It is recommended that Ceramic House, Nerang, be entered in the Gold Coast Local Heritage Register.

Grave of Sarah Duncan, Burleigh Heads (HER0082)

No submissions were received on the proposal to enter the Grave of Sarah Duncan, Burleigh Heads, in the Gold Coast Local Heritage Register. It is recommended that the Grave of Sarah Duncan, Burleigh Heads, be entered in the Gold Coast Local Heritage Register.

Kirrabelle Hotel (Former), Coolangatta (HER0029)

One submission was received against the proposal to enter the Kirrabelle Hotel (Former), now Coolangatta Sands Hotel, in the Gold Coast Local Heritage Register. A summary of this submission is contained in Attachment 1 to this report.

As a result of the information provided by the submitter, an independent review of the proposal to enter this place in the Gold Coast Local Heritage Register was carried out. This review supported the submitter's contention that while the current hotel may have a special association with local people, this association is not a product of the retention of its traditional fabric, character, and history and that the changes made to the building, while not completely removing all traces of age, have severely diminished its cultural heritage significance.

It is recommended that the Kirrabelle Hotel (Former), Coolangatta, not be entered in the Gold Coast Local Heritage Register.

Merrimac Drains Historic Landscape (HER0085)

One submission was received against the proposal to list the Merrimac Drains Historic Landscape in the Gold Coast Local Heritage Register. This submission provided information that may be relevant to the decision to enter this place in the Gold Coast Local Heritage Register. A summary of this submission is contained in Attachment 1 to this report.

The submission contains perceived future operations/management impacts, resulting from entry of the Merrimac Drains Historic Landscape in the Gold Coast Local Heritage Register, on what is proposed to be a critical priority infrastructure project for the City, that is, Greenheart.
As an asset controlled and managed by Gold Coast City Council, any development proposed at this place will be self-assessable with the maximum social and economic benefits being the identified outcome for the place. Although desirable, it is not necessary that all or part of the historic landscape is retained as part of any proposed development. However entry on the Register will provide recognition of its heritage values and ensure that this landscape is fully documented and properly considered as part of any future development plans.

It is considered that entering of the Merrimac Drains Historic Landscape in the Gold Coast Local Heritage Register would not significantly impact on the future operations and/or management of the Greenheart project. It is recommended that Merrimac Drains Historic Landscape be entered in the Gold Coast Local Heritage Register.

**Miami State High School Sign (HER0055)**

One submission was received against the proposal to list the Miami State High School Sign in the Gold Coast Local Heritage Register. A summary of this submission is contained in Attachment 1 to this report.

The submission did not elaborate on the reasons as to why the sign is not warranted to be entered in the Gold Coast Local Heritage Register. It was also noted within the submission itself that state property owners are exempt from the development requirements associated with listing on the local heritage register.

It is recommended that the Miami State High School Sign be entered in the Gold Coast Local Heritage Register.

**Molendinar Railway Tunnel and Former Railway Alignment (HER0047)**

Two submissions were received on the proposal to add the Molendinar Railway Tunnel and Former Railway Alignment in the Gold Coast Local Heritage Register. One submission was in support of the proposal and the other provided additional information in regards to the original name of the place, that is, Ernest Junction Railway Tunnel. Summaries of both of these submissions are contained in Attachment 1 to this report.

It is recommended that the Molendinar Railway Tunnel and Former Railway Alignment be entered in the Gold Coast Local Heritage Register as the Ernest Junction Railway Tunnel and Former Railway Alignment.

**Nerang Hall (HER0066)**

No submissions were received on the proposal to enter the Nerang Hall in the Gold Coast Local Heritage Register. It is recommended the Nerang Hall be entered in the Gold Coast Local Heritage Register.

