

## Environmental Functions Operational Service Levels Review



# Environmental Functions App A Service Levels Review

## Table of Contents

<b>1. Overview</b>	<b>3</b>
1.1 Executive Summary	3
1.2 Background	3
1.3 Review Document Development	4
<b>2. Natural Areas Management</b>	<b>6</b>
2.1 Service Overview	6
2.2 Assets Managed/ Community Outcomes from Service	6
2.3 Growth Trend and Cost Analysis	7
2.4 Service Levels & Standards	7
<b>3. Community Conservation Partnerships</b>	<b>10</b>
3.1 Current Service Overview	10
3.2 Assets Managed/ Community Outcomes from Service	10
3.3 Growth Trend and Cost Analysis	11
3.4 Service Levels & Standards	12
<b>4. Pest Management Review of Current Service</b>	<b>15</b>
4.1 Current Service Overview	15
4.2 Assets Managed/ Community Outcomes from Service	15
4.3 Growth Trend and Cost Analysis	15
4.4 Service Levels & Standards	16
<b>5. Waterway Operations</b>	<b>22</b>
5.1 Current Service Overview	22
5.2 Assets Managed/Community Outcomes from Service	22
5.3 Growth Trend and Cost Analysis	22
5.4 Service Levels & Standards	23
<b>6. Coastal and Canals Management</b>	<b>37</b>
6.1 Current Service Overview	37
6.2 Assets Managed/Community Outcomes from Service	37
6.3 Growth Trend and Cost Analysis	37
6.4 Service Levels & Standards	38
<b>7. Consolidated Growth Trend and Analysis</b>	<b>40</b>
7.1 Growth General	40
<b>8. Summary</b>	<b>43</b>

## 1. Overview

### 1.1 Executive Summary

The Sunshine Coast Regional Council has a corporate vision for the Sunshine Coast to be *'Australia's most sustainable region – vibrant, green, diverse'*.

A critical component of this vision is for Council to have the ability to implement on-ground and maintain, actions which develop from the range of organisational strategies (and subsequent implementation plans) adopted to support this vision.

Importantly this ability needs to be underpinned by pragmatic resource allocation, informed by sound science and best value practices to ensure optimum on-ground operational delivery of integrated programs to protect and enhance the Sunshine Coast's built and natural environment.

### 1.2 Background

Complementary to the intent of the Value and Success Program the service levels presented below are a result of a review and analysis of the costs associated with the operational delivery of the range of environmental functions delivered by the Environmental Operations (EO) Branch. These service levels represent a base line reference point for the development of future budgets to ensure Council's corporate vision can be achieved.

The Environmental Operations Branch currently deliver the following environmental functions:

#### ***Natural Areas Management***

The natural area management function includes the management of Council's 7,600ha natural area estate, three environmental visitor and education centres and a 90km multiuse recreational trail network.

The primary intent of the program is to manage and enhance the environmental and recreational values of the natural areas open space estate and recreational track and trail network under Council's control.

#### ***Community Conservation Partnerships***

Community Conservation Partnerships deliver two key service functions:

- The Conservation Partnerships Program – engaging and supporting private landholders in managing and protecting the region's environmental assets on private lands and includes 1050 landholders in the partnership network; and
- The Community Nature Conservation Program – engaging and supporting community volunteers in actively protecting and rehabilitating the region's environmental assets on public lands and includes over 1000 volunteers engaged in activities such as weeding, revegetation and turtle conservation.

# Environmental Functions App A Service Levels Review

## ***Pest Management***

The primary intent of the Pest Management function is to deliver Council's statutory responsibility to manage impacts of declared and environmental pest plant and animals on Council owned lands. Please note pest management functions associated with compliance and regulation of declared pest plant and animal on private lands are delivered by the Community Services Department. Coordination of these services are facilitated at an operational level.

## ***Waterway Operations***

The Waterway Operations function delivers operational services to assist in the protection, conservation, enhancement ecological health and function of natural waterways and constructed lakes and wetlands within the Sunshine Coast Regional Council's jurisdiction.

## ***Coastal and Canals Management\****

The Coastal and Canals Management functions include the development and delivery of hard and soft engineering solutions for coastal protection, beach access maintenance, management of artificial canals and lakes including associated infrastructure such as council owned revetment walls, scour protection, canal profiles and locks and weirs as well as bank stabilisation of natural and constructed waterways.

*\* It should be noted that transfer of the functional responsibility of the Coastal and Canals Management program from the Parks and Gardens Branch to Environmental Operations Branch occurred at the start of the 11/12 financial year.*

## **1.3 Review Document Development**

This document details environmental function service levels based on a range of factors such as service profile (levels & standards), current obligations, assets managed, financial details, benchmarking and review innovation recommendations.

In development of this review the following key activities were undertaken:

- Data capture and development of a regional understanding of asset base, hierarchy and service function;
- Development of Total Asset Management Plans for fixed assets
- Review of current, development and consolidation of regionally consistent service delivery models; and
- Value and Success service profiling and best value analysis.

These activities were supported with the establishment of foundational principle that provides the platform for the development of consistent service levels through the development of a priority rating system to inform the allocation of operational resources based on:

- asset maintenance and service function needs;
- maintenance and enhancement of ecological function;

# Environmental Functions App A Service Levels Review

- community engagement and activation (including the opportunity for attracting value-adding in-kind contribution) and fostering community pride;
- legislative obligations; and
- monitoring, evaluation and adaptation.

The following (but not limited to) suite of legislation and other applicable heads of power (corporate and other) provide guidance to operational service level provision:

- *Land Protection (Pest and Stock Route Mgt) Act 2002;*
- *Fire and Rescue Services Act 1990;*
- *Nature Conservation Act 1992;*
- *Land Titles Act 1994;*
- *Work Place Health and Safety Act 1995;*
- *Sustainable Planning Act 2009;*
- *Environment Protection and Biodiversity Act 1999;*
- *Vegetation Management Act 1999;*
- *Coastal Management Act 1995;*
- South East Queensland Regional Plan 2009 – 2031;
- South East Queensland Natural Resource Management Plan 2009 – 2031;
- Sunshine Coast Council Open Space Strategy 2011 – 2021;
- Sunshine Coast Biodiversity Strategy 2010 – 2020;
- Sunshine Coast Council Waterways and Coastal Management Strategy 2011 – 2021;
- Sunshine Coast Council Local Government Pest Management Plan;
- Sunshine Coast Community Plan; and
- Sunshine Coast Council Corporate Plan.

## 2. Natural Areas Management

### 2.1 Service Overview

The natural areas management function delivers the protection, enhancement and management of Council's natural area reserve network. The program focuses on:

- Delivery of operational management programs of environmental reserves including planning and implementation of restoration activities;
- Development and delivery of recreational and environmental asset management programs to protect and enhance Council's natural areas estate;
- Development and delivery of proactive and reactive fire management programs to address Council's legislative responsibilities for the protection of life, property and environment, and
- Development of revenue generating business models, the delivery of protection and embellishment programs for iconic reserves and environmental education facilities and delivery of educational programs such as Mary Cairncross Reserve, Maroochy Botanical Gardens and Bli Bli Wetlands.

### 2.2 Assets Managed/ Community Outcomes from Service

Type	Quantity	Services
Environmental Reserves	5,443.25 ha	Ecological Services – water quality, habitat provision including Endangered, Vulnerable and Rare (EVR), biodiversity, clean air, carbon capture, amenity, adaptability to climate change, sustainable recreation, Education and Interpretation
Beach and Dunal	357.85 ha	Stabilisation, Buffer to storm surge, & sea level rise, habitat provision
Botanic Gardens	82 ha	Ecological Services – water quality, habitat provision (including EVR), biodiversity, clean air, carbon capture, Education and Interpretation, recreation, research, amenity,
Riparian	635.02 ha	Ecological Services – water quality, habitat provision (including EVR), biodiversity, clean air, carbon capture, amenity
Amenity Reserve – Undeveloped	110.03 ha	Buffer, landscape, amenity
Utility	1,971.10 ha (small part of this area only exact extent is unknown)	Drainage, flooding, habitat corridor

## 2.3 Growth Trend and Cost Analysis

Collation and consolidation of growth of natural areas asset and service growth has been consistently costed and documented since 2008. These increases can come in a range of forms including:

- Growth (assets & services);
- Service Level (increase/ decreases); and
- Unavoidable Cost Increases (e.g. fleet, salary, equipment).

Previous growth trend for natural areas shows a constant level of growth of 4% and based on legacy asset contribution this trend is expected to continue for a further 3-5 years. However it is expected that this trend will decline beyond this relative to the current state of the industry.

Recent developing Council policy positions (e.g. offsets) and strategy adoptions (e.g. open space, biodiversity, carbon neutrality) will also have a flow on effect in terms of increased service level commitments.

## 2.4 Service Levels & Standards

### 2.4.1 Open Space Classification & Natural Area Management Responsibilities

The Sunshine Coast Council's Open Space Strategy has identified a variety of open space categories. These categories encompass natural or semi natural settings and primarily support nature conservation outcomes.

