

<b>Conservation and Environment Committee</b>	
Mtg Date: 16.07.18	OAR: YES
<b>Authorisation:</b> Bryce Hines	

DA:DA  
H:\departmental\committee reports\1806DA Black Snake Creek Improvement Project Update CR.doc

13 June 2018

**MEMORANDUM**

TO: ACTING SPORT RECREATION AND NATURAL RESOURCES MANAGER

FROM: WATERWAY HEALTH OFFICER

RE: UPPER BLACK SNAKE CREEK IMPROVEMENT PROJECT  
DIVISION 10

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**INTRODUCTION:**

This is a report by the Waterway Health Officer dated 13 June 2018 concerning the delivery of the Upper Black Snake Creek Improvement Project which is funded via the South East Queensland Council of Mayors Resilient Rivers Initiative.

**BACKGROUND:**

At the Council Ordinary Meeting held on the 30 January 2018 it was resolved:

*That Ipswich City Council develop a partnership agreement with Healthy Land and Water to govern and ensure the delivery of the revegetation project in the Black Snake Creek catchment in line with the Resilient Rivers Initiative agreement, as outlined in the report by the Waterway Health Officer dated 15 December 2017.*

A copy of the report is shown in Attachment A.

Upon engagement with Healthy Land & Water (HLW), a letter of intent to vary the original Funding Deed of Agreement (Attachment B) was sent from the Council of Mayors of South East Queensland to the Acting Chief Operating Officer on the 19 April 2018 to confirm that Ipswich City Council will receive a total of \$120,000 from the Council of Mayors.

**PROJECT PROGRESS AND IMPLEMENTATION:**

The works were originally planned for March 2018. Due to contractual delays, the works will commence in September 2018. Therefore, the Project Management Plan (Attachment C) and the corresponding site plans (Attachments D and E) have been updated accordingly.

Consequently, in September 2018 Ipswich City Council, in partnership with Healthy Land and Water, will plant 10,000 trees at two sites in the Black Snake Creek Catchment. The project will also include twelve months of maintenance.

The revegetation will occur on private property. Two landholders have been engaged by Healthy Land and Water, and have provided verbal approval to undertake the works on their properties. Formal landholder agreements will be signed once the contract has been signed by Healthy Land and Water and Ipswich City Council.

Council will continue to be a key partner, and will work closely with Healthy Land and Water in the implementation of the project to ensure the objectives of the project are being met. In order to facilitate the continuation of the project and progress made to date, it is proposed to extend the existing partnering arrangement as outlined in Attachment B with Healthy Land and Water to the total value of \$120,000.00 (Attachment F). This increase is in keeping with the increase in the funding deed of agreement.





**CONCLUSION:**

Council has received funding from the Council of Mayors towards revegetation in the Black Snake Creek catchment. This funding will soon be extended by the Acting Chief Operating Officer (Works Parks and Recreation) through a new deed of agreement to deliver a total of 10,000 trees in the upper mid-slopes of the upper Black Snake Creek catchment. This project is expected to commence in September 2018. Healthy Land and Water will provide assistance as the delivery agent, with the support of West Moreton Landcare Group.

The Chairperson of the Conservation and Environment Committee and the Division 10 Councillor have been advised that this report will be submitted to the Conservation and Environment Committee for July.

**ATTACHMENTS:**

Name of Attachment	Attachment
<a href="#">Conservation and Environment Committee 22 January 2018 Committee Report</a>	 Attachment A
<a href="#">Letter of intent to vary the funding deed of agreement</a>	 Attachment B

Project Management Plan	 Attachment C
Site Plan – Site 1	 Attachment D
Site Plan – Site 2	 Attachment E
Draft Products and Services Contract	 Attachment F

**RECOMMENDATION:**

- A. That Council enter into an amended funding agreement with Council of Mayors (SEQ) for the Black Snake Creek project as outlined in Attachment B to the report by the Waterway Health Officer dated 13 June 2018.
- B. That Council enter into a contract with Healthy Land and Water for the Black Snake Creek project for the sum of \$120,000 (excl. GST of \$12,000) for a period of twelve months.
- C. That the Chief Executive Officer be authorised to negotiate and finalise the terms of the contract to be executed by Council and to do any other acts necessary to implement Council’s decision in accordance with section 13(3) of the *Local Government Act 2009*.

Danielle Andlemac  
**WATERWAY HEALTH OFFICER**

I concur with the recommendation/s contained in this report.

Kaye Cavanagh  
**ACTING SPORT RECREATION AND NATURAL RESOURCES MANAGER**

I concur with the recommendation/s contained in this report.

Bryce Hines  
**ACTING CHIEF OPERATING OFFICER (WORKS, PARKS AND RECREATION)**

<b>Conservation and Environment Committee</b>	
Mtg Date: 22.01.18	OAR: YES
<b>Authorisation:</b> Bryce Hines	

PS: PS  
H:\departmental\committee reports\1710PS Waterway Health Strategy CR.doc

15 December 2017

### **MEMORANDUM**

TO: SPORT RECREATION AND NATURAL RESOURCES MANAGER

FROM: WATERWAY HEALTH OFFICER

RE: UPPER BLACK SNAKE CREEK REVEGETATION PROJECT FUNDED VIA THE  
RESILIENT RIVERS INITIATIVE  
DIVISION 10

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#### **INTRODUCTION:**

This is a report by the Waterway Health Officer dated 15 December 2017 concerning the delivery of the Upper Black Snake Creek Improvement planting project funded via the South East Queensland Council of Mayors Resilient Rivers Initiative.

#### **BACKGROUND:**

As detailed in a report to the City Works, Parks Sport and Environment Committee dated 11 September 2017 (Attachment A), Ipswich City Council has received \$60,000 from the Council of Mayors Resilient Rivers Initiative. The funding is to implement actions within the Black Snake Creek catchment, as part of the Mid Brisbane River Catchment Action Plan.

Funding will be for revegetation on the upper mid-slopes of the surrounding hills to positively impact the groundwater, reducing salinity and improving water quality in Black Snake Creek.

#### **PROPOSED DELIVERY MODEL:**

The revegetation on upper mid-slopes will need to be delivered on private property. Many landholders are already engaged or aware of existing natural resource management groups such as West Moreton Landcare and Healthy Land and Water. In addition, both of these groups have a successful history of delivering planting projects on private property and have the existing agreements and insurances in place to deliver projects directly, quickly and efficiently.





Through the development of the Mid-Brisbane River Catchment Action Plan and the Upper Black Snake Creek Improvement Plan, Council has been working in close partnership with the groups and landholders to deliver many on-ground projects.

To continue the good working relationships that have been established, it is proposed that Council engages Healthy Land and Water to deliver this project using the Resilient Rivers Funding. Council will continue to be a key partner, and will work closely with Healthy Land and Water to ensure the objectives of the project are being met.

**CONCLUSION:**

Ipswich City Council has received funding from the Council of Mayors to deliver 10,000 trees in the upper mid-slopes of the upper Black Snake Creek catchment. This project is expected to be completed by March 2018. In order to deliver this timely and efficiently it is proposed that Council develops a partnership agreement with Healthy Land and Water who can deliver the project using existing agreements and mechanisms and include project management costs.

**ATTACHMENTS:**

Name of Attachment	Attachment
<a href="#">Council of Mayors Investment Black Snake Creek through Mid-Brisbane Catchment Action Plan CWPSE September 2017</a>	 Attachment A
<a href="#">Black Snake Creek Improvement Plan - Full Working Proposal</a>	 Attachment B

**RECOMMENDATION:**

That Ipswich City Council develop a partnership agreement with Healthy Land and Water to govern and ensure the delivery of the revegetation project in the Black Snake Creek catchment in line with the Resilient Rivers Initiative agreement, as outlined in the report by the Waterway Health Officer dated 15 December 2017.

Kaye Cavanagh  
**ACTING SPORT RECREATION AND NATURAL RESOURCES MANAGER**

I concur with the recommendation/s contained in this report.

Bryce Hines  
**ACTING CHIEF OPERATING OFFICER (WORKS, PARKS AND RECREATION)**

<b>City Works, Parks, Sport &amp; Environment Committee</b>	
Mtg Date: 11.09.17	OAR: YES
<b>Authorisation:</b> Bryce Hines	

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11 August 2017

### **MEMORANDUM**

TO: ACTING SPORT RECREATION AND NATURAL RESOURCES MANAGER

FROM: WATERWAYS HEALTH OFFICER

RE: INVESTMENT BY THE COUNCIL OF MAYORS RESILIENT RIVERS INITIATIVE INTO THE BLACK SNAKE CREEK CATCHMENT THROUGH THE MID-BRISBANE CATCHMENT ACTION PLAN

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#### **INTRODUCTION:**

This is a report by the Waterways Health Officer dated 11 August 2017 concerning investment into the Black Snake Creek catchment through the Council of Mayors Resilient Rivers Initiative.

#### **BACKGROUND:**

The Resilient Rivers Task Force established through the Council of Mayors has recently completed the Mid Brisbane River Catchment Action Plan (Attachment A). The plan highlights regionally significant assets within the catchment, and the risks to those assets in the context of waterway health. The primary focus being on erosion and sediment control, and stream stability. The plan identifies a suite of projects to mitigate the risks.

In addition, the Resilient Rivers Initiative seeks to facilitate cross boundary, whole of catchment funding, and to direct investment from downstream beneficiary organisations, such as Brisbane City Council, into the upper catchments.

Black Snake Creek was identified as an investment opportunity in the Mid-Brisbane Catchment Action Plan based upon a project design proposal which draws heavily upon the Upper Black Snake Creek Improvement Plan (2014), specifically focussing on revegetation of the upper mid slopes and alluvial areas.

### **PROPOSED PROJECT:**

The plan of works for this stage is targeted at establishing deep rooted vegetation in the upper mid slopes and alluvial areas.

The long term aim is to lower the saline ground water table, improve stability of the slopes and slow the movement of surface water improving water quality and quantity. The project will aim to plant and establish 10,000 native trees over several hectares of the upper catchment over two (2) years. This will be carried out in partnership with West Moreton Landcare Group and private land owners.

The eligibility of properties will be defined by their location in relation to the previously identified target areas in the Upper Black Snake Creek Improvement Plan and a willingness of landowners to participate in the scheme.

Given one of the objectives of the Resilient Rivers Initiative is to facilitate cross council partnerships, the project is to be delivered by Ipswich City Council in partnership with the Somerset Regional Council using the Council of Mayors funding.

### **FUNDING:**

The Council of Mayors are potentially providing a total of \$120,000.00 dollars over two (2) years, with an initial agreement to fund \$60,000.00. The funding is for the delivery of planting of suitable native trees and plants in key areas of the Black Snake Creek catchment.

Council of Mayors have provided a funding Deed of Agreement (Attachment B) which outlines the basic scope and references an attached Project Management Plan (Attachment C). The Deed outlines the responsibilities of Ipswich City Council, the Council of Mayors and the reporting arrangements and funding payment details. The deed commits Ipswich to deliver works to the value of \$60,000.00 this year with the potential for a second payment of an equivalent amount the following year. Ipswich City Council are providing in-kind support through the administration and project management costs.

### **CONSULTATION:**




Consultation with the Council of Mayors and the Mid Brisbane Catchment Action Plan Steering Group has been ongoing for approximately eighteen months. Council will continue to discuss the progress of the project and details around promotion through normal reporting mechanisms.

Early consultation has been held with Somerset Regional Council, West Moreton Landcare Group and Councillor Pahlke. As the works require collaboration with these parties and the public it is envisaged that communications will be key to the success of the project. West Moreton Landcare Group will play a pivotal role in supporting the community communications into the future.