**Norfolk Pines Burleigh Foreshore (HER0083)**

No submissions were received on the proposal to enter the Norfolk Pines Burleigh Foreshore in the Gold Coast Local Heritage Register. It is recommended that the Norfolk Pines Burleigh Foreshore be entered in the Gold Coast Local Heritage Register.
ITEM 5 (Continued)
GOLD COAST LOCAL HERITAGE REGISTER ADOPTIONS JULY 2010
CE116/60/24(P1)

Norfolk Pines Coolangatta Foreshore (HER0084)

No submissions were received on the proposal to enter the Norfolk Pines Coolangatta Foreshore in the Gold Coast Local Heritage Register. It is recommended that the Norfolk Pines Coolangatta Foreshore be entered in the Gold Coast Local Heritage.

Pink Poodle Motel Sign (HER0060)

One submission was received against the proposal to list the Pink Poodle Motel Sign, Surfers Paradise, in the Gold Coast Local Heritage Register. A summary of this submission is contained in Attachment 1 to this report.

The submission did not elaborate why, in terms of cultural heritage significance for the Gold Coast, the sign should not be entered in the Gold Coast Local Heritage Register. That the motel became a place of questionable reputation does not, by itself, decrease the cultural heritage significance of the place. Matters raised in the submission regarding removal of the Heritage Order and/or the ‘Motel’ part of the sign are noted but are outside of the current proposal.

It is recommended that the Pink Poodle Motel Sign, Surfers Paradise, be entered in the Gold Coast Local Heritage Register.

Preece House (Relocated), Nerang (HER0075)

No submissions were received on the proposal to enter Preece House, Nerang, in the Gold Coast Local Heritage Register. It is recommended that the Preece House, Nerang, be entered in the Gold Coast Local Heritage Register.

Remains of Jack Evans’ Porpoise Pool, Coolangatta (HER0062)

No submissions were received on the proposal to enter the Remains of Jack Evans’ Porpoise Pool, Coolangatta, in the Gold Coast Local Heritage Register. It is recommended that the Remains of Jack Evans’ Porpoise Pool, Coolangatta, be entered in the Gold Coast Local Heritage Register.

St Augustine’s Church, Coolangatta (HER0033)

One submission was received in support of the proposal to list St Augustine’s Church, Coolangatta, in the Gold Coast Local Heritage Register. This submission also provided additional information in regards to the construction date of the church, that is, 1924/25 not 1925/26 and that the 1963 addition was complimented with alterations in the 1980s. A summary of this submission is contained in Attachment 1 to this report.

It is recommended that St Augustine’s Church, Coolangatta, be entered in the Gold Coast Local Heritage Register and that the Statement of Significance is corrected in regards to the construction date and noting that alterations were done to the 1963 addition during the 1980s.

St Margaret’s Church (Relocated), Surfers Paradise (HER0052)

No submissions were received on the proposal to enter St Margaret’s Church, Surfers Paradise, in the Gold Coast Local Heritage Register. It is recommended that the St Margret’s Church, Surfers Paradise, be entered in the Gold Coast Local Heritage Register.
Southport Sea Wall (HER0050)

No submissions were received on the proposal to enter the Southport Sea Wall in the Gold Coast Local Heritage Register. It is recommended that the Southport Sea Wall be entered in the Gold Coast Local Heritage Register.

Springbrook Community Hall (HER0054)

No submissions were received on the proposal to enter the Springbrook Community Hall in the Gold Coast Local Heritage Register. It is recommended that the Springbrook Community Hall be entered in the Gold Coast Local Heritage Register.

Walton Street Precinct Fig Trees, Southport (HER0070)

Information supplied during the submissions process suggested that further investigation is required prior to the possible entry of the Walton Street Precinct Fig Trees, Southport, in the Gold Coast Local Heritage Register. It is recommended that the Walton Street Precinct Fig Trees, Southport, not be entered in the Gold Coast Local Heritage Register until further investigations are completed.

Welch Pioneer Park Grave Site, Wongawallan (HER0081)

No submissions were received on the proposal to enter the Welch Pioneer Park Grave Site, Wongawallan, in the Gold Coast Local Heritage Register. It is recommended that the Welch Pioneer Park Grave Site, Wongawallan, be entered in the Gold Coast Local Heritage Register.