The natural areas management responsibilities (total or partial) extend across the following open space categories:

- Environment Reserves
- Recreation Trails
- Recreation Parks
- Landscape & Amenity
- Riparian Corridors
- Beach & Dunal Systems
- Drainage Reserves

Each reserve within the open space categories requires a variety of management approaches. The allocation of resources for reserves management may be determined by several factors, including:

- Biodiversity protection imperatives,
- Reserve condition, function or size,
- Recreation & educational opportunities,

# Environmental Functions App A Service Levels Review

- Minimum expectations.

The Open Space Strategy identifies three broad classifications for the recreation parks. These park classifications are; *Local, District and Sunshine Coast Wide*. These classifications are used for recreation parks in the context of catchment and public accessibility.

Natural Areas cannot be classified in the same context as recreation parks, but these descriptors have been adopted (albeit modified) to classify reserves within the Natural Areas estate with the addition the term *Amenity Reserve*. This has been incorporated to capture small reserves which may be considered to be of limited conservation value and yet fully vegetated and providing a green backdrop.

The following descriptors categorise reserves within the Natural Areas estate:

- Regional Reserve
- District Reserve
- Local Reserve
- Local Reserve Amenity

## 2.4.2 Reserve Assessment and Classification

To assist in determining the most effective allocation of resources to address core management objectives, each reserve is assessed using the following factors:

- Biodiversity factors
  - Reserve Size
  - Regional Ecosystems
  - Schedule species
  - Corridors
- Recreation & Infrastructure factors
  - Walking Trail Class
  - Volunteer Support
- Education and Visitor Support
  - Interpretative Centre Presence
  - Volunteer Presence
- Minimum Service
  - Interface zones

Based on the factors noted above a reserve classification scoring tool provides an overall ranking for each reserve (Amenity, Local, District & Regional) and a rank (1, 2 or 3) for each of the factors (e.g. Biodiversity (B1 - 3) & Recreation (R1 - 3)).

This assessment framework is designed to be an automated classification system which is applied through a Geographic Information System (GIS) model. This provides an efficient and effective way of assessing the current and future contributed natural areas reserve network.



# Environmental Functions App A Service Levels Review

## 2.4.3 Service Level Classification

Based on the reserve scores an operational service level ranking can be allocated to each reserve following the process identified below.

**Table - Service Level Classifications**

Reserve Class Rank (ALL)	Biodiversity Rank Class	Recreational. Rank Class	Environmental Education. Rank Class
Amenity/Local Reserve	B1 - 3	R1- 3	
District Reserve	B1 - 3	R1- 3	
Regional Reserve	B1 - 3	R1 - 3	E-1

Once a Service level classification is assigned each category has planning and operational service activities that have been developed for each classification which informs programmed maintenance activities and frequency. .

Due to the scale of the reserve listing eg 800 reserves the service level schedules for these are available upon request.

## 2.4.4 Planning and Service Activities (Service Levels)

The table below outlines the planning activities associated with each classification to be applied to the natural area reserve network.

**Table – Planning Service Levels**

Natural Areas - Planning Service Levels						
Category	MP *	SMI*	BOA*	Flora/Fauna Ass *	FMP*	Work Plan*
<b>B1</b>	✓	✓	✓	✓	✓	✓
<b>B2</b>		✓	✓	✓	✓	✓
<b>B3</b>					✓	✓
<b>R1</b>						✓
<b>R2</b>						✓
<b>R3</b>						

### \*Category Keys

MP – Management Plan, SMI – Statement of Management Intent, BOA – Bushland Operational Assessment, Flora/Fauna Assessments, FMP – Fire Management Plan

## 3. Community Conservation Partnerships

### 3.1 Current Service Overview

The primary intent of the Community Conservation Partnership is the delivery of two key service functions, they are:

- The Conservation Partnerships Program – engaging and supporting private landholders in managing and protecting the region’s environmental assets on private lands and includes 1050 landholders in the partnership network
- The Community Nature Conservation Program – engaging and supporting community volunteers in actively protecting and rehabilitating the region’s environmental assets on public lands and includes over 1000 volunteers

The Community Conservation Partnership Program enhances ecological assets within both the private and public estate and is service provision. The metrics that characterise the service level are based around officer time and service outcomes with the measures of effectiveness being the area of land actively under protection along with a measure of the community in-kind and financial contribution.

### 3.2 Assets Managed/ Community Outcomes from Service

Type	Quantity	Services
Council reserves with community group input	51 reserves covering 332 hectares	Facilitate community working bees on bushland reserves
Community input into Turtle Care program	112 volunteers plus 65 informal walkers/spotters	Facilitate Turtle care program
Private lands managed under Land For Wildlife and Voluntary Conservation Agreement program	13,262 hectares	Extension and support service to private landowners to manage their land for conservation outcomes
Community outcomes from private landowners	1050 private landowners contributing \$6,000,000 per annum in-kind.	Land For Wildlife program, VCA program
Community outcomes from Community Nature Conservation program	51 registered volunteer groups with 365 volunteers contributing \$680,000 of labour on 332 hectares of Council Reserves per annum	Community Nature Conservation program
Community capacity building	Broader community and existing partners	Grants, property visits, presentations, events, newsletters, workshops, telephone enquiries

# Environmental Functions App A Service Levels Review

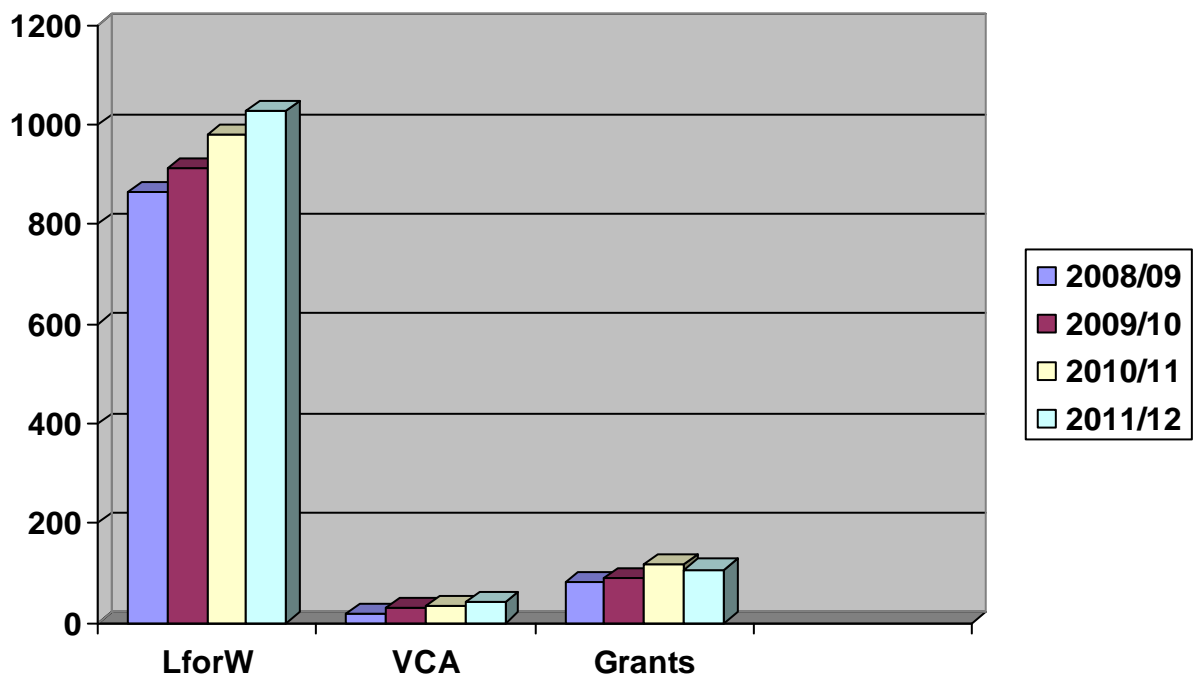
## 3.3 Growth Trend and Cost Analysis

Collation and consolidation of growth in community conservation partnerships services has been consistently costed and documented since 2008. These increases can come in a range of forms including:

- Growth (assets & services)
- Service Level (increase/ decreases)
- Unavoidable Cost Increases (e.g. fleet, salary, equipment)

Services that are experiencing growth in community demand are property revisits under the Land For Wildlife program, Voluntary Conservation Agreement program, Landholder Environment Grants program and the Community Nature Conservation Program (CNCP). To address the growth in demand for the LFW and VCA services, an additional conservation partnerships officer was engaged in mid 2011. Growth in service demand for the CNCP program has been addressed by capacity building some of the volunteer groups to reduce the level of Council officer time in attending working bees. In addition delivery of some workshops/field days has been outsourced to private providers.

**Graph depicting program (agreements, land for wildlife & grants) growth**



## 3.4 Service Levels & Standards

The Community Conservation Partnership program is unique in that while the program enhances ecological assets within both the private and public estate it is essentially service provision. Accordingly the metrics that characterise the service level are predominately based around officer time and service outcomes, conversely the measures of effectiveness is based around the area of land actively under protection along with a valuation measure of the community in-kind and financial contribution.