**CONCLUSION:**

Ipswich City Council has received a funding Deed of Agreement from the Council of Mayors South East Queensland. The agreement will release \$60,000.00 to council to carry out revegetation works in the upper mid-slopes as detailed in the previously endorsed Upper Black Snake Creek Improvement Plan. Successful delivery will likely see the addition of a further \$60,000.00 the following year. Revegetation will take place on private land through partnership agreements and a proportion of the works is to be delivered in Somerset Regional Council area by or under the control of Ipswich City Council.

**ATTACHMENTS:**

Name of Attachment	Attachment
<a href="#">Mid-Brisbane Catchment Action Plan</a>	 Attachment A
<a href="#">Funding Deed of Agreement</a>	 Attachment B
<a href="#">Draft Project Management Plan BSC 01.08.17</a>	 Attachment C

**RECOMMENDATION:**

That the report be received and the contents noted.

Philip Smith  
**WATERWAY HEALTH OFFICER**

I concur with the recommendation/s contained in this report.

Kaye Cavanagh  
**ACTING SPORT, RECREATION AND NATURAL RESOURCES MANAGER**

I concur with the recommendation/s contained in this report.

Bryce Hines  
**ACTING CHIEF OPERATING OFFICER (WORKS, PARKS AND RECREATION)**

# Mid-Brisbane Catchment Action Plan 2015 - 2018

May 2016

Resilient Rivers Initiative









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## Executive Summary

The Resilient Rivers Initiative vision is: “By 2045, the catchments of South East Queensland will support a resilient, productive, liveable and growing region.” This vision is documented in the Resilient Rivers Regional Strategy (2015-2025) which also has supporting goals and measures of success. The development of a Mid-Brisbane Catchment Action Plan has been identified as a priority area for this strategy.

The primary focus of the Catchment Action Plan is addressing the very high risk of sediment movement from Mid-Brisbane River channel (as identified in key state and local government and Seqwater investigations into the January (Australia Day) 2013 weather event).

With a catchment area of 563km<sup>2</sup> the Mid-Brisbane catchment accounts for a small but vital area of the Brisbane River catchment. The Mid-Brisbane River extends 61km, from Wivenhoe Dam to the Mount Crosby Water Treatment Plant with the Lockyer Creek flowing into it approximately 2km downstream of Wivenhoe. There are no impoundments on the River from Wivenhoe downstream to Moreton Bay. The Mid-Brisbane River acts as a conduit for water supply between

Wivenhoe Dam and the Water Treatment Plant, supplying 40 percent of the region’s drinking water. In addition to the regionally important water supply role, the Mid-Brisbane catchment supports a small amount of irrigated agriculture and limited grazing. River based recreation and rural residential values are key aspects. Much of the river’s riparian areas are poorly vegetated making them susceptible to erosion with significant erosion observed during the flooding of 2011 and 2013. Stabilisation and strengthening of the channel is required so it can continue to provide its significant values.

Detailed geotechnical analysis of the Mid-Brisbane channel has been undertaken. For example the Mid-Brisbane Stabilisation Strategy Technical Assessment (2014) split the Mid-Brisbane into 61 reaches and these have been classified in terms of the type and magnitude of erosion process i.e. fluvial scour and wet flow failure. It has been recommended that stabilisation should both protect and enhance areas of better riparian vegetation and begin restoring areas or poorer (or failed) riparian condition. The critical riparian area for this purpose is the area between the ‘toe’ (bank adjacent to the low-flow water level) and the top of the high bank.

Recreational sites along the river are largely ‘informal’ with consequential erosion, impacts on riparian vegetation and the introduction of pathogens. A 2008 Master Plan for the key recreational sites has identified improvements which will enhance the protection of the water supply.

High water tables in Black Snake Creek sub catchment continue to contribute to poor water quality in the Mid-Brisbane River due to the release of saline water (Ipswich City Council (ICC), 2014).

The Mid-Brisbane Catchment Action Plan was developed by a project team consisting of key investors and advisers as part of the Resilient Rivers Initiative. Community engagement for this Catchment Action Plan utilised existing channels such as Seqwater stakeholder reference groups and ICC’s Black Snake Creek Catchment reference group. The Catchment Action Plan has been endorsed by the relevant councils.



The following table outlines the actions in the Mid-Brisbane Catchment Action Plan 2015-18 and the Measures of Success as identified in the Resilient Rivers Regional Strategy (2015 – 2025):

Mid-Brisbane Catchment On-Ground Actions	Regional-level Measures of Success
<p>Bank stabilisation at high risk sites along the macrochannel and raising of beds (in-stream islands or benches) to slow sediment.</p> <p>Fencing of the bank and provision of off-stream watering points/irrigation infrastructure along macrochannel delivered as a supported package (voluntary, deliver works on behalf of landholder).</p> <p>Tree planting program to manage salinity in Black Snake Creek (recharge area) – link to Plan and Woolshed Creeks in the Lockyer catchment.</p> <p>On-site sewerage system education and compliance program (requires enhanced coordination between councils and Seqwater).</p> <p>Prioritise remediation of high use informal recreation areas along the macrochannel and develop best practice approaches to remediating recreation zones in a water supply catchment (as per the Sapling Pocket demonstration site).</p> <p>Strategic land purchase for multiple benefits (eg. riparian sites for recreation; riparian sites of good quality vegetation; to protect infrastructure; to stop sediment) based on a voluntary willing seller principle.</p>	<p>Four on ground works completed.</p> <p>Six industry best management practice projects implemented.</p>
Mid-Brisbane Catchment Policy Actions	Measures of Success
<p>Establish a working group to develop management options with relation to Mid-Brisbane sand and gravel extraction activities and impacts to water quality, catchment health and stakeholders, including solutions for operational sites and investigation of Key Resource Areas not DA approved or DA pending.</p> <p>Investigate groundwater pumping system for Black Snake Creek (a salinity management system would need the development of 'rules' as it is a collaborative approach to management).</p> <p>Clarification of rights and responsibilities of landholders adjacent to creek reserves/riparian zones.</p>	<p>Best option identified and agreed.</p> <p>Feasibility report prepared.</p> <p>Education activity completed.</p>

## About this action plan

### Scope and purpose

The Mid-Brisbane Catchment Action Plan 2015-18 has been prepared as part of the Resilient Rivers Initiative which has the 30 year vision for the South East Queensland (SEQ) region:

***“By 2045, the catchments of SEQ will support a resilient, productive, liveable and growing region.”***

This vision is documented in the Regional Strategy (2015-2025) which also has the following supporting goals:

- Keep soil on our land and out of our waterways to support agricultural productivity and improve water quality.
- Help protect our region’s water security so it can support the current and future population of SEQ.
- Improve the climate resilience of our region.
- Promote partnerships with strong leadership to deliver a coordinated approach to catchment management in SEQ.

The Resilient Rivers Taskforce determined that the Mid-Brisbane catchment is a regional priority area for works as identified in key state and local government and Seqwater investigations into the January (Australia Day) 2013 weather event which resulted in the Mt Crosby water treatment plants being severely impacted due to siltation.

This Catchment Action Plan:

1. Provides a commitment to enact change based on the ‘best of our knowledge and understanding’ which reflects the values of the local community
2. Identifies specific actions to mitigate risks in the catchment within the context of the Resilient Rivers Initiative
3. Identifies a package of coordinated and consolidated investments based on agreed prioritisation actions.



Location of the Mid-Brisbane catchment

## Rationale for regional investment in the Mid-Brisbane Catchment

With a catchment area of 563km<sup>2</sup> the Mid-Brisbane catchment accounts for a small but vital area of the Brisbane River catchment. The Mid-Brisbane Catchment contains the section of the River below Wivenhoe Dam and to the Mt Crosby Weir. It is dominated by the 61km 'macrochannel' which is an important conduit of the water supplied from Wivenhoe for treatment at Mt Crosby and the Lowood Water Treatment Plants. As such, the catchment is strategically important to SEQ, and indeed Queensland, being the main water supply intake catchment for the region, providing drinking water for three million people in SEQ.

Lockyer Creek enters the catchment below Wivenhoe and in high flow events it can impact on the catchment. Black Snake Creek is a tributary which contributes significant salinity due to underlying soils. The nearby Lockyer sub catchments of Woolshed and Plain Creeks have similar issues.

Protecting the macrochannel and the quality of the water within the macrochannel is the main issue for this catchment. Bank slumping and erosion risks have been studied. The banks are mainly stable but high risk areas exist. The re-suspension of sediment can occur in high flow rain events such as input from the Lockyer. A concerted effort to protect the entire macrochannel and riparian zone through a number of different

actions is appropriate. As the River is continually in flow due to water supply releases, it is attractive to recreationalists.

As the 2013 Australia Day weather event showed, the risk of siltation on the functioning of the Water Treatment Plants, while of low frequency, is of potentially catastrophic consequences. As a general rule, any contaminants entering the 61km stretch that is the Mid-Brisbane River result in increased treatment costs for the region's community and businesses. There is also the benefit for downstream communities and users of Moreton Bay from the improved water quality within the Brisbane River.

Issues related to the catchment condition degradation have been documented and investigated by various agencies. Managing the issues 'at source' is demonstrably more cost efficient than managing the issues at the region's Water Treatment Plants. Any expenditure of public and private funds should aim to achieve the maximum outcome across a range of values and issues and be of benefit to the community at large. Expenditure in the Mid-Brisbane catchment fulfils this and represents a significant return on investment to the population of SEQ.



Brisbane River near Fernvale

## Development of the Plan

The process for developing the Plan commenced in February 2015 and was overseen by a project team consisting of representatives from Queensland Departments of Natural Resources and Mines, and Environment and Heritage Protection, Somerset Regional Council (SRC), ICC, Brisbane City Council (BCC), Healthy Waterways Ltd, SEQ Catchments Ltd, Seqwater, Queensland Urban Utilities (QUU) and the Brisbane River Catchment Flood Study team.

The Resilient Rivers Taskforce reviewed aspects of the Plan as it proceeded. The Taskforce was supported by the executive level Catchment Action Plans Working Group which nominated the representatives for the project team. Council of Mayors (SEQ) provided the coordination and project management capacity on behalf of the project team.

A five step process was undertaken to develop the Mid-Brisbane Catchment Action Plan:

**Step 1:** Walking the Landscape – gather information on the geology and hydrology of the catchment in a workshop setting and prepare summaries to consolidate the current understanding of the catchment processes.

**Step 2:** Catchment description and issues – compile detailed data and prepare mapping products and a comprehensive analysis report; collate data gaps.

**Step 3:** Risks, targets and preliminary actions – identify key catchment issues and preferred management responses.

**Step 4:** Prioritisation of actions – investigate the initial feasibility of actions and likelihood of success, with political input.

**Step 5:** Publishing – finalise the action plan document and seek endorsement from collaborators.

The Queensland Government's Wetlands Program conducted Step 1 and provided invaluable data throughout. A number of supporting factual publications have been prepared and are available on the Wetlands Program website.

Consultancies engaged were:

*Alluvium Consulting:* prepared a detailed Catchment Descriptions and Issues Report (Step 2) which included a stream type assessment for the major streams based on the River Styles® were undertaken using aerial imagery and available GIS spatial data, such as waterways, topography and infrastructure. Data from the site inspections was used to supplement and refine the desktop assessments.

ClimateRisk: assisted the project team with the development of the catchment risk register (Step 3) using methodology developed for the region's water entities.

Natural Decisions: assisted the project team to conduct a cost benefit analysis based on the Investment Framework for Environmental Resources (INFFER) methodology. This analysis assisted with determining the priority actions within this Action Plan.

Prioritisation (Step 4) also involved consideration of key actions from previous planning and studies, feedback from community based knowledge experts involved in this Plan's development, and input from the catchment's political leadership.