Wreck of the Coolangatta Fragment (HER0025)

No submissions were received on the proposal to enter the Wreck of the Coolangatta Fragment in the Gold Coast Local Heritage Register. It is recommended that the Wreck of the Coolangatta Fragment be entered in the Gold Coast Local Heritage Register.

13-15 Griffith Street, Coolangatta (Thompson House) (HER0031)

One submission was received against the proposal to list 13-15 Griffith Street, Coolangatta (Thompson House), in the Gold Coast Local Heritage Register. A summary of this submission is contained in Attachment 1 to this report.

As a result of the information provided by the submitter, an independent review of the proposal to enter this place in the Gold Coast Local Heritage Register was carried out. This review supported the submitters contention that 13-15 Griffith Street, Coolangatta, does not demonstrate Art Deco architecture, is not aesthetically significant, and changes to the building have negated any ability of the building to place the building in the context of its time.

It is recommended that 13-15 Griffith Street, Coolangatta, not be entered in the Gold Coast Local Heritage Register.
17 Griffith Street, Coolangatta (Alberosa House) (HER0032)

One submission was received against the proposal to list 17 Griffith Street, Coolangatta (Alberosa House), in the Gold Coast Local Heritage Register. A summary of this submission is contained in Attachment 1 to this report.

As a result of the information provided by the submitter, an independent review of the proposal to enter this place in the Gold Coast Local Heritage Register was carried out. This review supported the submitters contention that 17 Griffith Street, Coolangatta, does not demonstrate Art Deco architecture, is not aesthetically significant, and changes to the building have negated any ability of the building to place the building in the context of its time.

It is recommended that 17 Griffith Street, Coolangatta, not be entered in the Gold Coast Local Heritage Register.

23 Griffith Street, Coolangatta (HER0361)

One submission was received against the proposal to list 23 Griffith Street, Coolangatta, in the Gold Coast Local Heritage Register. A summary of this submission is contained in Attachment 1 to this report.

As a result of the information provided by the submitter, an independent review of the proposal to enter this place in the Gold Coast Local Heritage Register was carried out. This review, while noting that the building retained a reasonable amount of early fabric, supported the submitters contention that 23 Griffith Street, Coolangatta, cannot be considered to demonstrate any of the principal characterises of interwar Art Deco commercial buildings, that what remains of that original fabric does not impart sufficient aesthetic significance, and that the building cannot be considered important in demonstrating the growth of Coolangatta in the interwar period.

It is recommended that 23 Griffith Street, Coolangatta, not be entered in the Gold Coast Local Heritage Register.

25 Griffith Street, Coolangatta (HER0362)

One submission was received against the proposal to list 25 Griffith Street, Coolangatta, in the Gold Coast Local Heritage Register. A summary of this submission is contained in Attachment 1 to this report.

As a result of the information provided by the submitter, an independent review of the proposal to enter this place in the Gold Coast Local Heritage Register was carried out. This review supported the submitters contention that 25 Griffith Street, Coolangatta, does not demonstrate the pre-War development of Coolangatta (although it may, potentially, be capable of demonstrating the development of Coolangatta at or around the end of World War II) and that while the upper façade exhibits some principal characteristics of Art Deco design, the building, as a whole, does not demonstrate many of those principal characteristics.

In variance with the submission, the review notes that the upper façade is capable of demonstrating the principal characteristics of Art Deco design and that a building need not contain many or all of those characteristics to be able to do so.
It is considered that, on balance, sufficient ambiguity regarding the cultural heritage values of the place has been established. It is recommended that 25 Griffith Street, Coolangatta, not be entered in the Gold Coast Local Heritage Register.