# Environmental Functions App A Service Levels Review

**Service Level Table**

Activity	Service Level, Staff Time expressed as full time employee	No. of properties/ volunteers/workshops or events per annum	Standards Documented
<b>Conservation Partnerships Program</b>			
Land For Wildlife program	2.0	1050 (13,262ha voluntarily protected)	LFW Operating procedures manual
Voluntary Conservation Agreement Program	1.5	24 (254ha legally protected)	VCA Departmental Policy
Grants	0.25	150	Grants criteria
General extension/ education activities	0.1		
<b>Sub total</b>	<b>3.85</b>		
<b>Community Nature Conservation Program</b>			
Labour market program	0.2	6 month project -10 FT participants	
Volunteer group management	2.5	51 volunteer groups	
Facilitating training workshops for volunteer groups	0.10	10 workshops per annum 150 participants	
On ground reserve management / contractor management	0.80	332 hectares of reserve land managed by contractors.	
Customer Service Requests	0.13	33	
Weed control pilot program	0.02	Gloriosa Lily and Cats Claw biocontrol program	
<b>Sub total</b>	<b>3.75</b>		
<b>Turtle Care Program</b>			
Website maintenance	0.05		
Community / Volunteer Engagement	0.2	112 volunteers plus 65 informal walkers/spotters	
Fox management	0.10		
Reporting	0.02		
Training/ compliance	0.13		
Grant Coordination	0.5		
<b>Sub total</b>	<b>1</b>		
<b>Environmental Education and Training</b>			
Events (such as Conservation forum, Wildflower Festival)	0.15	Community involvement in delivery of events, 9 per annum	
Brochures, fact sheets, guidelines	0.15	Hard copy brochures etc, delivery through community group events	S E Qld joint Council development of education & training materials

# Environmental Functions App A Service Levels Review

Activity	Service Level, Staff Time expressed as full time employee	No. of properties/ volunteers/workshops or events per annum	Standards Documented
Interpretive signage	0.20	Approx 16 per annum dependant on projects	
Workshops, Field days, training to volunteers	0.12	8 per annum	
Staff Training and liaison (Compliance guidelines for due diligence)	0.35	Approx 10 per annum	
<b>Sub Total</b>	<b>0.97</b>		
<b>Other Activities</b>			
Environment Grants program – provision of specialist advice to applicants (community volunteers)	0.03		
Environmental Grants program – assessment of applications	0.03		
Advisory service to the community on environmental matters	0.03		
Provision of specialist advice to internal clients(working groups)	0.03		
Newsletters/ website	0.15		
Applying for external grants, eg Oil Spill funding, Caring for Country	0.01		
School Activities on Council reserves	0.05		
Consultation, liaison with other agencies lgs, state and fed)	0.05		
Administration	0.35		
<b>Sub Total</b>	<b>0.73</b>		
<b>TOTAL FTE</b>	<b>11.3</b>		

## 4. Pest Management Review of Current Service

### 4.1 Current Service Overview

The role of the Pest Management function is to address Council's statutory responsibility to manage impacts of declared pest plant and animals on Council owned lands (as well as high priority environmental weeds as identified in the Sunshine Coast LGAPMP), including the rural and coastal road reserve system, environmental reserves and open space network. The program supports research, develops and delivers targeted pest animal management programs to mitigate environmental impacts and predation upon protected species, such as green and loggerhead turtles. In conjunction with, and to value-add to, Council's natural areas asset management programs, the program also delivers targeted private landholder (LFW and other lands under Conservation Agreement) engagement and support initiatives for the management of pest animal and environmental weeds impacting on the sustainability of the region's natural assets. In addition, the program also focuses on the provision of education and awareness to community through involvement in local NRM related groups, community events, media and customer advice.

Please note pest management functions associated with compliance and regulation of declared pest plant and animals on private lands are delivered by the Community Services Department. Coordination of these services are facilitated at an operational level.

### 4.2 Assets Managed/ Community Outcomes from Service

Type	Quantity	Services
Road Reserves	Approx 2,000km rural and 1,000km coastal road reserve	Control operations focused on the reduction of impacts incurred from declared pests.
Open Space + Environmental Reserve	Approx 7,600ha	Control operations focused on the reduction of impacts incurred from declared pests.
Conservation Partnerships in Private Tenure	13,093ha <i>Land for Wildlife</i> Properties, 157ha Voluntary Conservation Agreements, and 12ha Fixed Term Conservation Agreements	Pest management Support services provided to landholders currently supported via the Conservation Partnerships Program

### 4.3 Growth Trend and Cost Analysis

Collation and consolidation of growth in the pest management program has been consistently costed and documented since 2008. These increases can come in a range of forms including:

- Growth (assets & services);
- Service Level (increase/ decreases); and

# Environmental Functions App A Service Levels Review

- Unavoidable Cost Increases (e.g. fleet, salary, equipment).

Previous growth trend for the Pest Management Program shows a growth trend of approximately 17%. Over the next 5–10 years there is further forecast growth associated with issues such as managing problematic native wildlife interactions (e.g. flying fox, ibis, etc), emergency responses actions (e.g. myrtle rust) and new declared species.

Recent Council strategy adoptions (e.g. biodiversity, pest management plan) will also have a flow on effect in terms of increased service level commitments for the Team.

## 4.4 Service Levels & Standards

### 4.4.1 Pest Plant Program

The pest plant program adopts a landscape approach to ensure the impacts associated with pest plant and environmental weeds are minimised, strategically and efficiently. A landscape approach is achieved through ensuring Council programs align with other pest plant commitments within the Region. The program comprises several sub programs and outputs, with staff time allocated to each sub program accordingly (see Figure 1). Three full time staff (Pest Management Field Leaders) deliver these services.

#### **Sub Program – Road Reserve Declared Pest Plant/Environmental Weed Program**

This program delivers services aimed at reducing the spread of both declared and environmental weeds within Council managed road reserves, comprising 3,444kms. Approximately 45%, or \$135k, of wages and salaries is dedicated to implementing this Program, including a projected Materials and Services budget to the amount of \$360k, total investment \$495k. Road reserves are considered a major pathway and contributor to the spread of declared pest plants, for example, Giants Rats Tail Grass, an invasive species that thrives in road reserves and has the propensity to become attached to travelling motor vehicles and/or other plant.

To fulfil both statutory (*Land Protection (Pest and Stock Route Management) Act 2002*) requirements, as well as, community and visitor expectations in the Region, the Roadside Declared Plant Program requires ~3000hrs of service. The 3000hrs are the sum of 1200hrs targeting Declared Herbs/Woody Shrubs (Dicots), 1200hrs targeting Declared Grasses (Monocots) and 600hrs targeting Declared Class 3 and Environmental Weed Species, as outlined in the Sunshine Coast Regional Council's Pest Management Plan. Each weekly 'Run' consists of a 32 hour week for 1 operational vehicle, 2 x operators, utilising high volume spray equipment. Operational Runs are managed according to the superseded Divisional Electoral Boundaries to ensure consistent coverage of the SCRC within identified timeframes. Certain boundaries require more than one 32 hour Run due to geographical size and/or Declared Plant abundance. Target species for each Run are prioritised according to pest plant biology, seasonal variation, SCC PMP status, and level of Declared Classification (1, 2 or 3).



# Environmental Functions App A Service Levels Review

## Sub Program – Strategic Species Program

Under this program, a project management framework is applied to the management of established Class 1 and other highly strategic incursions across all council managed lands, within the Region. Services specifically address the Management Category – *Broad Control*, as per the Sunshine Coast Local Government Area Pest Management Plan. Species identified under this sub program are targeted for eradication (and containment) within the region. The project management framework sets out the scope, schedule (milestones) and budget in managing each species. Approximately 40%, or \$120k, of wages and salaries is dedicated to implementing elements of this Program.

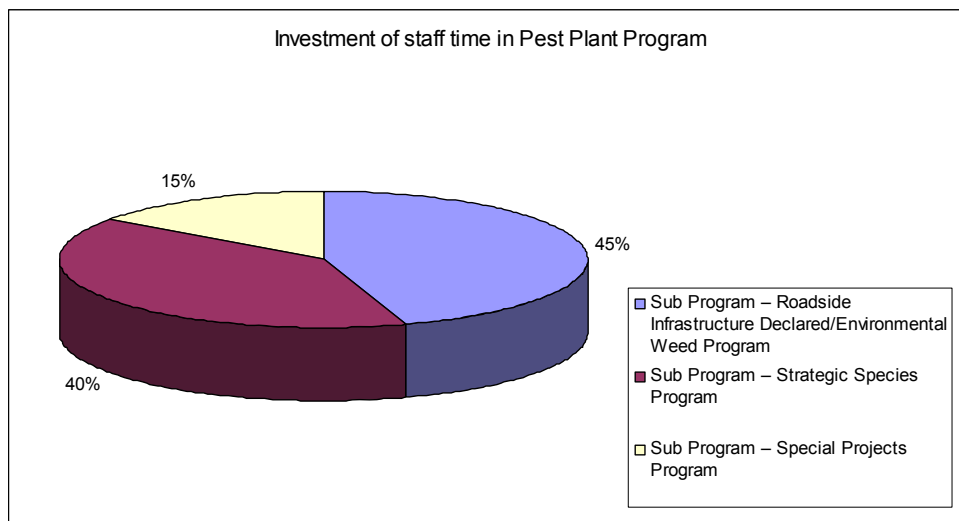
## Sub Program – Special Projects Program

Approximately 15% wages and salaries is dedicated to developing projects that contribute to enhancing the capacity of community. These services are provided to the broader community, as well as other areas of business within Council. Approximately 15%, or \$45k, of wages and salaries is dedicated to implementing elements of this Program. A project management framework is applied to manage these projects. Officers are afforded the opportunity within their respective capacity to explore special projects that aim to provide related services.