Community engagement for this Catchment Action Plan utilized existing channels such as Seqwater's stakeholder reference groups and ICC's Black Snake Creek Catchment reference group. The Catchment Action Plan has been endorsed by the relevant councils.

The following organisations provided funding towards the preparation of the Plan and assisted with the provision of venues for project team activities: Lockyer Valley Regional Council, Seqwater, SRC, BCC, QUU, Council of Mayors (SEQ), and the Australian Government Department of Environment (through SEQ Catchments Ltd).

A special thank you to the involvement of the community based knowledge experts at various points throughout the development of the Plan.

## Catchment In Context

This section of the Action Plan is drawn mainly from the comprehensive Mid-Brisbane Catchment – Description and Issues Report prepared by Alluvium Consulting on behalf of the project team and is therefore the primary reference source. Additional sources of information are referenced.

### The Mid-Brisbane Catchment

The Mid-Brisbane catchment is located approximately 26km west of Brisbane in SEQ within parts of the SRC Local Government Area (LGA), the ICC LGA and the BCC LGA. A small amount of the catchment is within Moreton Bay Regional Council (MBRC) LGA.

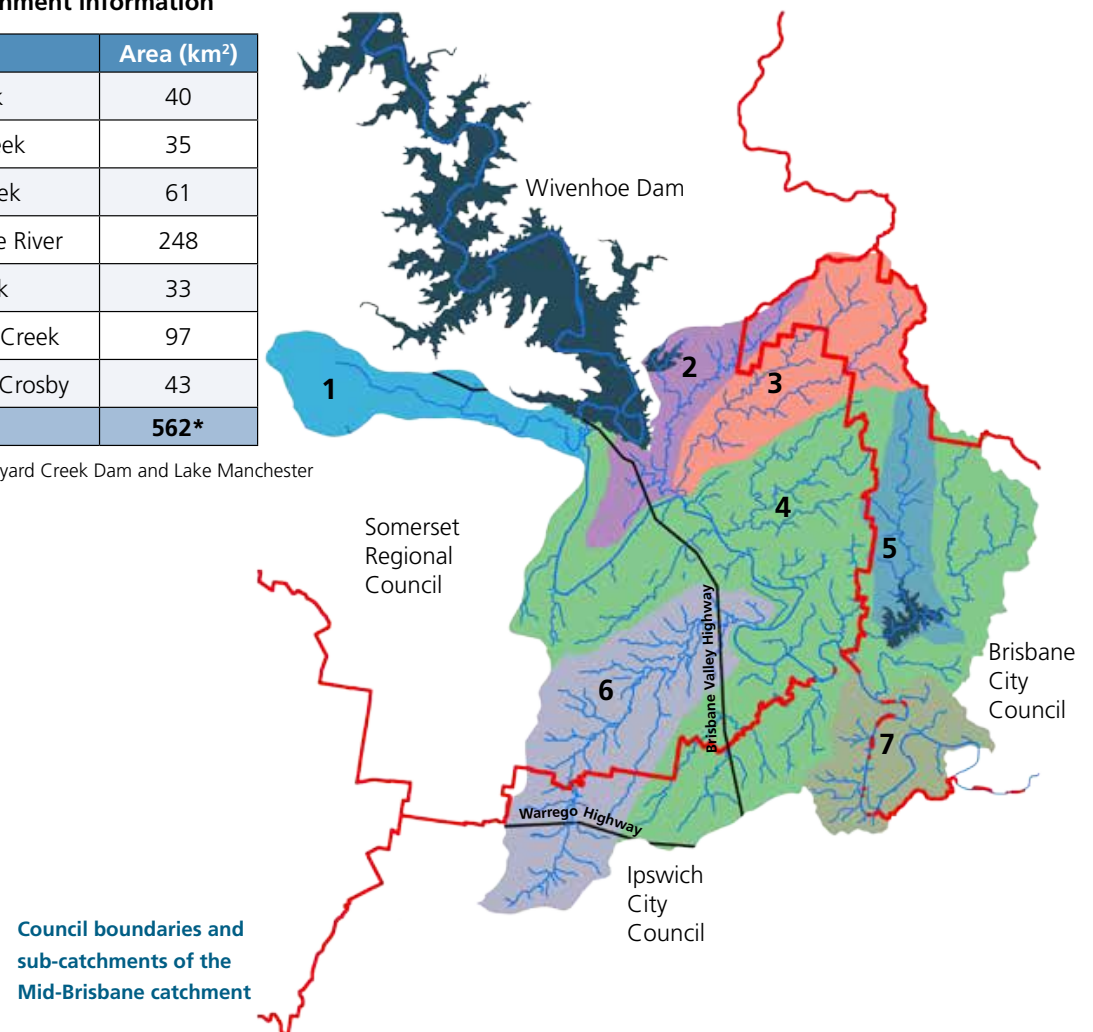
The Mid-Brisbane River is defined as being located between the Wivenhoe Dam outlet and the Mt Crosby Weir. This stretch of river and its catchment is strategically important to SEQ as it is located upstream of the Mt Crosby Water Treatment Plants, which are the region's largest suppliers of potable water. There are no barriers between the Mid-Brisbane reach and the receiving environment of Moreton Bay.

The Catchment area is approximately 560km<sup>2</sup> however it also receives inflows from the Lockyer catchment and discharges from Wivenhoe Dam. The catchment is bounded by the D'Aguilar Ranges in the north and east with the highest elevations of 700m AHD and the lower Liverpool Range to the south west. The Mid-Brisbane catchment has seven sub-catchments (Table 1).

**Table 1. Sub-catchment information**

Sub-catchment	Area (km <sup>2</sup> )
1 Spring Creek	40
2 Splyyard Creek	35
3 England Creek	61
4 Mid-Brisbane River	248
5 Branch Creek	33
6 Black Snake Creek	97
7 Borallon/Mt Crosby	43
<b>Total</b>	<b>562*</b>

\*Including area of Splyyard Creek Dam and Lake Manchester (total area of 3km<sup>2</sup>)





Geology and landscapes are variable across the catchment. To the east of the Brisbane River the geology consists of Neranleigh-Fernvale geology (hard rock), resulting in steep mountains and hills and steep v-shaped valleys. To the west of the Brisbane River the sub-catchment is dominated by low undulating hills to shallow, open valleys and flats underlain by Gatton Sandstone geology. The Mid-Brisbane River in this catchment is described as a macrochannel.

The sub-tropical climate of SEQ is capable of producing extreme flood events, and the Brisbane River has been demonstrated as having amongst the highest flood variability in Australia. These extreme events are likely to be a determining factor in the formation of the macrochannel morphology. The River base is armoured with large rocks and gravel. The presence of islands and in-stream sand benches is commonly seen.

Recent studies suggest SEQ macrochannel systems have an inherent resilience to changes in flow and sediment regimes, collapsing and reforming over time, and this is a consideration in restoration techniques.

The Gatton Sandstone in the west is a type of sandstone and has been recognised as a major contributor to groundwater salinity observed at the Mt Crosby Weir. In the Mid-Brisbane River catchment, this is mainly a concern within the southern tributaries,

Black Snake Creek and Sandy Creek, where it outcrops and although these are natural processes in soil formation, human land use practices can exacerbate issues of erosion and salinity. This can lead to long-term land and water degradation as deep-rooted, perennial vegetation has been cleared from the plains and hillslopes and replaced by shallow rooted annual vegetation such as grasses and crops. The area impacted by dryland salinity increases during and after wet years as water tables rise and come close to the surface, bringing with it salts in the soil.



**A salinity scour Black Snake Creek and the Hills Crossing section of the Brisbane River.**

## Land use and infrastructure

The relatively flat areas of the Mid-Brisbane catchment are predominantly used for rural residential purposes and livestock grazing and some irrigated areas, whilst the steeper area within the D'Aguilar Ranges is classified as 'Conservation and Natural Environments'. Rural residential properties are generally greater than 0.2ha and undertake some agricultural activity, however this is unlikely to be the major source of income for the property. The livestock grazing is predominantly of 'native vegetation', which is classified by ABRES as areas where there has been limited or no deliberate attempt at pasture modification and typically occurs in open woodland or grasslands where greater than 50 percent of the dominant species are native.

Land use in the catchment is governed by the relevant planning schemes of each local government and the SEQ Regional Plan 2009- 2031 under the Sustainable Planning Act. In the Mid-Brisbane catchment future growth will be focused on the urban centres of Fernvale and Lowood. These areas are designated for limited increases in urban residential land use. The vast majority of the catchment, however, is zoned as Regional Landscape and Rural Production Area, for which there are the limits on any sub-divisions below 100ha. The Regional Plan is to be formally reviewed in 2016-17.

The relevant sections of the SRC Planning Scheme 2016, the Ipswich Planning Scheme 2006 and the Brisbane City Plan 2014, indicate no significant future changes in land use. The latter includes the forested areas surrounding the Lake Manchester reservoir.

The majority of land use changes in the catchment occurred prior to the mid 20th century. During the late 1800s, laws and regulations encouraged wholesale clearing of land. Since 1990 land use change in the catchment has been relatively minimal. The cessation of production forestry in native vegetation in the late 1990s saw the subsequent increase in Conservation and Natural Environments from 7 percent of the catchment to 22 percent. There has also been a 1 percent increase in areas classified as residential. Whilst there are no Identified Growth Areas within the catchment in the 2009-2031 SEQ Regional Plan and the council planning schemes limit development areas, the potential exists for future residential growth due to the proximity to Brisbane.

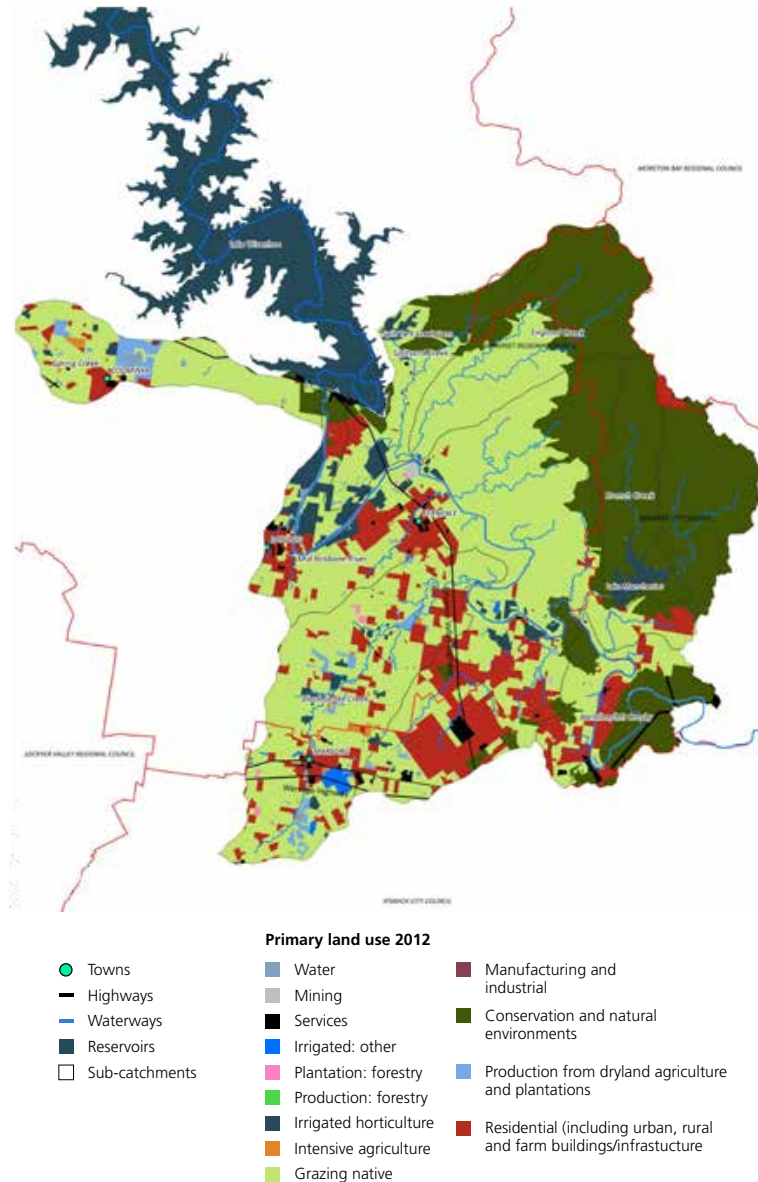
A number of sand and gravel extraction sites are located within the catchment – some are active, others pending approval or indicated in the State's planning data layers as Key Resource Areas. Sand and gravel extraction located near the Mid-Brisbane River can influence the hydrology of that system.