6 ALIGNMENT TO BOLD FUTURE VISION, CORPORATE PLAN, OPERATIONAL PLAN

The development of the Gold Coast Local Heritage Register aligns with the following Bold Future theme:

A city connecting people and places
We are spiritually enriched by our heritage, our places, our culture

Key focus area and actions from Council's Corporate Plan 2009-14 that are relevant to the development of the Gold Coast Local Heritage Register are:

Key Focus Area 3 – A city connecting people and places

Outcome 3.5: The community takes pride in its heritage and diversity

3.5.3 Educate and promote the value of cultural heritage and the conservation of built heritage, working in partnership with the community, State and Federal Government, and the private sector

3.5.5 Recognise the heritage of the Gold Coast and Traditional Owners of the land

7 FUNDING AND RESOURCING REQUIREMENTS

Not applicable

8 RISK MANAGEMENT

<table>
<thead>
<tr>
<th>Risk</th>
<th>Mitigation</th>
<th>Mitigation Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>The city’s growth and development is not adapted, enhanced or preserved through a strategic and long term planning approach while protecting and conserving our natural resources, infrastructure and heritage</td>
<td>5.24 Heritage</td>
<td>Facilitate and assist in the protection and recognition of heritage on the Gold Coast.</td>
</tr>
</tbody>
</table>
9 STATUTORY MATTERS

Queensland Heritage Act 1992 creates a statutory requirement for local governments to keep a local heritage register of places of cultural significance in its area and sets out the process to be followed when adding or removing places from that register.

Development on a local heritage place is assessable according to Schedule 2 contained in the Queensland Heritage Regulations 2003.

10 COUNCIL POLICIES

The following Council Policy is applicable:
- Cultural Development Policy

11 DELEGATIONS

Not applicable

12 COORDINATION & CONSULTATION

In the table below, identify how internal and external stakeholders have been involved / participated in the proposal to date and the outcome of that participation.

<table>
<thead>
<tr>
<th>Name and Title of the Stakeholder Consulted</th>
<th>Directorate or Organisation</th>
<th>Is the Stakeholder Satisfied With Content of Report and Recommendations (Yes/No) (comment as appropriate)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Property owners/managers</td>
<td>Various</td>
<td>Direct notification of proposal to enter place on Gold Coast Local Heritage Register and submissions invited. A detailed summary of all submissions received are contained in Attachment 1 to this report.</td>
</tr>
<tr>
<td>General Public</td>
<td></td>
<td>Public notification and submissions invited. A detailed summary of all submissions received are contained in Attachment 1 to this report.</td>
</tr>
<tr>
<td>Internal Stakeholders</td>
<td>Various</td>
<td>Global email including invite for submissions. Discussions with various internal stakeholders. A detailed summary of all submissions received are contained in Attachment 1 to this report.</td>
</tr>
</tbody>
</table>
13 STAKEHOLDER IMPACTS

Once a place is entered on a local heritage register the property owner, under the *Queensland Heritage Regulations 2003*, has to make a Development Application to make changes to that place or, in some cases, a lot. The assessing agency is the local government. Consideration is being made, as part of the development of the new Planning Scheme, for some changes to local heritage places to be self-assessable by property owners.

Places managed by a local or state government and entered in a local heritage register are self-assessable.

14 TIMING

Subject to Council approval and adoption, the recommended proposed entries into the Gold Coast Local Heritage Register will come into effect immediately.

15 CONCLUSION

The report contains a discussion of the proposal to enter twenty eight places in the Gold Coast Local Heritage Register, summary of submissions to which Council must have regard to and other relevant information received which Council may have regard to in regards to the entry of those places in the Gold Coast Local Heritage Register, review of specialist information supplied in those submissions, and recommendations on the adoption, or otherwise, by Council of the twenty eight places in the Gold Coast Local Heritage Register.

It is recommended that twenty-one of the twenty eight proposed places be entered in the Gold Coast Local Heritage Register at this time with a further two proposed entries requiring further investigation before a decision as to whether or not enter those places in the Gold Coast Local Heritage Register is made. It is also recommended that five of the twenty eight proposed places not be entered in the Gold Coast Local Heritage Register.

16 RECOMMENDATION

It is recommended that Council resolves as follows:

1. That attachments 1 and 2 be deemed confidential documents and be treated as such in accordance with sections 171 (3) and 200 (9) of the *Local Government Act 2009* and that the documents remain confidential unless Council decides otherwise by resolution.