## Sub Program – Pest Plant Emergency Response Program

This sub program spans both the pest plant and animal Program functions and its services are delivered to all council managed lands, within the Region. The program specifically addresses emergency response requirements associated with Management Categories – *Under Surveillance* and *Broad Control*, as per the Sunshine Coast Local Government Area Pest Management Plan. Due to the sporadic nature of these situations, a percentage of staff time has not been identified for this sub program, as typically, resources are pooled and coordinated reactively as the need arises. An emergency response situation might include, for example, a new incursion of a Class 1 species into the Region.

**Figure 1 – Apportionment of staff time to Pest Plant Program** - The following pie graph illustrates the apportionment of staff time to the various sub-programs within the overall Pest Plant Program. The sub program – Emergency Response Program has not been included as a percentage due to unknown resource demands associated with each situation as it arises.



## **Pest Plant Delivery Structure**

Three (3) Management Zones (Northern, Central and Southern) exist to ensure the equitable and efficient delivery of Pest Plant services throughout the Region. Each Management Zone and has consistent human resource investment within each of the three Management Zones maintaining jurisdictional responsibilities for the delivery of programs aimed at reducing the impacts of declared pest plants/environmental weeds. Of note officers integrate management programs across respective zones.

*\*See attachment for Pest Management Zones.*

## **4.4.2 Pest Animal Program**

The Pest Animal Program aims to reduce the impacts of declared pest animals across the Region through application of a landscape approach. A landscape approach includes the coordination of resources over as larger area as practicable when targeting a specific pest animal. Application of a landscape approach throughout the various pest animal sub programs encourages land manager collaboration, community goodwill and commitment, temporal efficiency, and ultimately, aids to minimise re-invasion via dispersal sinks (Thomson et al. 1992) of pest animals. Two full time staff deliver these services. The Program comprises several Sub-Programs, each committed to the provision of services across Council managed assets and to community.

### **Sub Program - Common (Indian) Myna Bird Program**

The Common (Indian) Myna program is a community based trapping program introduced by Council in 2010, aimed at reducing the impacts of these introduced birds across the Region. A Project Management framework sets the vision and delivery for this program. In fostering a landscape approach, the program aims to harness and establish a network of volunteers from across the Region to undertake cage trapping activities. Approximately 20% of wages and salaries or \$36k, are allocated to this Program, including a projected Materials and Services budget to the amount of \$25k, total commitment, \$61k.

### **Sub Program - Deer Management Program**

Given the growing establishment of wild deer and recent declaration of these animals under State legislation (2010), this program aims to reduce the impact of established populations in the Region, through identifying best practice approaches for their control. Control options for deer within Queensland are limited, and scarcely documented. The Region's diverse landscape, varied land use, growing human population, diverse attitudes towards deer management, and relatively small land holdings, coupled with an invasive species that is exceptionally mobile and adaptable, remains the current challenge. Approximately 20% of wages and salaries or \$36k, are allocated to this Program, including a projected Materials and Services budget to the amount of \$15k, total investment of \$51k.

### **Sub Program - Wild Dog/Dingo Impact Reduction Program**

The wild dog program embraces the landscape approach on a Regional scale, through ensuring impact reduction activities are delivered in unison, to ensure maximum effect. While the program is aimed at reducing impacts on Council managed lands, its delivery is focussed on the broader landscape context, and programs are married to activities undertaken on private and state managed lands. In addition to fulfilling these commitments within a landscape context, services are also provided to enhance the capacity of land managers to better

# Environmental Functions App A Service Levels Review

respond themselves to these impacts. This capacity is bolstered through the provision of field days and workshops. Programmed services are concentrated at times of the year that recognise the animal's biological vulnerabilities, for example, September has been identified as a key time of the year to direct baiting and trapping programs due to the breeding behaviour and biology of the dog. Approximately 20% of wages and salaries or \$36k, are allocated to this Program, including a projected Materials and Services budget to the amount of \$25k, total investment of \$61k.

## **Sub Program - Fox/Feral Cat Impact Reduction Program**

This program aims to reduce the impact of foxes and feral cats throughout the region. While both animals exhibit obvious differences in physiology and biology, their respective impacts are similar, as are the areas they tend to occupy. Feral cats, for example, can often be captured while undertaking fox control activities and visa versa, hence, both animals have been coupled together and the Program entails a dual delivery function. Coastal areas of the region are a key focus for this program, with activities centred on long term protection of biodiversity in these areas, namely, nesting sea turtle species. Hinterland and rural foxes/feral cats are additionally targeted, however, resources are largely focussed on enhancing land manager capacity in these land tenures, for example, through field days and workshops. Approximately 20% of wages and salaries or \$36k, are allocated to this Program, including a projected Materials and Services budget to the amount of \$20k, total commitment \$56k.

## **Sub Program - Problematic Wildlife Program**

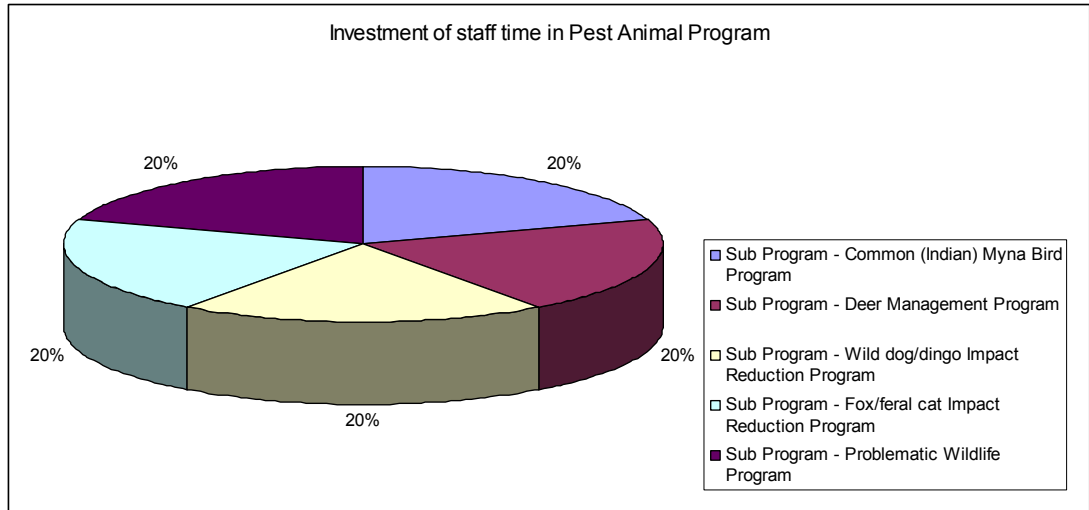
This program aims to deliver services to achieve practical and realistic solutions, where possible, to problematic interactions that exist between community and wildlife. Key species targeted under this program include, ibis, flying foxes, aggressive magpies, egrets, bush turkeys etc. The program involves working in partnership with the affected community to reduce the overall impact. Approximately 20% of wages and salaries or \$36k, are allocated to this Program, including a projected Materials and Services budget to the amount of \$30k, total investment \$66k.

## **Sub Program – Pest Animal Emergency Response Program**

This sub program spans both the pest plant and animal Program functions and its services are delivered to all council managed lands, within the Region. The program specifically addresses emergency response requirements associated with Management Categories – *Under Surveillance* and *Broad Control*, as per the Sunshine Coast Local Government Area Pest Management Plan. Due to the sporadic nature of these situations, a percentage of staff time has not been identified for this sub program, as typically, resources are pooled and coordinated reactively as the need arises. An emergency response situation might include, for example, a new incursion of a Class 1 species into the Region.