Recreational opportunities within the Mid-Brisbane catchment are numerous and varied. The natural environment and waterways are widely used for recreational activities in addition to council parks and recreation facilities. The areas identified include council, state and national parks as well as road and rail reserves and dams. The Mid-Brisbane River is an area for recreation due to the continuous flow of water from Wivenhoe Dam and activities include swimming, canoeing, fishing and four wheel driving on inset floodplains at information access points.



Sand and gravel extraction site near Kholo Bridge

### Land uses within the Mid-Brisbane Catchment



The location of key infrastructure assets which are adjacent to or within the waterways of the Mid-Brisbane catchment are shown in Table 2. There is a high concentration of culverts, bridges, roads and weirs to the west of the catchment, in the flatter, more densely populated areas. The nationally significant Warrego Highway traverses the catchment in an east-west direction, through the town of Marburg. The Warrego Highway is the state's vital east-west freight artery that transports people and freight between western and southern Queensland, New South Wales and the Northern Territory. The Brisbane Valley Highway is an increasingly important transportation route to the Kingaroy region.

**Table 2. Infrastructure assets within the Mid-Brisbane catchment**

Sub-catchment	Culverts	Bridge	Weirs	Dams	Sewage Treatment Plants	Water Treatment Plants	Roads (km)
Spring Creek	40	0	0	1	0	0	55
Splityard Creek	24	5	0	1	0	0	53
England Creek	0	0	0	0	0	0	63
Mid-Brisbane River	169	8	0	0	2	1	422
Branch Creek	0	0	0	0	0	0	38
Black Snake Creek	172	10	0	1	0	0	183
Borallon/Mt Crosby	24	0	1	0	0	1	95



Infrastructure within the catchment is vulnerable to damage from natural disasters, as shown during the January 2011 and January 2013 floods. After these floods, SRC, ICC and BCC were eligible for the Natural Disaster Relief and Recovery Arrangements for a large number of damaged assets in or adjacent to waterways. These arrangements are a joint funding initiative of the State and Commonwealth Governments to provide disaster relief and recovery payments and infrastructure restoration to help communities recover from the effects of natural disasters.

An estimated 10,500 people reside within the catchment; this is expected to increase by approximately 30,000 people by 2031. This will occur particularly in the already populated areas, such as around Lowood, Fernvale and Glamorgan Vale, at a rate of approximately 2 percent per annum over the next 15 years. As the population increases, infrastructure requirements, such as roads and drains also increase.

Within the catchment there are three Sewerage Treatment Plans (STPs). These STPs represent a point source for Total Nitrogen (TN) and Total Phosphorous (TP) as well as pathogens. Two of the STPs are owned and operated by QUU (Fernvale and Lowood) which discharge directly into the Brisbane River. The

remaining STP services the Borallon Correctional Centre. These STPs elevate the protozoa and E. Coli risk for the Mt Crosby Water Treatment Plants. The licence for the Fernvale STP includes nutrient removal requirements and both STPs have treated effluent disinfection. The Lowood STP is at capacity, whilst the Fernvale STP is above design capacity, upgrades are due to be completed in the near future. As the population increases in these towns there will be additional load on the STPs.

Table 3 outlines the projected increase in the sewerage population, which will require an increase in sewerage drainage and water treatment facility upgrades.

In addition to the STPs there are a significant number of on-site sewerage facilities such as septic tanks (which are being phased out) or Aerated Wastewater Treatment Systems within the catchment. Facilities need approval from the relevant councils and the onus is on the homeowner to adequately maintain the system. Discharge from the on-site facilities as well as the STPs discharging to land (both surface and sub-surface) present a potential source of contaminant to waterways, particularly during rainfall events through surface and sub-surface flows. The cumulative risk from on-site facilities has been assessed as the primary input of E. Coli risk within the upper reaches of the catchment.

**Table 3. Queensland Urban Utilities sewerage population growth forecasts**

Region	Mid-Brisbane Catchment – Sewerage Population Projections	
	Fernvale	Lowood
Current estimated population	1,095	1,795
Projected 2031 estimated population	5,322	5,595
Percentage increase	486%	312%

## Policy and Management Context

The organisations with a primary policy and management interest in the Mid-Brisbane Catchment include the three councils, Queensland Government, QUU and Seqwater. The majority of land is in private ownership and so the interests of land managers are an important consideration within the management context. The Action Plan will build on existing activities underway in the catchment.

### Councils

As previously outlined, the councils have a role in land use planning. They also invest in infrastructure asset management and recreational area management. Councils have some devolved responsibilities such as local laws relating to on-site sewerage facilities.

### Queensland Government

The Department of Environment and Heritage Protection (EHP) has involvement in regulatory, policy and catchment management roles. EHP regulates Environmentally Relevant Activities, such as STPs and sand and gravel extraction under the *Environmental Protection Act 1994*. At a policy level, EHP sets Water Quality Objectives and Environmental Values (EVs) under the *Environmental Planning Policy 2009* to ensure the water is usable for the purposes defined in the EVs (e.g. drinking water, stock water, irrigation, recreation, aquatic ecosystems). It also establishes frameworks and processes in consultation with key stakeholders. EHP's catchment management interest

focuses on reducing the source of pollutants entering waterways through data custodianship, research and industry-partnerships for improving land management. Queensland Parks and Wildlife manages the protected areas of the D'Aguliar Range. The Department of Natural Resources and Mine's role is to regulate instream work to maintain the physical integrity of the watercourses and manage the take of water for irrigation and other purposes. It works closely with Seqwater which holds a Resource Operations Licence for Wivenhoe Dam and Mt Crosby Weir.

### QUU

QUU operates under the *South East Queensland Water (Distribution and Retail Restructuring) Act 2009*, *Water Supply (Safety and Reliability) Act 2008*, *Environmental Protection Act 1994*, and the *Water EPP 2009*. These prescribe standards for the operation of wastewater systems including licensed discharge criteria for protection of waterway environmental values. More recently, QUU has been investigating the State's 2014 'Flexible options for managing point source water emissions: A voluntary market-based mechanism for nutrient management' Policy. This Policy is a mechanism for protecting downstream water quality (for example, receiving water quality at a STP discharge) by mitigating upstream rural diffuse pollution sources. In a practical sense for QUU, this means targeting investments to mitigate significant

sediment pollution sources (containing relatively low levels of nutrients).

### Seqwater

Seqwater works collaboratively with customers, communities, governments and industry to deliver safe, secure and cost-effective water and catchment services to customers and communities. It sources, stores and supplies treated water from catchments and alternative sources. The Queensland Government has set the performance standard for Seqwater through a Statement of Obligations. Seqwater has recently prepared a water security plan for the region outlining how SEQ's drinking water supply is going to be managed into the future. Drinking water quality guidelines have been established nationally to which Seqwater adheres. The guidelines contain six principles which highlight the importance of understanding the source or raw water, the risks and hazards involved, and the management of these issues. Management of water levels within Wivenhoe Dam takes into account the competing uses of the dam, including water supply security, dam safety, flood inundation impacts downstream of the dam and economic impacts. The Manual of Operational Procedures for Flood Mitigation at Wivenhoe Dam and Somerset Dam ('Flood Manual') includes reference to Brisbane River flows during small flood events which may result in the inundation of low level rural crossings and irrigation equipment.

### Private landowners

A landowner will have individual lifestyle and/or business goals as well as land and water use rights and responsibilities to consider. Goals and circumstances may change over time.



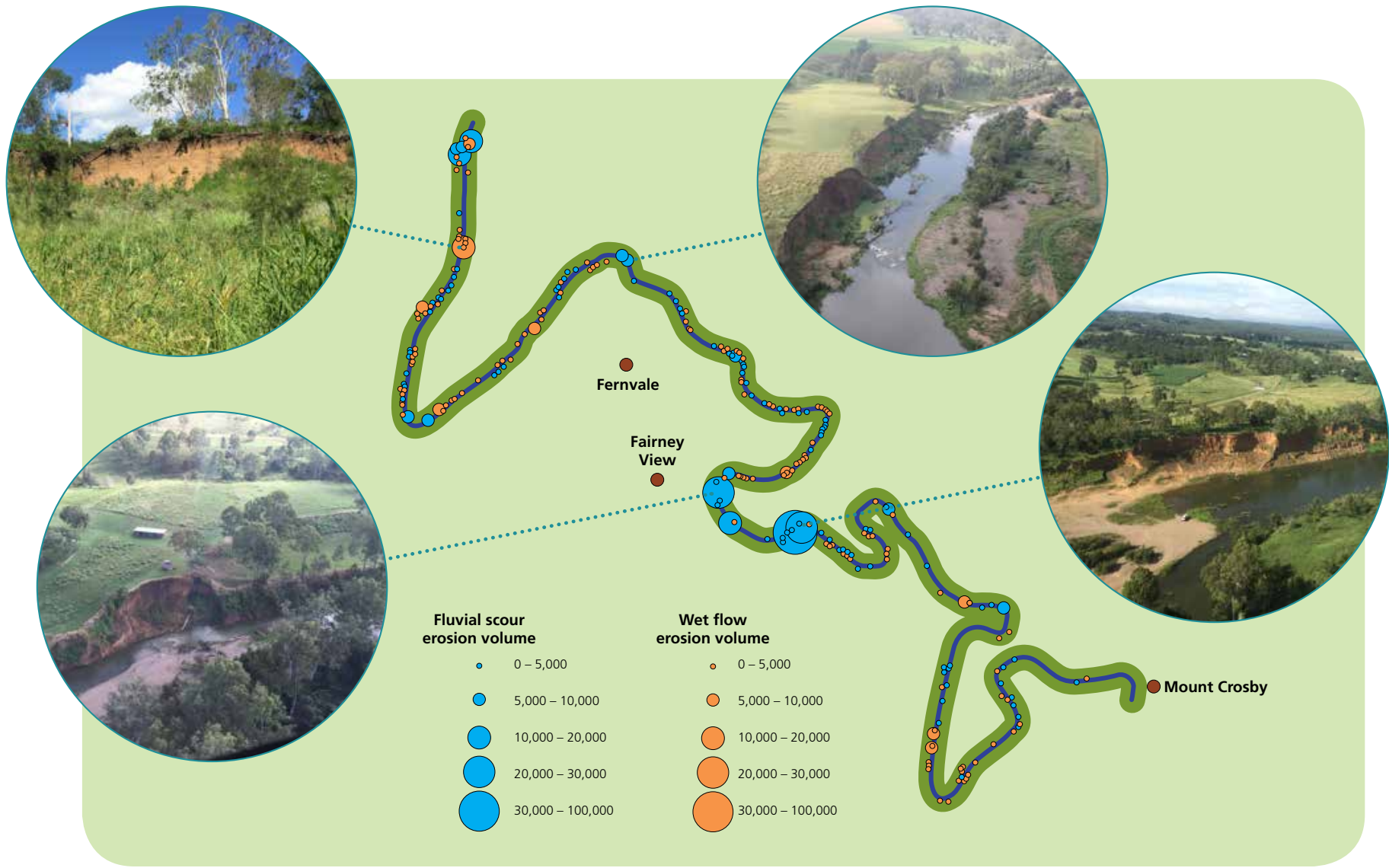
Seqwater installed fencing on the river bank rehabilitation site of this Mockers Road property in consultation with the owner