2. That Council enter the following places in the Gold Coast Local Heritage Register:
   a. ANZAC Memorial, Coolangatta
   b. Benowa Post Office (Former)
   c. Burleigh Heads Caravan Park and Caretakers Residence
   d. Carey Park Fig and Paperbark Plantings, Southport
   e. Ceramic House (Relocated), Nerang
   f. Grave of Sarah Duncan, Burleigh Heads
   g. Merrimac Drains Historic Landscape
   h. Miami State High School Sign
   i. Nerang Hall
   j. Norfolk Pines Burleigh Foreshore
   k. Norfolk Pines Coolangatta Foreshore
ITEM 5 (Continued)
GOLD COAST LOCAL HERITAGE REGISTER ADOPTIONS JULY 2010
CE116/60/24(P1)

l Preece House, Nerang
m Pink Poodle Motel Sign, Surfers Paradise
n Remains of Jack Evans’ Porpoise Pool, Coolangatta
o St Margaret’s Church (Relocated), Surfers Paradise
p Southport Sea Wall
q Springbrook Community Hall
r Welch Pioneer Park Grave Site, Wongawallan
s Wreck of the Coolangatta Fragment, Coolangatta

3 That Council enter the Molendinar Railway Tunnel and Former Railway Alignment in the Gold Coast Local Heritage Register as the Ernest Junction Railway Tunnel and Former Railway Alignment.

4 That Council enter St Augustine’s Church in the Gold Coast Local Heritage Register and that the Statement of Significance is corrected in regards to the construction date, that is, 1924/25 not 1925/26 and noting that alterations were done to the 1963 addition in the 1980s.

5 That Council defer the entry of the following places in the Gold Coast Local Heritage Register until a later date subject to further investigations
   a Bauer Street Precinct Tree Plantings, Southport
   b Walton Street Precinct Fig Trees, Southport

6 That Council not enter the following places in the Gold Coast Local Heritage Register
   a Kirrabelle Hotel (Former), Coolangatta
   b 13-15 Griffith Street, Coolangatta (Thompson House)
   c 17 Griffith Street, Coolangatta (Alberosa House)
   d 23 Griffith Street, Coolangatta
   e 25 Griffith Street, Coolangatta

Author: Jonathan Welch
Program Manager – Cultural Heritage
1 July 2010

Authorised by: Matthew Hulse
Acting Director Planning Environment & Transport
ITEM 5 (Continued)
GOLD COAST LOCAL HERITAGE REGISTER ADOPTIONS JULY 2010
CE116/60/24(P1)

COMMITTEE RECOMMENDATION    SC10.0713.005
moved Cr Shepherd    seconded Cr Wayne

1 That attachments 1 and 2 be deemed confidential documents and be treated as
such in accordance with sections 171 (3) and 200 (9) of the Local Government
Act 2009 and that the documents remain confidential unless Council decides
otherwise by resolution.

2 That Council enter the following places in the Gold Coast Local Heritage Register
   a ANZAC Memorial, Coolangatta
   b Benowa Post Office (Former)
   c Burleigh Heads Caravan Park and Caretakers Residence
   d Carey Park Fig and Paperbark Plantings, Southport
   e Ceramic House (Relocated), Nerang
   f Grave of Sarah Duncan, Burleigh Heads
   g Merrimac Drains Historic Landscape
   h Miami State High School Sign
   i Nerang Hall
   j Norfolk Pines Burleigh Foreshore
   k Norfolk Pines Coolangatta Foreshore
   l Preece House, Nerang
   m Pink Poodle Motel Sign, Surfers Paradise
   n Remains of Jack Evans’ Porpoise Pool, Coolangatta
   o St Margaret’s Church (Relocated), Surfers Paradise
   p Southport Sea Wall
   q Springbrook Community Hall
   r Welch Pioneer Park Grave Site, Wongawallan
   s Wreck of the Coolangatta Fragment, Coolangatta

3 That Council enter the Molendinar Railway Tunnel and Former Railway
   Alignment in the Gold Coast Local Heritage Register as the Ernest Junction
   Railway Tunnel and Former Railway Alignment.