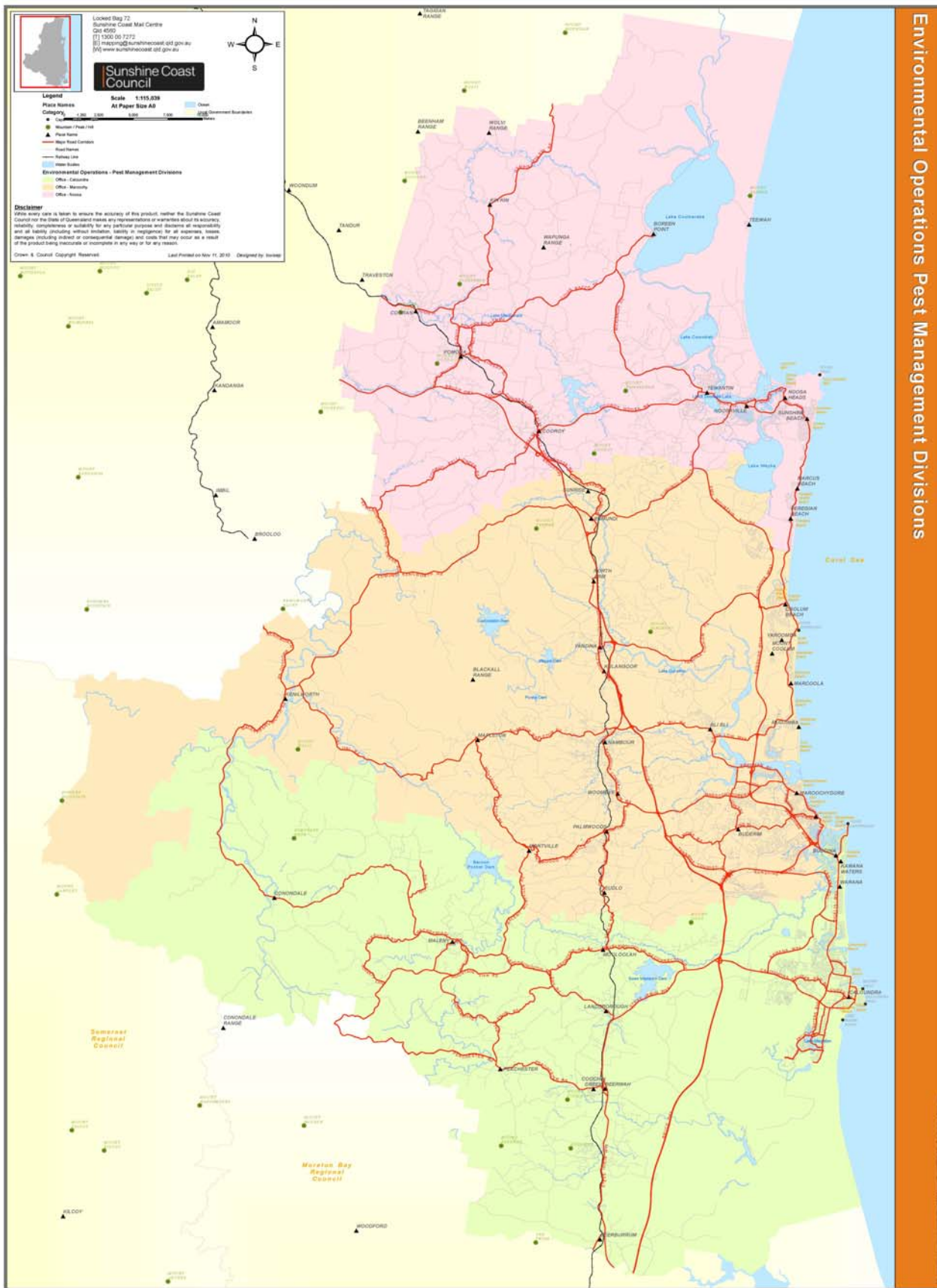
# Environmental Functions App A Service Levels Review

**Figure 2 – Apportionment of staff time to Pest Animal Program** - The following pie graph illustrates the apportionment of staff time to the various sub-programs within the overall Pest Animal Program. The sub program – Emergency Response Program has not been included as a percentage due to unknown resource demands associated with each situation as it arises.



# Environmental Functions App A Service Levels Review

## Attachment – Pest Management Operational Zones



## 5. Waterway Operations

### 5.1 Current Service Overview

The Waterway Operations program delivers operational services and to assist in the protection, conservation, enhancement of the ecological health and sustainability of waterways, lakes, wetlands and constructed water bodies within the Sunshine Coast Regional Council's jurisdiction.

### 5.2 Assets Managed/Community Outcomes from Service

Type	Quantity	Services
Canals	100km	Operational Planning, Litter management, CRMs, Incident response, presence & surveillance
Urban Lakes & Ponds (WSUD assets)	>70	Operational Planning, aquatic vegetation & litter management; aquatic fauna management, riparian revegetation, CRMs, Incident response, presence & surveillance
Major Stream length	>6000km	Operational Planning, Water quality & biological monitoring, litter management, CRMs, Incident response, Riparian revegetation, waterway rehabilitation, presence & surveillance
Coastal Lakes	6	Operational Planning, Water quality monitoring, litter management, riparian revegetation, waterway rehabilitation, CSRs, Incident response, presence & surveillance

### 5.3 Growth Trend and Cost Analysis

Collation and consolidation of growth in the waterways operations program has been consistently costed and documented since 2008. These increases can come in a range of forms including:

- Growth (assets & services);
- Service Level (increase/ decreases); and
- Unavoidable Cost Increases (e.g. fleet, salary, equipment).

Previous growth trend for the Waterway Operations shows a constant level of growth of 27%. For the 2012/13 Financial year The growth forecast is 12.6% however beyond 2012/13 there are a significant number of water bodies currently on maintenance due to be handed over to Council e.g. Wises Road Farm (18.7 Ha); Lake Kawana (72 Ha); Horton Park Golf Course (4 Ha). In addition, there will also be significant growth for Waterways Operations with the development of Pelican Waters South, Palmview and Caloundra South.

Recent Council discussions around determining a policy position to avoid new constructed water bodies will assist to relieve the growth rate in this area and conversely associated risks to the organisation.

# Environmental Functions App A Service Levels Review

## 5.4 Service Levels & Standards

### 5.4.1 Service Level Categories

Waterways Operations has two core business areas:

- Natural Waterways, and,
- Artificial Waterways.

Natural waterways include rivers, creeks, and coastal lakes, including:

- Pumicestone Passage
- Coastal lakes at Currimundi, Tooway, Coondibah, Lake Magellan and Stumers Creek.

Artificial waterways include freshwater urban lakes, wetlands, ponds, some vegetated channels and some detention basins (Water Sensitive Urban Design (WSUD)).

#### Natural Waterways

A recurrent service level weighting ranging from Very High, High, Medium and Low will be attributed to each asset or service activity. This service level weighting will guide the effective allocation of limited resources to achieve maximum returns in terms of delivering a waterways management program.

Each waterway (W) asset or service has been assessed using the following factors:

- a) Minimum **Level of Service** required to maintain the asset – presence of an active community group is considered.
- b) **Ecological value** – areas of high ecological value, sensitive area, receiving waters, known valuable species,
- c) **Community expectation** – waterfront homes, parkland, recreation, no. of CRMs.

Each asset is rated from 1 (low) to 3 (high) for each of the above factors. These are then totalled and the assets are ranked from highest to lowest and allocated a service level category to correspond with that ranking (Table 5.4.1). A community expectation factor is also applied. If the community expectation is rated 3 that asset is automatically placed in the W1 category for monthly maintenance.

- Ranks 7, 8 and 9 are given category W1
- Ranks 5 and 6 are given category W2
- Rank 4 are given category W3
- Rank 3 is given category W4

# Environmental Functions App A Service Levels Review

The descriptions of the service level categories for Natural Waterways (NW) are:

- NW1** Very High Service Level Weighting will receive 70% of the resources available for recurrent operational Management (6 – 8 hours/month)
- NW2** High Service Level Weighting will receive 20% of the resources available for recurrent operational management (3 – 5 hours/month)
- NW3** Medium Service Level Weighting will receive 5% of the resources available for recurrent operational management (2 hours/month)
- NW4** Low Service Level Weighting will receive <5% of the resources available for recurrent operational management (≤1 hour/month)

Costs have been allocated on basic Service levels including salaries, vehicle and boat costs, and laboratory costs.