Ease of access to irrigation equipment in the event of river water rising can be considered as part of riparian works at each site

The Mid-Brisbane Catchment Action Plan builds on previous studies and planning activities. Key items described here have a level of detail that provides guidance for immediate investment planning:

<b>Study/ Investigation</b>	Mid-Brisbane Stabilisation Strategy Technical Assessment	Upper Black Snake Creek Improvement Plan	Mid-Brisbane River: Outdoor Recreation Master Plans
<b>Prepared by</b>	Seqwater, 2014	ICC, August 2014	SRC and Queensland Government, 2008
<b>Description</b>	The investigation split the Mid-Brisbane into 61 reaches and these have been classified in terms of the type and magnitude of erosion process i.e. fluvial scour and wet flow failure. It has been recommended that stabilisation should both protect and enhance areas of better riparian vegetation and begin restoring areas of poorer (or failed) riparian condition. The critical riparian area for this purpose is the area between the 'toe' (bank adjacent to the low-flow water level) and the top of the high bank.	This plan provides a total water cycle approach to planning and describes detailed prioritized actions to mitigate salinity, poor water quality and flooding risks in the sub catchment.	Five detailed outdoor recreation master plans for key sites along the Mid-Brisbane River. The report built on the 2004 Mid-Brisbane River Recreation Management Plan which involved BCC, SRC and the State Government. These studies found that the Mid-Brisbane River is a regionally significant outdoor recreation open space which needs to be coupled with the protection of the integrity of the water supply catchment.



2011 flood event mapped erosion sites identified in the 2014 Mid-Brisbane Stabilisation Strategy Technical Assessment (adapted from Alluvium, 2015)



## Issues analysis

Based on the information gathered through the development of this action plan the following high level issues have been identified:

Asset	Threat	Impact
<p>Integrity of the Mid-Brisbane River macrochannel</p> <p>Regional water quality for drinking water supply and ecosystem health</p>	Disturbance of banks and inset floodplains and reduction in riparian vegetation of the Brisbane River macrochannel	<ul style="list-style-type: none"> <li>• Reduction in the physical stability of waterways resulting in bank collapse and/or scouring</li> <li>• Loss of high value agriculture land through erosion</li> <li>• Reduction in the ability of the natural systems to perform their ecosystem functions including water purification</li> <li>• Reduced water quality resulting in increased water treatment costs due to mobilisation and transport of sediment</li> <li>• Increased sediment loads entering Moreton Bay and Ramsar-listed wetlands, reducing seagrass habitat and increasing the need for the dredging of shipping channels</li> <li>• Increased nutrient input resulting in blooms of potentially toxic algae species, aquatic weed growth and waterway eutrophication</li> <li>• Change in flood behaviour and distribution of flood flows</li> </ul>
Regional water quality for drinking water supply and ecosystem health	Increased salinity seepage in Black Snake Creek catchment	<ul style="list-style-type: none"> <li>• Loss of native vegetation and increased erosion due to saline seepage in the landscape</li> <li>• Loss or change in agricultural production due to salt affected land and the use of saline water for irrigation</li> <li>• Brackish surface waters resulting in ecosystem change</li> <li>• Waterway eutrophication due to decreased organic matter decomposition</li> <li>• Increased cost of water treatment</li> </ul>
Regional water quality for drinking water supply	Increased pathogens in the Brisbane River macrochannel	<ul style="list-style-type: none"> <li>• Human health impacted water quality</li> <li>• Increased cost of water treatment to remove pathogens</li> </ul>

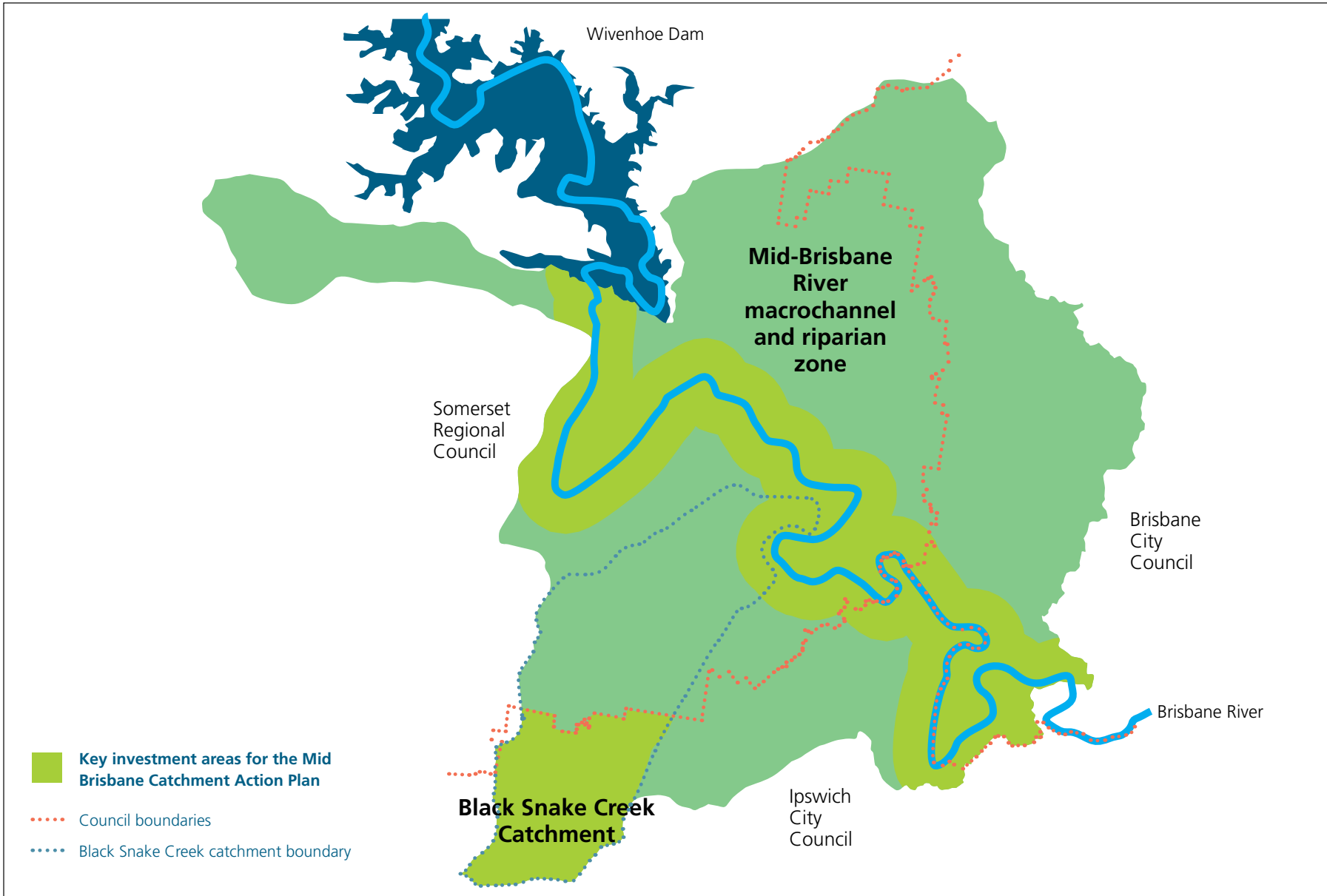


# Action Plan

## Overview

<b>Regional investment drivers</b>	<ul style="list-style-type: none"> <li>• To protect the water supply of the region.</li> <li>• To keep soil on the land and out of our waterways for water quality purposes.</li> <li>• To improve the climate resilience of the region.</li> <li>• To promote partnerships with strong leadership to deliver a coordinated approach to catchment management in SEQ.</li> </ul>
<b>Assets at risk</b>	<ul style="list-style-type: none"> <li>• Integrity of the Mid-Brisbane River macrochannel; regional water quality for drinking water supply and ecosystem health.</li> </ul>
<b>Outcomes sought</b>	<ul style="list-style-type: none"> <li>• Maintaining the integrity of the macrochannel and associated riparian zone; reducing salinity and pathogens entering the Mid-Brisbane River; protecting infrastructure from erosion.</li> </ul>
<b>Actions summary</b>	<ul style="list-style-type: none"> <li>• Bank stabilisation at high risk sites along macrochannel and raising of bed (via in-stream islands or benches) to slow sediment.</li> <li>• Fencing of the bank and provision of off-stream watering points/irrigation infrastructure along macrochannel delivered as a supported package (that is, voluntary participation by landholder with works delivered on behalf of landholder).</li> <li>• Tree planting program to manage salinity in Black Snake Creek catchment recharge area.</li> <li>• On-site sewerage facilities education and compliance program (requires enhanced coordination between councils and Seqwater).</li> <li>• Establish a working group to develop management options with relation to Mid-Brisbane sand and gravel extraction activities and impacts to water quality, catchment health and stakeholders, including solutions for operational sites and investigation of Key Resource Areas not Development Assessment approved or pending.</li> <li>• Clarification of rights and responsibilities of landholders adjacent to River riparian zones</li> <li>• Strategic purchase of land for multiple benefits (e.g. riparian sites for recreation; riparian sites of good quality vegetation; to protect infrastructure; to stop sediment; flood storage; retire land from current use) based on a voluntary willing seller principle.</li> <li>• Prioritise remediation of high use informal recreation areas along the macrochannel and develop best practice approaches to remediating recreation zones in a water supply catchment (as per the Sapling Pocket demonstration site).</li> <li>• Investigate the development of possible 'rules' for a groundwater pumping system for Black Snake Creek (a salinity management system would need the development of 'rules' as it is a collaborative approach to management).</li> </ul>





## Risk treatment plan

Based on a consolidated understanding of the key issues, a risk assessment (Appendix) and a high-level feasibility assessment of treatment options, the resulting risk treatment plan assists decision makers to prioritise investment decisions. The treatment and implementation pathways form the actions for this 2015-18 Action Plan.

Treatment	Risk Addressed	Implementation Pathway	Cost	Benefit	Approx. Timeframe	Priority
Bank stabilisation at high risk sites along macrochannel and raising bed via in-stream islands or benches	Channel integrity: Sediment entering water through bank slumping; Sediment re-suspension affecting water quality	Targeted investment at high risk sites identified by the Seqwater 2014 investigation	High	High	2016-2018	High
Fencing of the bank and provision of off-stream watering points/ irrigation infrastructure along macrochannel	Riparian zone degradation leading to loss of channel integrity; Pathogens entering water supply conduit causing acute illness	Deliver as a supported package: voluntary participation by landholder with works delivered on behalf of landholder	Medium to High	High	2016-2018	High
Restore deep rooted trees in recharge area of Black Snake Creek catchment	High saline groundwater table entering the water supply conduit	Tree planting program (investor – landholder – facilitator partnership including the prioritization of offset receiving sites)	Medium	Medium	Commence 2016	High
On-site sewerage facilities education and compliance program	Pathogens entering water supply conduit causing acute illness	Enhance coordination between councils and Seqwater to deliver an agreed program	Low	High	Commence 2016	High

Treatment	Risk Addressed	Implementation Pathway	Cost	Benefit	Approx. Timeframe	Priority
Limit Mid-Brisbane sand and gravel extraction impacts on water quality and catchment health	Inset floodplain/riparian zone degradation leading to loss of channel integrity	Establish a working group to development management options including solutions for Mid-Brisbane operational sites and investigation of Key Resource Areas not Development Assessment approved or pending	Low	High	Commence 2016	High
Improve landholder management of the riparian zone	Unintentional mismanagement of the riparian zone	Clarification of rights and responsibilities of landholders adjacent to River riparian zones	Low	High	Commence 2016	High
Strategic purchase of land to provide protection of the macrochannel	Riparian zone degradation leading to loss of channel integrity	Based on a voluntary, willing seller principle with a focus on multiple benefits (e.g. riparian sites for recreation; riparian sites of good quality vegetation; to protect infrastructure; to stop sediment; increase flood storage capacity; retire land from current use)	Medium to High	High	Commence 2018	Medium
Remediate high use informal recreation areas along macrochannel	Channel integrity: Sediment entering water through bank slumping; Pathogens entering water supply conduit causing acute illness	Prioritise high use informal areas identified in Master Plans 2008 report. Develop- a best practice approach to remediating recreation zones in a water supply catchment as per the Sapling Pocked demonstration site	High	High	Commence 2018	Medium
Artificial lowering of shallow groundwater table and re-use of brine in Black Snake Creek catchment	High saline groundwater table entering the water supply conduit	Investigate the development of possible 'rules' for a groundwater pumping system for Black Snake Creek (a salinity management system would need the development of 'rules' as it is a collaborative approach to management)	High	Medium	Commence 2016	Medium

## Review of progress

### Information gaps and emerging studies

This Action Plan and supporting documents will be updated by June 2018 with any relevant information arising as described below.