4 That Council enter St Augustine’s Church in the Gold Coast Local Heritage
   Register and that the Statement of Significance is corrected in regards to the
   construction date, that is, 1924/25 not 1925/26 and noting that alterations were
done to the 1963 addition in the 1980s.

5 That Council defer the entry of the following places in the Gold Coast Local
   Heritage Register until a later date subject to further investigations
   a Bauer Street Precinct Tree Plantings, Southport
   b Walton Street Precinct Fig Trees, Southport

6 That Council not enter the following places in the Gold Coast Local Heritage
   Register
   a Kirrabelle Hotel (Former), Coolangatta
   b 13-15 Griffith Street, Coolangatta (Thompson House)
   c 17 Griffith Street, Coolangatta (Alberosa House)
   d 23 Griffith Street, Coolangatta
   e 25 Griffith Street, Coolangatta

CARRIED
CLOSSED SESSION
LOCAL GOVERNMENT ACT 2009 AND SUPPORTING REGULATIONS

PROCEDURAL MOTION

That Council move into Closed Session pursuant to section 72(1) of the Local Government (Operations) Regulation 2010, for the consideration of the following items for the reasons shown:-

<table>
<thead>
<tr>
<th>Item</th>
<th>Subject</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>INTERNATIONAL URBAN DESIGN CONFERENCE SERIES – UPDATE</td>
<td>PREJUDICIAL MATTER</td>
</tr>
<tr>
<td>7</td>
<td>INFRASTRUCTURE CHARGES SUBSIDY ECONOMIC STIMULUS INITIATIVE ASSESSMENT REPORT</td>
<td>PREJUDICIAL MATTER</td>
</tr>
</tbody>
</table>

CARRIED

PROCEDURAL MOTION moved Cr Shepherd seconded Cr Wayne

That the Committee move into Open Session and that Committee Recommendations SC10.0713.006 and sc10.0713.007 be moved and carried as indicated on the following pages.

CARRIED
COMMITTEE RECOMMENDATION  SC10.0713.006  
moved  Cr Betts  seconded  Cr Robbins

1  That the report/attachment be deemed a confidential document and be treated as such in accordance with sections 171 (3) and 200 (9) of the *Local Government Act 2009* and that the document remain confidential unless Council decides otherwise by resolution.

2  That Council note the successful completion of the International Urban Design Conference 2009.

3  That Council note the staging of the International Urban Design Conference 2010 to be held in Canberra from 30 August to 1 September.

4  That Council, in return for naming rights and policy control, agrees to co-host the International Urban Design Conference 2011 in conjunction with the conference management firm AST Management Pty Ltd at no financial cost or financial risk to Council.

5  That Council endorses the City Architect to be Council’s representative to co-chair the Conference Programming Committee for 2011.

CARRIED
Cr Pforr advised the meeting that he may have a Conflict of Interest in the matter for the reason that the lists at Attachments A and B may include a property owner that provided an election campaign donation. Cr Pforr left the room and did not take part in discussion or voting on the matter.

PROCEDURAL MOTION moved Cr Young seconded Cr Wayne

Noting that the instrumental matter of concern relates to Alvey Properties Pty Ltd and that the decision of the committee has no impact or bearing on any of the other projects that are listed of which the applicant identities are unknown to the committee, it is considered that no Councillors present have a Conflict of Interest in the matter and may remain in the room and participate in discussion and voting.

Record of Voting:
For: 5 Cr Robbins, Cr Wayne, Cr Young, Cr Betts, Cr Shepherd
Against: 0
Absent: 1 Cr Pforr
Abstained: 0

CARRIED

MOTION moved Cr Betts seconded Cr Shepherd

1 That the report/attachment be deemed a confidential document and be treated as such in accordance with sections 171 (3) and 200 (9) of the Local Government Act 2009 and that the document remain confidential unless Council decides otherwise by resolution.