# Environmental Functions App A Service Levels Review

**Table - Natural Waterways Service Levels**

Asset	Activity	Method	a) Level of service	b) Ecological	c) Community Expectation	Total	Service Level Rank	Service Level Category	Service Frequency	No. of days/month
Minyama Canals	Litter management	Boat	3	1	3	7	1	NW1	Monthly	1
Mooloolah River & Hideaway Waters	Litter management	Boat	3	3	2	8	1	NW1	Monthly	1
Parrearra Lake	Litter management	Boat	3	1	3	7	1	NW1	Monthly	1
Currimundi Lake	Litter management	Boat	3	2	3	8	1	NW1	Monthly	1
Lake Magellan	Seagrass management	Boat	3	1	3	7	1	NW1	Monthly	1
Pumicestone Passage	Litter management	Boat	2	3	2	7	1	NW1	Monthly	1.5

# Environmental Functions App A Service Levels Review

Asset	Activity	Method	a) Level of service	b) Ecological	c) Community Expectation	Total	Service Level Rank	Service Level Category	Service Frequency	No. of days/month
Tooway/Bundabah/Coondibah	Litter management	Land & Kayak	3	2	3	8	1	NW1	Monthly	1
Southern Run (Land Based) - Beerburrum Creek Bridge - Coonowrin Creek Bridge - Young's crossing Pikes road - Coochin Creek (Harry's Bridge) - Mellum Ck (Below Landsborough Depot) - Addlington Ck (beside skate park) - Mooloolah River Bridge - Steven's Road	Litter management	Land based	3	2	2	7	1	NW1	Monthly	1.5
Noosa River	Litter management	Boat	2	3	3	8	1	NW1	Monthly	1
	Litter management	Land based	2	3	3	8	1	NW1	Monthly	1
Noosa River	Shorebird Monitoring	Boat	2	3	1	6	2	NW2	Monthly	0.5

# Environmental Functions App A Service Levels Review

Asset	Activity	Method	a) Level of service	b) Ecological	c) Community Expectation	Total	Service Level Rank	Service Level Category	Service Frequency	No. of days/month
Maroochy Canals in Mooloolah River	Litter management	Boat	2	1	2	5	2	NW2	Bi-monthly	0.5
Maroochy River (Boat Based) - Maroochy Sunshine Plaza to Mouth - Cornmeal Creek	Litter management	Boat	2	1	2	5	2	NW2	Bi-monthly	0.5
Maroochy River (Boat Based) - Northern Arm Maroochy river - Southern arm Maroochy river - Coolum Creek	Litter management	Boat	2	3	1	6	2	NW2	Bi-monthly	0.5
Maroochy River (Boat Based) - Mid flanks & canals	Litter management	Boat	2	2	2	6	2	NW2	Bi-monthly	0.5
Maroochy River (Boat Based) - Petrie Creek	Litter management	Boat	2	2	2	6	2	NW2	Bi-monthly	0.5
Maroochy River (Boat Based) - Paynters Creek	Litter management	Boat	2	2	2	6	2	NW2	Bi-monthly	0.5

# Environmental Functions App A Service Levels Review

Asset	Activity	Method	a) Level of service	b) Ecological	c) Community Expectation	Total	Service Level Rank	Service Level Category	Service Frequency	No. of days/month
Maroochy River (Boat Based) - Eudlo Creek	Litter management	Boat	2	2	2	6	2	NW2	Bi-monthly	0.5
Maroochy River (Land based) - Cotton Tree Caravan Park to Cornmeal Creek - Picnic Point Esp to boat ramp - Chambers Island and boat hire area - Cod Hole Boat Ramp - Fishermans Road boat ramp - Petrie Creek Road bridge - Lefoes Road off Nambour Bli Bli Road	Litter management	Land based	2	1	2	5	2	NW2	Bi-monthly	0.5
Pelican Waters	Litter management	Boat	2	1	2	5	2	NW2	Monthly	0.3
Obi Obi Ck/Gardener Falls	Litter management	Land & Kayak	2	2	1	5	2	NW2	Quarterly	0.3
Maroochy Northshore to Sunshine Beach	Litter management	Land/Kayak	2	2	1	5	2	NW2	Quarterly	0.3

# Environmental Functions App A Service Levels Review

Asset	Activity	Method	a) Level of service	b) Ecological	c) Community Expectation	Total	Service Level Rank	Service Level Category	Service Frequency	No. of days/month
Northern Run (Land Based) - Pt Cartwright rockwall - McKenzies Bridge & Outrigger Park - Parrearra Lake (Supercheap & Boardwalk at Kawana Lights) - Parrearra weir (north) - Parrearra Weir (south) - Kawana Way - Tokara Canal Bridge - end of Tokara Canal	Litter management	Land based	2	1	2	5	2	NW2	Quarterly	0.5
Upper Mooloolah River (Land Based)	Litter management	Land based	1	2	2	5	2	NW2	Quarterly	0.3
Hinterland Run (Land Based) - Hell Hole Creek - Mary River Bridge - Scott's Road (Stanley River) - Stanley River (Peachester) - Behind Beerwah Library	Litter management	Land based	1	2	1	4	3	NW3	Quarterly	0.3
Bruce Highway Run (Land based) - Bells Creek Road - Roys Road; Coochin Creek; Boat ramps; Recreation Area; Fishing spots and campsites - Wild Horse Mountain; Hussey Creek camp sites/fishing spots - Coochin Creek southern side; camp sites/fishing spots	Litter management	Land based	2	1	1	4	3	NW3	Quarterly	0.3

# Environmental Functions App A Service Levels Review

Asset	Activity	Method	a) Level of service	b) Ecological	c) Community Expectation	Total	Service Level Rank	Service Level Category	Service Frequency	No. of days/month
The Great Walk (Land based) - Golden Beach to Moffat Beach; Dicky Beach	Litter management	Land based	1	2	1	4	2	NW3	Quarterly	0.3
Noosa River Monitoring Program	Monitoring	Boat/Land	1	1	1	3	4	NW4	Bi-Annual	0.2
	Water Quality Testing	Land based	3	3	2	8	1	NW1	2	3
	Fishing Line Bins (Bells Creek to Maroochy River)	Land based	2	3	2	7	1	NW1	Monthly	1
	Service requests	Office/Land/Boat	3	2	3	8	1	NW1	Daily	5
	Sediment Boom Deployment	Land Based	2	3	2	7	1	NW1	When Required	1

# Environmental Functions App A Service Levels Review

Asset	Activity	Method	a) Level of service	b) Ecological	c) Community Expectation	Total	Service Level Rank	Service Level Category	Service Frequency	No. of days/month
Noosa River Monitoring Program (continued)	Administration/	Office	3	2	2	7	1	NW1	Daily	9
	Waterway Rehab and restoration	Land/Office	1	3	1	5	2	NW2	When Required	
	Lyngbya monitoring	Boat	1	3	1	5	2	NW2	Monthly	0.3
	Incident Response	Land/Boat	1	2	1	4	3	NW3	When required	0.2
									<b>Monthly Total</b>	<b>37.8</b>
										<b>Annual Total</b>

# Environmental Functions App A Service Levels Review

## Artificial Waterways

This document presents interim service levels as work has recently been initiated to develop a comprehensive Strategic Asset Management Plan for Council's constructed water body assets by Regional Strategy and Planning that will streamline asset information registers and mapping; and, establish sustainable levels of service and lifecycle management strategies.

An interim recurrent service level weighting ranging from Very High, High, Medium and Low will be attributed to each water body. This service level weighting will guide the effective allocation of limited resources to achieve maximum returns in terms of delivering a water body management program.

Each water body has been assessed using the following factors:

- a) Legislative requirements;
- b) Level of risk;
- c) Receiving environment; and
- d) Community expectation.

Service levels depend on the overall health of the water body, the park rating &/or amenity, the receiving/downstream environment, risk management & Council's legislative responsibilities (e.g. management of declared species). While ecological values are sometimes attributed to constructed water bodies Council does not consider maintenance of these values as part of the 'service'. Through the maintenance of reasonable environmental health standards, there are flow on benefits to habitat, water quality, landscape and recreational amenity. While managed differently to water bodies, wetland & WSUD elements require similar levels of service.

Water bodies & wetlands are dynamic systems that pose many management challenges. While some may behave in a predictable manner, where regular maintenance can be scheduled and is generally sufficient to deliver the 'service', many may appear okay though water body and climatic conditions may result in an event that requires priority intervention to maintain environmental health (e.g. events such as blue green algae blooms, avian botulism outbreak, low dissolved oxygen, malodours). The risks associated with these events occurring at specific water bodies are such that provisions for management contingencies are required. Although they may not eventuate in any one year, contingencies are required to deal with the risk.

Costs have been allocated on basic service levels in a dynamic changing environment including number of harvests per year and no. of follow up treatments. This method of costing has been used by the Brisbane City Council in the management of their lake and wetland assets. Costs are also based on the recommendation from "Water by Design" which indicate that an average of \$10,000/ha per annum should be allocated to these assets. No provision has been made for depreciation of the asset, capital improvements or minor enhancements however the program is flexible & adaptive enough to achieve enhancements that provide longer term sustainability of some assets where climatic or other conditions have alleviated the need for certain maintenance activities.



# Environmental Functions App A Service Levels Review

Services include aquatic weed removal/ riparian & edge maintenance/ litter & managing some of the ecological issues associated with particular water bodies such as fauna/ odours/ algal blooms/ sedimentation/ other.

Each asset is rated from 1 (low) to 3 (high) for each of the above 4 factors. These are then totalled and the assets are ranked from highest to lowest and allocated a service level category to correspond with that ranking (Table 1).

- Ranks 10, 11 and 12 are given category W1;
- Ranks 9, 8 and 7 are given category W2;
- Rank 5 and 6 are given category W3; and
- Rank 4 is given category W4.