The Alluvium technical report collated flood extents based on largest floods. Following the development of hydraulic models as part of the BRCFS the flood extents will be updated and made consistent across the LGAs and the relevant information should be incorporated into this Action Plan and supporting documents. A “bed level sensitivity assessment” is also being prepared under the BRCFS which may provide information for catchment protection actions.

There was very limited catchment modeling information to be confident about the impact of individual and combined actions. Given this is a regionally significant drinking water catchment, increased modeling of actions to reduce the impact of pathogens, sediment, nutrients, and salinity is a very important research/ knowledge gap investment.

Detailed geomorphic assessments are required within the tributary sub-catchments to determine extent and level of erosion risk and within the main Brisbane River channel to determine the risk of removal/ damage to inset floodplain features. Additionally, minor tributaries and gully lines were

not assessed for stability and may represent significant sources of sediment.

There is currently no data on sediment transport quantities or rates for the tributaries. This is key to understanding sediment loads moving through the catchment.

A high level qualitative assessment with the catchment identified potential assets at risk however this assessment was limited to the main tributaries and does not include the likelihood or consequence of asset damage.

The best available data was utilised for the geomorphic condition assessment. Digital Elevation Models (DEMs) from 2009 and 2014 (1m resolution) were used for the BCC LGA. ICC LGA had 2009 1m resolution DEM. No DEM data is available in the SRC LGA. Shuttle Radar Topography Mission (STRM) derived DEM (30m resolution) was used. Obtaining good quality up-to-date LiDAR for the region would be preferable.

The SEQ Regional Plan will be reviewed in 2016- 17 and may inform a future review of this action plan.

### Monitoring and evaluation

Progress on action implementation will be monitored through the reporting framework established under the Resilient Rivers Initiative, including an evaluation to be conducted in 2018.



Before and after photos for a river bank rehabilitation site at Mockers Road, Fernvale

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## References

Alluvium, 2015, Reid, J, Ivezich, M and Daley J. *Mid-Brisbane Catchment Action Plan: Technical Report: Catchment descriptions and issues, Report P415020\_R03* by Alluvium Consulting Australia for the Council of Mayors (SEQ).

Ipswich City Council, 2014, *Upper Black Snake Creek Improvement Plan – A Total Water Cycle Management Approach to the Management of the Upper Black Snake Creek Catchment*.

Queensland Wetlands Program (2016) *Walking the Landscape – Mid-Brisbane Catchment Summary*. Department of Environment and Heritage Protection, Brisbane.

Seqwater, 2014, *Mid-Brisbane Stabilisation Strategy Technical Assessment*

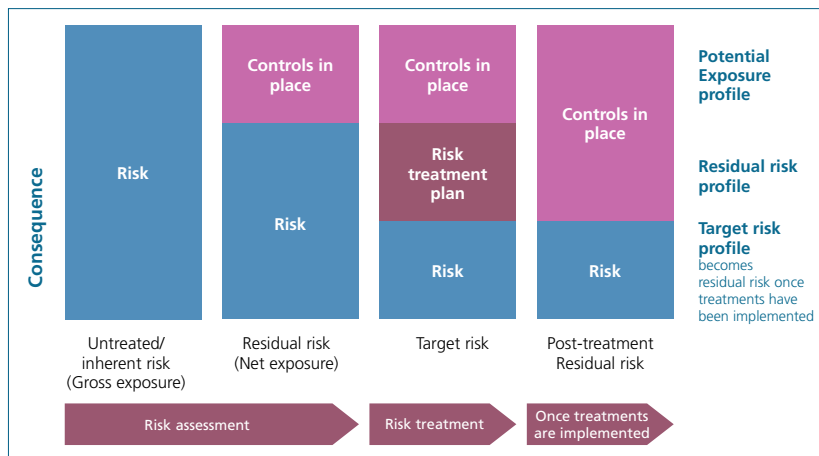
Somerset Regional Council and Queensland Government, 2008, *Mid-Brisbane River: Outdoor Recreation Master Plans*

# Appendix

## Risk assessment tool kit used in the preparation of the Mid-Brisbane Catchment Action Plan

Criteria	Expected Frequency	Probability (for use in quantitative assessments only)
Almost Certain	Occurs more than once a year	>95%
Likely	Occurs once between 1 to 3 years	>33–95%
Possible	Occurs once between 3 to 10 years	>10–33%
Unlikely	Occurs once between 10 to 50 years	>2–10%
Rare	Occurs once between 50 to 100 years	1–2%

		CONSEQUENCES				
		Insignificant	Minor	Moderate	Major	Catastrophic
LIKELIHOOD	Almost certain	Medium	High	High	Extreme	Extreme
	Likely	Medium	Medium	High	High	Extreme
	Possible	Low	Medium	Medium	High	High
	Unlikely	Low	Low	Medium	Medium	High
	Rare	Low	Low	Low	Medium	Medium



Residual Risk Rating	Action Required
Extreme	Risk treatment plan (RTP) must be in place immediately. The Taskforce to review and approve RTP.
High and increasing	Risk treatment plan must be completed. Plan must also neutralise increasing risk over trend time frame. The Taskforce to review and approve RTP.
High	Risk treatment plan must be completed.
Medium and increasing	Risk treatment plan must be considered. Plan must also neutralise increasing risk over trend time frame.
Medium	Risk treatment plan must be considered.
Low and increasing	Risk treatment plan must be considered. Plan must also neutralise increasing risk over trend time frame.
Low	Risk treatment may not be required.







Images courtesy of Council of Mayors (SEQ), Seqwater, Ipswich City Council, Department of Environment and Heritage Protection, SEQ Catchments, Healthy Waterways





**Council of Mayors**

South East Queensland

**Council of Mayors (SEQ)**

**Black Snake Creek Improvement Plan Delivery  
Project**

**Funding Deed of Agreement**

**Between**

**Council of Mayors (SEQ)**

**And**

**Ipswich City Council**

## **DEFINITIONS, INTERPRETATION and SCOPE**

### **1.1 Definitions**

In this Agreement, unless the context indicates otherwise:

**“Approved Funding”** or **“Approved Funds”** means the maximum amount of monies specified in the agreement, to be provided by the Funders to the Organisation during the Funding Period(s) for the sole purpose of the delivery of an Approved Project(s).

**“Business Day”** or **“Business Days”** means a weekday or weekdays on which banks are open for business in Brisbane.

**“Confidential Information”** includes all trade secrets and know-how, financial information and other commercially valuable information of whatever description and in whatever form this information is communicated (whether by electronic means, in an electronic storage device, in writing or orally) and includes the interpretation, analysis and application of general information in the public domain.

**“Goods and Services Tax”** or **“GST”** means an amount of GST payable under the *A New Tax System (Goods and Services Tax) Act 1999* and *A New Tax System (Goods and Services Tax Imposition – General) Act 1999* or otherwise imposed by the Commonwealth Government.

**“GST Amount”** means the amount calculated by multiplying the GST exclusive amount of the financial assistance as a taxable supply, payable under the terms of this Agreement, by the rate of GST applicable from time to time.

**“Intellectual Property”** includes all copyright (including any future copyright), moral rights, all rights in relation to inventions (including patent rights), plant varieties, registered and unregistered trade marks (including service marks), registered designs, confidential information (including trade secrets and know-how), circuit layouts and all other rights resulting from intellectual activity in the industrial, scientific, literary or artistic fields as a result of the use of the Approved Funding.

**“Moral Rights”** has the meaning given to that term in the *Copyright Act 1968 (Commonwealth)*.

**“Party”** or **“Parties”** means a party or parties to this Agreement.

**“Payment Schedule”** means the schedule of payments to be made in accordance with the nominated timeframes as specified in this Agreement.

**“Personal Information”** means information or an opinion (including information or an opinion forming part of a database) whether true or not, and whether recorded in a material form or not, about an individual whose identity is apparent, or can reasonably be ascertained, from the information or opinion.

**“Tax Invoice or Invoice”** means a document directed to the Organisation requesting payment for goods or services and detailing the supplier's name, the goods and services provided, the date these were provided, the amount due, the goods and services tax amount due, the terms of trade and the date of the invoice;

**“Unexpected Event”** means any circumstance beyond the reasonable control of a party which results in that being unable to perform an obligation on time, and includes, but is not limited to:

1. natural events like fire, storm, flood, landslide, washaway or earthquake;
2. national emergency;
3. terrorist act;
4. war; or
5. an order of any Court.

## **1. PARTIES**

The parties to this Memorandum of Understanding (FDoA) are the:

- A. Council of Mayors (SEQ) (CoMSEQ).
- B. Ipswich City Council (ICC)

## **2. PURPOSE**

- 2.1. The FDoA establishes a clear understanding of the terms of agreement between the parties in relation to the implementation of the Black Snake Creek Improvement Plan Delivery Project (the Project) as outlined in the Black Snake Creek Improvement Plan Delivery Project Plan, dated August 2017.

## **3. TERM**

- 3.1 The FDoA is effective from the date of its execution for a period of one year unless otherwise agreed by the parties.

## **4. RESPONSIBILITIES OF CoMSEQ**

- 4.1. CoMSEQ agrees to provide funding of \$60,000, GST exclusive, to the ICC for it to implement the Project for the period of the Project.
- 4.2. CoMSEQ will provide reporting functions and advice in relation to the Project, as may be agreed between the parties.

## **5. RESPONSIBILITIES OF ICC**

- 5.1. The ICC will use the funding for the implementation of the Project only, unless otherwise agreed in writing by the parties.
- 5.2. The ICC will provide overall management and resourcing of the project along with office accommodation and facilities as required.
- 5.3. The ICC will develop a Project Management Plan by no later than a month after the signing of this FDoA.
- 5.4. The ICC will comply with all reporting requirements outlined in the Project Plan as agreed between the parties.
- 5.5. The ICC will provide the engagement with private landholders, Somerset Regional Council, Seqwater, and local Landcare and NRM groups as outlined in the Project Plan.
- 5.6. The ICC will provide representation on the governance of the project.

## **6. REPORTING ARRANGEMENTS**

6.1 ICC will provide progress reports referencing milestones and deliverables as agreed in the Project Plan every month after the commencement of this FDoA.