2 That Council notes the contents of this report.

3 That Council advises Alvey Properties Pty Ltd that their subsidy request has been elevated to the top of the waiting list shown at Attachment B due to concerns about the inaccurate time displayed on the countdown timer on the submitter’s computer which was drawn from Council’s software code.

4 That Attachment A to this report be published on Council’s website in the interest of transparency.

5 That Council note that there are errors in Attachment B that need to be corrected and reported on at a later point in time.

Record of Voting:
For: 2 Cr Betts, Cr Shepherd
Against: 3 Cr Robbins, Cr Wayne, Cr Young
Absent: 1 Cr Pforr
Abstained: 0
AMENDMENT
moved Cr Young seconded Cr Wayne

1 That the report/attachment be deemed a confidential document and be treated as such in accordance with sections 171 (3) and 200 (9) of the *Local Government Act 2009* and that the document remain confidential unless Council decides otherwise by resolution.

2 That Council notes the contents of this report.

3 That Council advises Alvey Properties Pty Ltd that their initial subsidy request was submitted prior to 11.00am and accordingly the system advised this error, and Alvey Properties submitted a subsequent subsidy request which has been assessed and is included on the waiting list as shown at Attachment B.

4 That Attachment A to this report be published on Council’s website in the interest of transparency.

5 That Council note that there are errors in Attachment B that need to be corrected and reported on at a later point in time.

Record of Voting:
For: 3 Cr Robbins, Cr Wayne, Cr Young
Against: 2 Cr Betts, Cr Shepherd
Absent: 1 Cr Pforr
Abstained: 0

The AMENDMENT was CARRIED
The AMENDMENT became the MOTION and was CARRIED:

Changed Recommendation

COMMITTEE RECOMMENDATION SC10.0713.007
moved Cr Young seconded Cr Wayne

1 That the report/attachment be deemed a confidential document and be treated as such in accordance with sections 171 (3) and 200 (9) of the *Local Government Act 2009* and that the document remain confidential unless Council decides otherwise by resolution.

2 That Council notes the contents of this report.

3 That Council advises Alvey Properties Pty Ltd that their initial subsidy request was submitted prior to 11.00am and accordingly the system advised this error, and Alvey Properties submitted a subsequent subsidy request which has been assessed and is included on the waiting list as shown at Attachment B.

4 That Attachment A to this report be published on Council’s website in the interest of transparency.

5 That Council note that there are errors in Attachment B that need to be corrected and reported on at a later point in time.

CARRIED
ITEM 7 (Continued)
INFRASTRUCTURE CHARGES SUBSIDY ECONOMIC STIMULUS INITIATIVE
ASSESSMENT REPORT
PD113/106/10/13(P1) REPORT CONFIDENTIAL

CHANGED AT COUNCIL 19 JULY 2010
RESOLUTION G10.0719.018 moved Cr Betts seconded Cr Shepherd

That Committee Recommendation SC10.0713.007 be adopted with the deletion of paragraph 5, such that it reads as follows:

1 That the report/attachment be deemed non-confidential except those parts deemed by the Chief Executive Officer to remain confidential in accordance with sections 171(3) and 200(9) of the Local Government Act 2009.

2 That Alvey Properties Pty Ltd be advised that their subsidy request is considered by Council to be a valid application under the subsidy criteria, and is to be listed on the “Approved list of Infrastructure Charges Subsidy Projects” due to the special circumstances outlined in correspondence of 15 July 2010.

3 That the funding of this addition to the subsidy list be found by the Chief Executive Officer and reported back to Council.

4 That Attachment A to this report be published on Council’s website in the interest of transparency.

CARRIED

There being no further business the meeting closed at 3.40pm.
These Pages Numbered 1 to 197
Constitute The Adopted Report Of The Meeting
Of The Sustainable City Future Committee
Held Tuesday, 13 July 2010