The service level categories for Artificial Waterways (AW) are:

- AW1** Very High Service Level Weighting will receive 60% of the resources available for recurrent operational Management (6 – 8 hours/month)
- AW2** High Service Level Weighting will receive 25% of the resources available for recurrent operational management (3 – 5 hours/month)
- AW3** Medium Service Level Weighting will receive 10% of the resources available for recurrent operational management (2 hours/month)
- AW4** Low Service Level Weighting will receive 5% of the resources available for recurrent operational management ( $\leq 1$  hour/month)

# Environmental Functions App A Service Levels Review

**Table - Artificial Waterways Service Levels**

Site	a) Legislative requirement	b) Level of risk	c) Receiving Environment	d) Community expectation	Total	Service Level Rank	Service Level Category	Enhancement/ planting/extra works
Lake - Lakeshore Ave Park	3	3	2	3	11	1	AW1	
Lake - Kolora Park	3	2	3	2	10	1	AW1	
Lake - Mangrove Ct Park Bli Bli	2	3	3	2	10	1	AW1	
Lakes - 3, 2 & 1 Sippy Downs (deep lakes)	3	3	3	3	12	1	AW1	
Lake - Nelson Park	3	2	2	3	10	1	AW1	
Lakes - Lillyponds Park Mapleton	2	2	3	3	10	1	AW1	
Lakes - Russell Family Park	3	3	3	2	12	1	AW1	
Lake - Dalton Dr Maroochydhore	3	2	2	2	9	2	AW2	
Lake - Petigrain Ave Park 2 Old Orchard Palmwoods	3	2	2	2	9	2	AW2	
Lake - Mapleton Fire Brigade Park	3	1	2	2	8	2	AW2	
Lake - Platypus Park	3	2	2	2	9	2	AW2	
Lake - Botanic Gardens	1	1	3	2	7	2	AW2	
Lake - Allora Gardens	2	2	2	2	8	2	AW2	
Lakes - Mt Creek 1 & 2 brackish (litter only as required)	1	2	2	2	7	2	AW2	
Lakes 7 & 8 Sippy Downs (newly retrofitted)	1	2	3	3	9	2	AW2	
Lakes - 6 & 5 Sippy Downs (being retrofitted June 2011)	2	2	2	3	9	2	AW2	
Lakes - 4 & 4A, 3 Sippy Downs	2	2	2	3	9	2	AW2	3 lakes
Lake - The Avenue Park Peregian Springs	1	1	3	3	8	2	AW2	
Lake - Tom Richards Park	1	2	2	3	7	2	AW2	
Lake - Quanda Rd	1	2	3	2	8	2	AW2	Edges only
Wetland - Maroochy Bvd Interchange Wisers Rd Depot	1	2	3	1	7	2	AW2	
Wetland - Rainforest Sanctuary Dr	1	2	2	2	8	2	AW2	
Wetlands - Sippy Downs Riparian Zone	2	1	3	1	7	2	AW2	
Wetlands - 17 / 19 Sippy Downs	2	2	2	2	8	2	AW2	
Wetland - 18D Sippy Downs	2	2	2	1	7	2	AW2	
Wetlands - Peregian Springs BCR	2	2	2	1	7	2	AW2	
Vegetated swales - Maroochydhore Cumberland Way	1	2	2	3	8	2	AW2	

# Environmental Functions App A Service Levels Review

Site	a) Legislative requirement	b) Level of risk	c) Receiving Environment	d) Community expectation	Total	Service Level Rank	Service Level Category	Enhancement/ planting/extra works
Vegetated swales - Kawana Forest	1	2	2	2	7	2	AW2	
Vegetated swales - Creekside	1	2	2	2	7	2	AW2	
Claymore Rd wetland (newly off maintenance)	1	2	3	2	8	2	AW2	
Ivadale Lakes Caloundra east	1	2	2	3	8	2	AW2	
Ivadale west	1	2	2	3	8	2	AW2	
Sediment basin/water body Wallum Garden Parklands Caloundra	1	3	2	3	9	2	AW2	
Bellvista Caloundra Water bodies	1	2	3	3	9	2	AW2	
Caloundra Industrial wetlands DEEDI	1	3	3	2	9	2	AW2	
Mooloolah Springs	1	2	2	3	8	2	AW2	
Beerwah Library pond	1	2	2	2	7	2	AW2	
Noosa Aspera Place - new site	1	1	3	3	8	2	AW2	
Bicentennial wetlands - new civil works	1	2	3	1	7	2	AW2	
Little Mountain Common	1	2	2	2	7	2	AW2	
Jessica Park Kawana	1	3	2	3	9	2	AW2	
Lake - Central Car Park Buderim	1	1	2	2	6	3	AW3	
Lake - Merchants Pde Park 1 Town of Seaside	1	1	2	2	6	3	AW3	
Lake - Seaside Bvd Park	1	1	2	2	6	3	AW3	
Lake - Coolum Shores Park	1	1	2	2	6	3	AW3	
Lake - Old Orchard Neighbourhood Park Palmwoods	1	1	1	3	6	3	AW3	
Lake - Flame Tree Cr Park Palmwoods	1	1	2	2	6	3	AW3	
Lake - Orchard Gr BCR	1	1	2	1	5	3	AW3	
Lake - Jim Carolan Park	2	1	1	1	5	3	AW3	
Lake - Secret Valley BCR	1	1	2	1	5	3	AW3	
Wetland - ELCA Mountain Creek	1	1	3	1	6	3	AW3	
Wetland - Strezlecki CI Rainforest Sanctuary	1	1	2	2	6	3	AW3	
Wetland - Cape York Bvd	1	1	1	2	5	3	AW3	
Wetlands - 1 & 2 Coolum Industrial Estate	1	1	3	1	6	3	AW3	
Bellvista wetland	1	2	2	1	6	3	AW3	

# Environmental Functions App A Service Levels Review

Site	a) Legislative requirement	b) Level of risk	c) Receiving Environment	d) Community expectation	Total	Service Level Rank	Service Level Category	Enhancement/ planting/extra works
Vegetated swales - Palmwoods Kuskoph Park	1	2	1	2	6	3	AW3	
Detention Basin/pond Avalon St	1	1	1	1	4	4	AW4	
Lake - The Parkway Place	1	1	1	1	4	4	AW4	
Lake - Nimbus Dr Park	1	1	1	1	4	4	AW4	
Lake - Dunethin Rock / Kirra Rd, BCR Network	1	1	1	1	4	4	AW4	
Dam - Spring Pastures Dr Dulong	1	1	1	1	4	4	AW4	
Wetland - Boardrider Cr Park	1	1	1	1	4	4	AW4	
<b>Salaries – 1 x F5; 1 x S7</b>								
<b>2 x Vehicles</b>								
						<b>Annual Total</b>		

## 6. Coastal and Canals Management

### 6.1 Current Service Overview

The Coastal and Canals Management functions include the development and delivery of hard and soft engineering solutions for coastal protection, management of artificial canals and lakes including associated infrastructure such as council owned revetment walls, scour protection, canal profiles and locks and weirs as well as bank stabilisation of natural and constructed waterways.

### 6.2 Assets Managed/Community Outcomes from Service

Type	Quantity	Services
Beach and Dunal systems	354 ha	Asset management, Operational management, Maintenance, Capital delivery
Canals	100km of revetment walls +20km revetment walls in front of parks ≈60km artificial beach/batter ≈40km rock scour protection	Maintenance, dredging, inspections, revetment walls, rock scour protection
Artificial Lakes (sand bottom, not including canals)	6 <i>(Lake Magellan, Lake Kawana, 2x Mountain Creek, Twin Waters, Parrearra)</i>	Maintenance, dredging for access, inspections
Beach accesses	(300 some currently with EO, northern region with C&C)	Maintenance, inspections
Waterways/weirs/locks/ tidal control structures	3 locks, 6 weirs	Maintenance, inspections, renewal
Navigation lights	40	Asset management, Operational management, Maintenance
Boat ramps	12	Asset management, Operational management, Maintenance
Jetties & pontoons	23 (over 8m long)	Maintenance, inspections, cleaning
Noosa sand shifter	1	Asset management, Operational management, Maintenance

### 6.3 Growth Trend and Cost Analysis

Growth for the Coastal and Canals Management can come in a range of forms including:

- Growth (assets & services);
- Service Level (increase/ decreases); and
- Unavoidable Cost Increases (e.g. fleet, salary, equipment).

# Environmental Functions App A Service Levels Review

Growth trend for the 2012/13 includes the inheritance of the Pelican Waters (north) lock, weir and salinity exchange system, Twin Waters lake system, Sunshine Cove lake system and weir, Hyatt Coolum beach accesses, Golden Beach Nelson St and Leach Park seawalls and Mooloolaba Beach renourishment. Beyond 2012 higher expectations in service will be required for the following projects Dog Beach Noosa, Slurry Systems Noosa Beach upgrade, Scour protection works Noosa Waters, Lake Kawana salinity exchange, weir and revetment walls and Pelican Waters (south) lock and weir.

## 6.4 Service Levels & Standards

Currently the Coastal and Canals Management Team have a high degree of confidence in asset condition and service needs associated with the following service elements:

1. Canal Dredging
2. Canal Desilting
3. Navigation Lights
4. Beach Nourishment
5. Sand Scraping
6. Beach Access
7. Locks & Weirs
8. Permit Approvals
9. River Foreshore Rock Retaining Walls
10. River Dredging
11. Tidal Control Structures
12. Oil Spill Activities

However further ongoing condition investigation is required to inform adequate maintenance service levels for the following asset groups:

1. Revetment Walls (in relation to public open space)
2. Scour Protection
3. Seawalls
4. Groyne Protection
5. Beach Access Renewal
6. Dunal Fencing
7. Boat Ramps
8. Jetties & Pontoons

Please note, while a range of these listed assets would be considered as high risk the Branch is developing an asset program to address these data shortfalls and the associated variances in baseline funding requirements.