## **7. FUNDING ARRANGEMENTS / PAYMENT DETAILS**

7.1 Payment of \$60,000, the total funding amount for the duration of the project, will be made within 14 days upon the satisfactory completion of the agreed milestones, subject to the receipt of a valid tax invoice, as outlined in the following table:

<b>Milestone</b>	<b>Funding</b>
Execution of this FDoA	\$30,000
Completion of project	\$30,000

## **8. VARIATION**

8.1 This FDoA may be varied with the written agreement of all parties.

## **9. DISPUTES**

9.1 CoMSEQ and ICC will take all necessary steps to resolve, by mutual agreement, any dispute that arises under this FDoA in relation to the Project.

## **10. INTELLECTUAL PROPERTY**

10.1. The parties acknowledge that any intellectual property created during the Project, upon its creation, shall vest in the ICC.

10.2. The ICC grants to CoMSEQ a non-exclusive, irrevocable and royalty-free licence to use, adapt for its own use, modify, develop and distribute any intellectual property for the sole purpose of discharging its portfolio responsibilities.

## **11. PERSONAL INFORMATION**

11.1 The parties undertake to ensure that all personal information exchanged between CoMSEQ and ICC under the terms of this FDoA is dealt with in accordance with each party's obligations under the *Information Privacy Act 2009*.

## **12. ACKNOWLEDGEMENT**

12.1. The ICC must acknowledge the Funding:



- 12.1.1. by acknowledging the Resilient Rivers Initiative in publicly made statements, promotional material, websites or appropriate documentation or publications; and
- 12.1.2. by inviting the CoMSEQ to attend any events connected with the project.
- 12.2. Joint publicity between all parties is to be approved in advance by COMSEQ.

### **13. NOTICES / CONTACT OFFICERS**

- 13.1. Notices required to be given under this FDoA must be in writing and may be delivered by hand, by post or by email.
- 13.2. Notices will be deemed to have been received:
  - 13.2.1. if hand delivered, upon delivery;
  - 13.2.2. if sent by post, two business days after posting;
  - 13.2.3. if sent by email, one business day after sending, unless an undeliverable report is received.
- 13.3. A party may change its address for service from time to time, by a written notice served on the other party.
- 13.4. Any notice received after 5:00pm is deemed to have been received on the next business day in the place to which it was sent.
- 13.5. The parties' addresses for service and contact officers are as follows:

**Council of Mayors (SEQ)**

Name: Scott Smith  
Position: Acting Executive Director  
Address: PO Box 12995, George Street QLD 4003  
Telephone: 3040 3479  
Email: [scott.smith@seqmayors.qld.gov.au](mailto:scott.smith@seqmayors.qld.gov.au)

**Ipswich City Council (ICC)**

Name: Bryce Hines  
Position: Acting Chief Operating Officer (Works, Parks and Recreation)  
Address: PO Box 191, IPSWICH QLD 4305  
Telephone: (07) 3810 6666  
Email: [bhines@ipswich.qld.gov.au](mailto:bhines@ipswich.qld.gov.au)



# Resilient Rivers Initiative

Catchment Investment Program

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## Project Management Plan

Black Snake Creek Improvement Plan Delivery

Phase 1

**DRAFT**

**Version:** 0.2

**Date:** 1 August 2017

# Document Control

## Version History

Version	Author	Change	Date
0.1	D Dawson/P. Smith	Initial Draft	27 July 2017
0.2	D. Dawson	Final Draft	1 August 2017
1.0		Final	

DRAFT



<b>Title:</b>	<b>Black Snake Creek Improvement Plan Delivery – Phase 1</b>
<b>Project Lead Contact:</b>	<b>Philip Smith, ICC</b>
<b>Background:</b>	<p>The Resilient Rivers Initiative (RRI) is a collaborative effort between local and state government, water utilities and key non-government organisations to improve the health and resilience of South East Queensland’s catchments, rivers and Moreton Bay. Further background on the RRI is available at <a href="http://seqmayors.qld.gov.au/project/resilient-rivers-initiative/">http://seqmayors.qld.gov.au/project/resilient-rivers-initiative/</a></p> <p>As indicated in the RRI Strategy, the Catchment Investment Program was established by the Resilient Rivers Taskforce in 2016 to provide a pool of funds for priority on-ground works identified in Catchment Action Plans. A rolling program of works has been established and as funds become available, projects are prioritised for delivery.</p> <p>In 2014 Ipswich City Council (ICC), in partnership with multiple stakeholders and the local Marburg community produced the ‘Upper Black Snake Creek Improvement Plan’ (UBSCIP). This Plan took an integrated catchment approach to the challenges faced in the Black Snake creek catchment, focussing on water quality, salinity and flood risk. In particular, the salinity that comes out of the catchment has impacts upon the Brisbane river, and the proximity of the confluence with the Mount Crosby treatment works mean that issues are of particular concern to the Seqwater and Queensland Urban Utilities (QUU) who are tasked with the provision and supply of potable water to a large area of South East Queensland.</p> <p>The UBSCIP looked at potential solutions, delivery mechanisms and funding streams to deliver those solutions. Further discussions continue with key potential partners including QUU and Seqwater and the project has been included in the Catchment Action Plan for the Mid Brisbane.</p>
<b>Justification:</b>	<p>This project was confirmed as a priority for funding the Resilient Rivers Initiative Catchment Investment Program as per the process identified in the Catchment Investment Program Terms of Reference.</p> <p>The Catchment Action Plans Working Group provided in-principle support of the project at its meeting of 14 April 2017. The RRI Taskforce provided in-principle support of the project at its meeting of 5 May 2017 and approved release of \$60,000 excl GST on 28 July 2017.</p>
<b>Catchment Action Plan:</b>	Mid Brisbane Catchment Action Plan, 2015-2018
<b>Objectives:</b>	<p>The objective of this project is to:</p> <ol style="list-style-type: none"> <li>1. Restore deep-rooted vegetation to assist lowering raised saltwater table and reduce the impacts of salinity in the Mid Brisbane River.</li> </ol>

## Black Snake Creek Improvement Plan Delivery Phase 1: Project Management Plan

<b>Project Description:</b>	<p><b>Overview</b></p> <p>The project is located in the Black Snake Creek catchment which is a sub-catchment of the Mid Brisbane River. The management intervention is the commencement of a long-term approach to manage salinity in the catchment. Salinity is an issue for water treatment at the downstream Mount Crosby Water Treatment Plant. The engagement of local landholders to undertake targeted large-scale revegetation occurs in this phase (Phase 1).</p> <p>Other works as per the UBSCIP managed by ICC will occur concurrently in Phase 1 which are not included in this Plan.</p> <p>Catchment Investment Program funds will leverage funds provided by ICC via its offsets program as well as funds provided by Healthy Land and Water Ltd (HLW).</p> <p><b>Duration</b></p> <p>Overall there will be three planting phases over three years plus a 5 year establishment period. A staged approach is required for the scale of landholder engagement needed and seasonal requirements of vegetation establishment. Phase 1 will occur from August 2017 to June 2018.</p> <p><b>Site detail</b></p> <p>The project will be delivered in areas located within ICC and Somerset Regional Council (SRC) LGAs. An initial focus is the area around Marburg.</p>
<b>Project Maps:</b>	Attachment A
<b>Supporting documents:</b>	<p>The project will be delivered as per;</p> <p>The Upper Black Snake Creek Improvement Plan.</p>
<b>Key deliverables:</b>	Key milestones in the delivery of the project are included in Attachment B.
<b>Budget and Procurement Requirements:</b>	<p>(2017-18) \$60,000 ICC; (2017-18) \$120,000 Catchment Investment Program; \$80,000 (2017-18) HLW.</p> <p>Details at Attachment C</p>
<b>How the success of the project will be measured:</b>	<p>Establishment rates of vegetation.</p> <p>Hectares revegetated.</p> <p>Landholder engagement numbers.</p>
<b>Governance:</b>	Attachment D

Black Snake Creek Improvement Plan Delivery Phase 1: Project Management Plan

<b>Reporting Requirements:</b>	The Project Coordinator will report progress to the Council of Mayors (SEQ) Coordinator who will arrange for a progress report to be circulated to the CAPs Working Group and Resilient Rivers Taskforce.	
<b>Communications and Engagement Plan, including Project Promotion:</b>	This project has significant opportunity for positive media. A communications and engagement plan will be developed.	
<b>Major Project Risks &amp; Minimisation Strategies:</b>	<b>Risks</b>	<b>Minimisation Strategies</b>
	Approvals	Works will require only local and private landowner approvals. Where further approval is required the relevant State Government bodies will be engaged
	Procurement	Procurement will be managed through the use of existing and authorised Local Government Procurement protocol and procedures (Procedure 42/22 Procurement)
	Private Land Owner Engagement	Use existing networks and ongoing/existing partnerships in key strategic locations
<b>Related Projects:</b>	Brisbane River Floodplain Management Strategy, Qld Reconstruction Authority	
<b>Quality Management</b>	<p>To ensure works are of the highest standard, the following key references are to be included in project contracts:</p> <ul style="list-style-type: none"> <li>• Chenoweth EPLA and Bushland Restoration Services 2012, South East Queensland Ecological Restoration Framework</li> <li>• Ipswich City Council Riparian Revegetation Guidelines/Waterway and Channel Rehabilitation Guidelines</li> </ul>	
<b>Capturing the Lessons Learnt:</b>	Upon completion of the project, a project evaluation will be undertaken and provided to the CAP Working Group.	

## Attachment A Maps

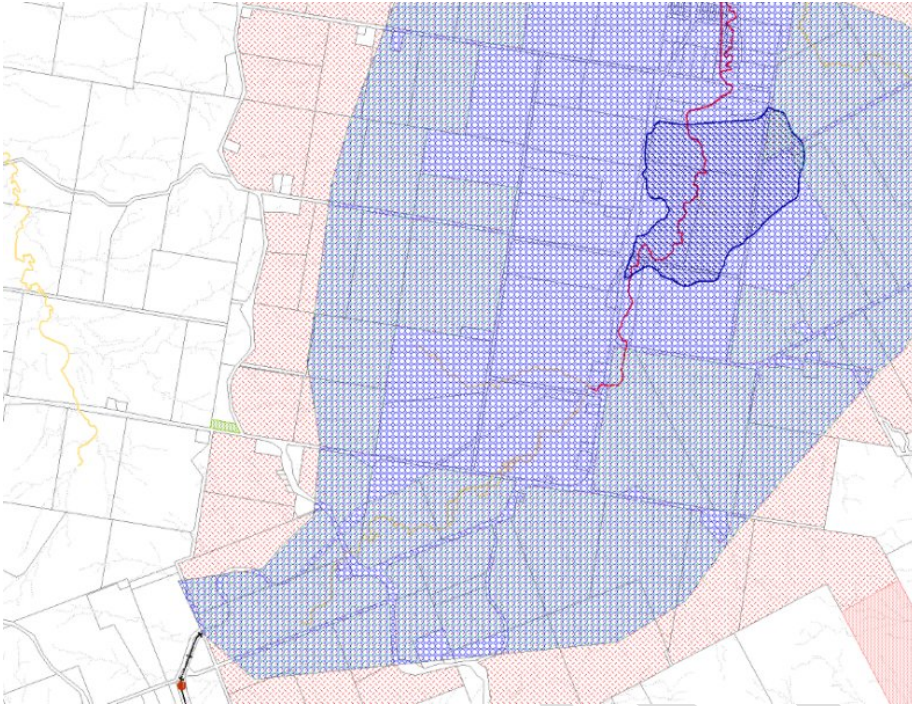


Figure 1 – Target Upper Catchment and Mid-slope Properties - Marburg and Tallegalla