# Environmental Functions App A Service Levels Review

**Table - Service Level Standards**

<b>Activity</b>	<b>Total Area</b>	<b>Whole of Life</b>	<b>Current Service Level</b>	<b>Required Level of Service</b>
Canal Dredging	35kms	0	3 - 4 years rotation	3 - 4 years rotation
Canal Desilting	Minyama Canals	7 years	Annual	Annual
Revetment Walls	13.233 kms	50 years	Reactive	265 m / year
Scour Protection	39.966 kms	25 years	Reactive	1600m / year
Navigation Lights	WOR	5 years	Reactive	Reactive
Beaches	140 kms	0		
Beach Nourishment	3 Beaches	0	Annual Programme	Annual Programme
Sandscraping	WOR	0	Reactive	Reactive
Seawall	2.9 kms	25 years	Reactive	120m / year
Groyne Protection	18 groynes	15 years	Capital Programme	2 per annum
Beach Access	322	25 years	Operation Programme	
Beach Access Renewal	322	25 years	Capital Programme	Renewal 13 Beach Accesses
Dunal Fencing	216 Kms	8 years	Reactive	Replace 27 kms / year
Locks & Weirs	2	30 years	Asset Management Plans	Asset Management Plans
EPA Licences & DA Licences	15	0	Annual	Annual
Boat ramps	6	50 years	Reactive	1 every 10 years
Jetties & Pontoons	40	30 years	Bridge Programme	Replace 1 / year
River Foreshore Rock Retaining walls	13.589 Kms	35 years	Reactive Capital Programme	Replace 380m / year
River Dredging	Pumicestone Passage	0	Annual	Annual
Tidal Control Structures	Lake Magellan	25 years	Reactive	Reactive
Oli Spill Equipment	WOR	5 years	Reactive	Reactive

## 7. Consolidated Growth Trend and Analysis

### 7.1 Growth General

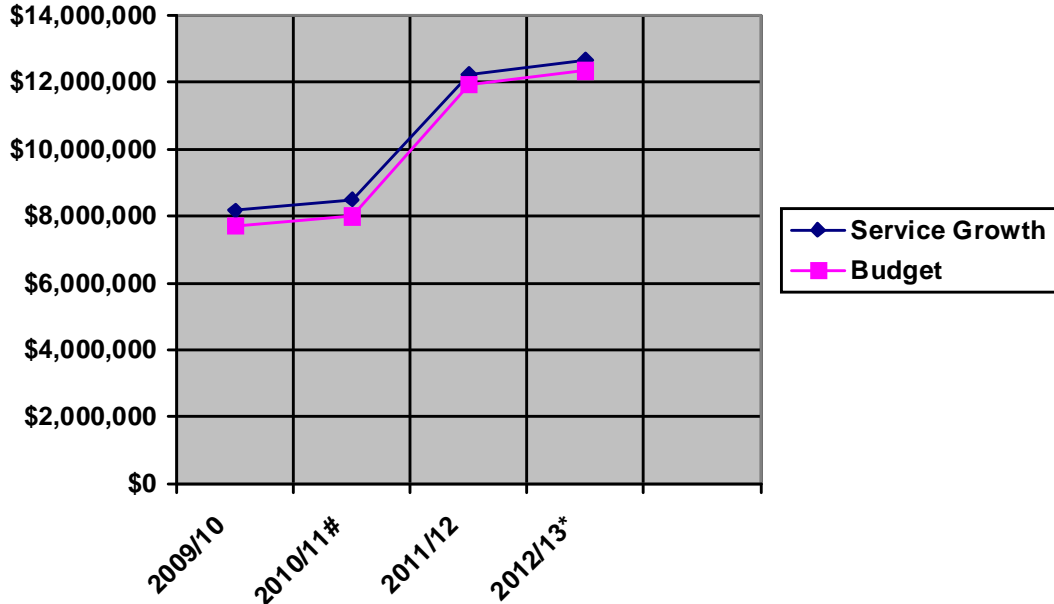
The operational budget allocation for the operational delivery of the environmental functions discussed above for 2011/12 is apx \$12,000,000. This allocation is based on the respective recommended service level costs and the cumulative cost of service delivery across the functions.

Service and asset growth for these environmental functions has been captured and collated consistently since 2008. These increases can come in a range of forms including:

- Growth (assets & services)
- Service Level (increase/ decreases)
- Unavoidable Cost Increases (e.g. fleet, salary, equipment)

A comparison of the service growth to recurrent operational budget costs (2008 to present) is provided in the graph below.

**Graph - Comparison of the Branch business growth to recurrent operational budget costs**



\* 2012/13 based on national CPI of 3.5%

# budget jump between 2010/11 to 2011/12 is due to inclusion of Coastal & Canals at this time.

Following the review process and an assessment of current and emerging service delivery trends a series of service structure changes were initiated within the Branch that realise the benefit of an effective balance between internal and external service provision. These internal structural changes has



# Environmental Functions App A Service Levels Review

now positioned the organisation to leverage off these benefits and respond to growth in the medium term without the traditional response of a proportional increasing of staff establishment levels and other corporate costs associated with unavoidable on-costs, fleet costs and other internal charges.

**Table – 2011/12 Cumulative Cost of Recommended Service Level and Budget Comparison**

<b>Team</b>	<b>Current Budget</b>	<b>Desired Service Level Cost</b>	<b>Variance</b>
Natural Areas	\$4,666,393.24	\$4,668,769.00	-\$2,375.76
Community Conservation Partnerships	\$1,811,158.25	\$1,828,251.00	-\$17,092.75
Pest Management	\$1,225,483.56	\$1,454,137.00	-\$228,653.44
Coastal and Canals	\$3,016,903.80	\$3,016,903.80	\$0*
Waterway Operations	\$1,219,279.01	\$1,270,103.00	-\$50,823.99
<b>Total</b>	<b>\$11,939,217.86</b>	<b>\$12,238,163.80</b>	<b>-\$298,945.94</b>

*\* Nil desired service level cost information included for Coastal & Canals due to the transfer of the functional responsibility of the Coastal and Canals Management program from Parks and Gardens Branch to Environmental Operations Branch commencing at the start of the 11/12 financial year. The Coastal and Canal Management Unit service levels are evolving and being established around asset condition data and asset risk.*

As a consequence of this review process (and recurrent budget yearly increase) these outstanding operational costs were reduced to a final growth cost of c. \$300k or approximately 2.5% of current budget allocation.

This negative budget variance of 2.5% (in relation to 11/12 full year budget) is considered acceptable and is to be expected given the difficulty is forecasting the range of variables to determine operational budgets with complete accuracy.

Subsequent financial years will realise increased operational costs due to internal and external variables that include:

- growth of donated assets;
- growth in participation in community conservation partnership programs;
- continued regionalisation of equitable service levels;
- unavoidable cost increase associated with service provision for legislative obligations;
- activating the implementation of elements of the various endorsed and pending strategies and plans e.g. Biodiversity, Coastal and Waterways, Climate Change, Pest Management, Tracks and Trails, Open Space etc; and

# Environmental Functions App A Service Levels Review

- increased key development areas such as Palmview and Caloundra South and the associated contributed assets (e.g. constructed water bodies).

## 8. Summary

This document details the key elements of the operational delivery of environmental functions and establishes the base line funded service standards. While the outcome of the Value and Success review has already realised changes in service delivery models, determination of service levels, identification of areas for improvement and the delivery of efficiencies in the area of growth management there still remains a number of organisational activities that are needed to continue to ensure a focus remains on continuous improvement.

Some of these additional activities include:

- Remove barriers to organisational integration by remaining engaged through the Integrated Teams and working group process;
- Continue to foster a positive culture that focuses on active customer and stakeholder engagement, adaptive and professional service delivery, utilisation of Performance Planning and Review processes to articulate and measure performance accountability and valuing staff through recognition of achievement and identifying opportunities for development of skills, knowledge and experience;
- Improved use of asset data systems such as Maximo along with improved asset data collection and validation processes and the ability to explore mobile office technology and improved GIS tools for field based data capture and mapping that improves understanding and validation of infrastructure and ecological assets and that promotes efficiency for service level delivery;
- A commitment to monitoring customer satisfaction through the delivery of events such as the annual Conservation Forum;
- Ensure best practice through active scanning of the external industry environment and engagement in industry networks; and
- Benchmark against other organisations and aim to be a recognised Industry benchmark for the development and delivery of innovative, integrated and effective environmental management practice.

In addition, an examination and testing of structure, exploration of external entrepreneurial market opportunities, review and integration of strategic and operational priorities along with specific functional business and workforce planning will see the continued realisation of efficiencies in the delivery of environmental functions provided by Sunshine Coast Council.