Figure 2 - Current to future aspirational condition projection - 20 - 30yr

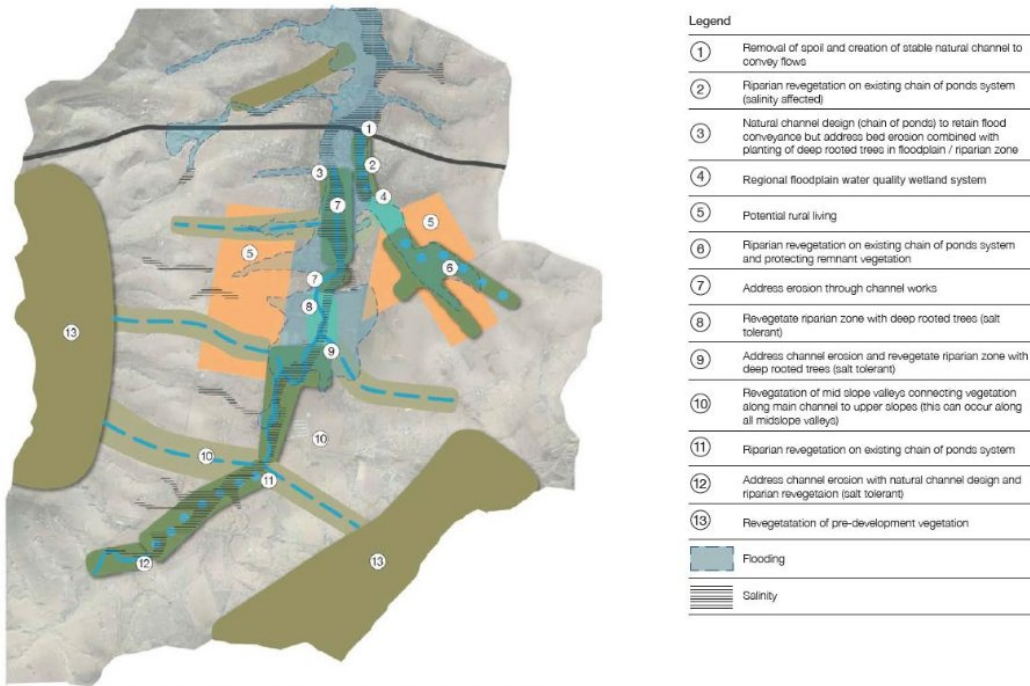


Figure 18 - Proposed locations of actions across the Upper Black Snake Creek catchment

Figure 3 - From Upper Black Snake Creek Improvement plan targeted areas and corresponding actions

DRAFT



**Attachment B Milestones and Deliverables**

	<b>Milestone</b>	<b>Amount from Catchment Investment Program</b>	<b>Date</b>
1	Project Initiation	\$30,000	August 2018
2	Mid Project Report	\$30,000	31 January 2018
3	<i>Draft Project Report*</i>	<i>\$30,000</i>	<i>30 May 2018</i>
4	<i>Final Project Report*</i>	<i>\$30,000</i>	<i>30 June 2018</i>

\*Milestones 3 and 4 are to be funded in a second tranche payment

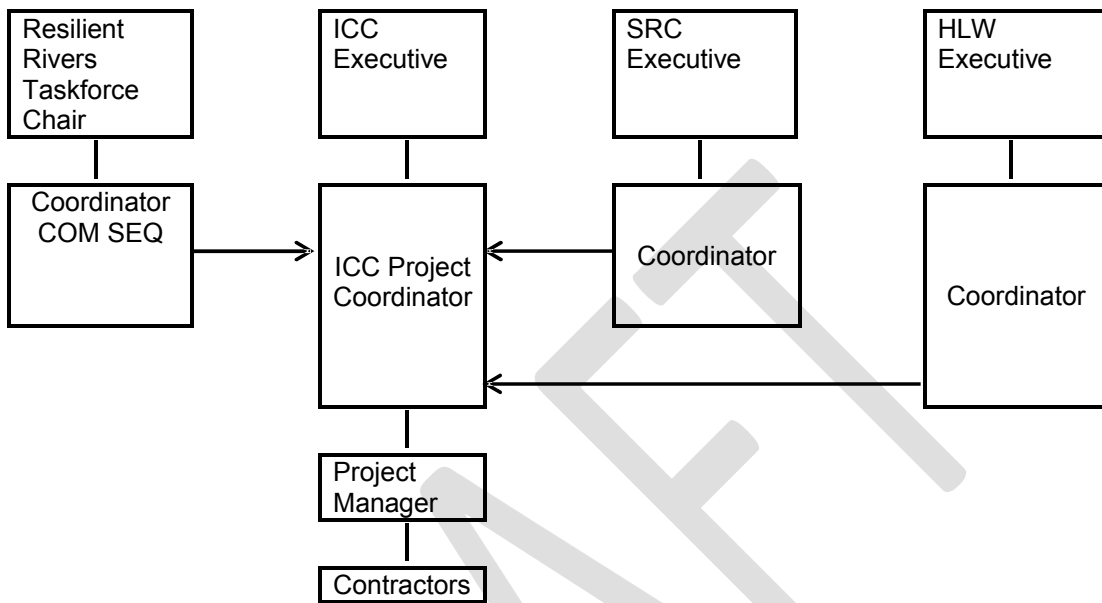
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**Attachment C Budget FY 17-18**

<b>Activity</b>	<b>Amount</b>
Round 1 @\$5 per tree (plant, planting and maintenance)	\$30,000
Round 2 @\$5 per tree (plant, planting and maintenance)	\$30,000
Round 3 @\$5 per tree (plant, planting and maintenance)	\$30,000
Round 4 @\$5 per tree (plant, planting and maintenance)	\$30,000
Total	\$120,000

DRAFT

## Attachment D Governance



May 2017



**Black Snake Creek Improvement Project Proposal.**

**A delivery plan based around actions from the “Upper Black Snake Creek Improvement Plan”**

In 2014 Ipswich City Council, in partnership with multiple stakeholders and the local Marburg community produced the 'Upper Black Snake Creek Improvement Plan' (The Plan). The aim of the Plan is to take an integrated catchment approach to the challenges faced in the Black Snake creek catchment, namely, focussing on water quality, salinity and flood risk. In particular the salinity that comes out of the catchment has impacts upon the Brisbane River, and the proximity of the confluence with the Mount Crosby treatment works mean that issues are of particular concern to the likes of SEQWater and Queensland Urban Utilities (QUU) who are tasked with the provision and supply of bulk potable water to a large area of South East Queensland.

The Plan looks at potential solutions, delivery mechanisms and funding streams to deliver integrated outcomes. Further discussions with key potential partners including QUU and SEQWater, have commenced and the project continues to be of interest to the Resilient Rivers program and have been included in the Catchment Action Plan for the Mid Brisbane.

What follows in this document is a proposal to deliver a number of synchronised solutions looking to deliver on multiple objectives highlighted in The Plan.

## **A Flood Plan re-engagement and in stream improvement**

### ***Background and Synopsis***

In December 2016, ICC conducted a joint field trip with staff from what is now Healthy Land and Water and West Moreton Landcare to progress on ground actions in the Black Snake Creek region. After meeting it was agreed that a floodplain re-engagement program, including the consideration of best management practice engineering solutions (i.e. Engineered Log Jams and Pile Fields) would be looked at, in conjunction with riparian and floodplain revegetation. A summary of this project concept with potential locations for engineering works and revegetation efforts are documented in this project proposal. Works locations will be finalised through community engagement, site visits, and detailed design and modelling as the project progresses.



**Figure 1 - Black Snake Creek Catchment (Extracted from "living in the black snake creek" booklet**

Objectives:

- Raise the bed level and decrease channel incision
- Disconnect the surface water from the saline ground water
- Reduce velocity
- Reduce scour and erosion
- Improve water quality through flood plain re engagement.
- Reinstate Brigalow and eucalyptus communities, creating riparian buffers
- Improve in stream habitat and biodiversity

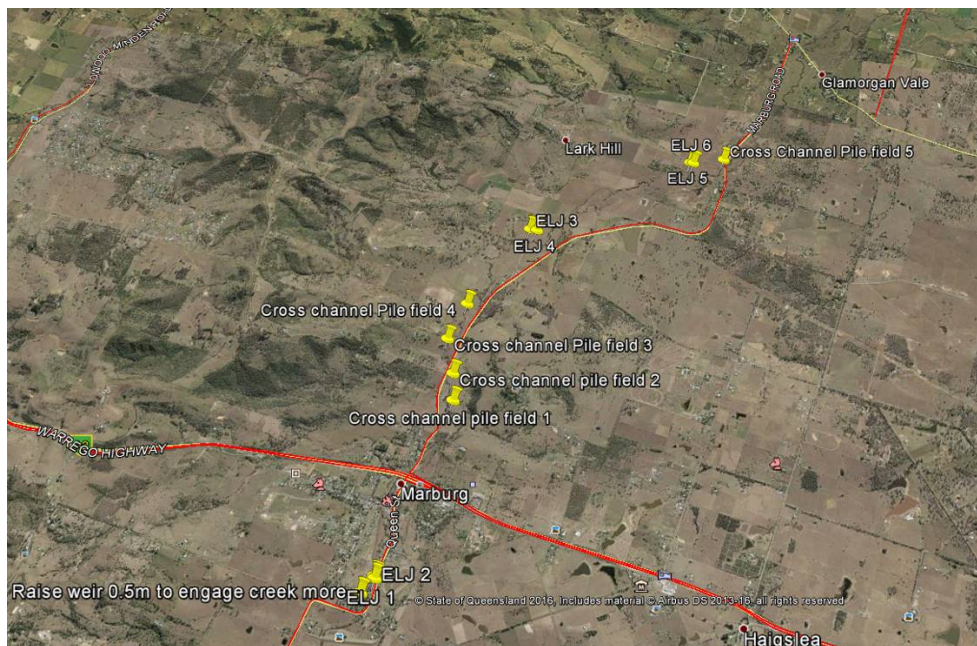
Channel deepening is an in stream process in SEQ creeks that needs managing as it results in increased water velocities and significant channel widening, and in some catchments increases the interaction of a salty groundwater table with the creek, resulting in highly saline pools. In Black Snake Creek these pools are flushed into the mid Brisbane River just above Brisbane's main water treatment facility, and can significantly increase salinity levels and negatively impact on water treatment plant. In addition, Black Snake Creek has repeatedly been found to have elevated E. coli and Enterococci, nutrients and total suspended solids, which are considered significant risks to Brisbane's main water treatment facility. This poor water quality is exacerbated by the municipal water supply in Marburg town with the urban influence on water quality and quantity both immediate (runoff from road and roofs) and long term, with septic systems providing not only the potential for bacterial/nutrient contamination, but also an imported background water supply. This urban 'leakage' only serves to increase the height of the saline water table.

The Plan recommends that natural channel design, with a goal to slowing flows, and works that reduce bed and bank erosion combined with planting deep rooted trees along the



floodplain are key mitigation strategies to address declining water quality. This project proposes to increase the number of deep rooted trees along riparian areas, specifically targeted around in channel revegetation and potentially log jams which will reduce erosion and induce sediment deposition. These solutions will increase deposition, add complexity to the chain of ponds system and over-time return wetland functions to areas of floodplain.

Whilst the final concept and plan of works will be finalised through community engagement, site visits, detailed design and modelling, the principle of the placement of in stream structures such as piles to slow flows and encourage deposition, thus raising the bed levels of the creek. These structures where practical will continue out into the floodplain and be associated with riparian and floodplain revegetation programs.



**Figure 2 Overview of potential on-ground works sites in phase 1 of the project.**



Figure 3 cross channel pile fields and locations to in channel water velocities and encourage sediment deposition to raise the creek bed level



Figure 4 Other locations outside of Ipswich Council Local Government Area which would be suitable for funding from an alternative source.





### *Costings*

3x Pile fields = \$50,000 (\$70 dollars per pile installed)

Associated deep rooted revegetation (including maintenance) = \$18,000 (\$10 per plant installed and established - 5 plants per m)

1 xLog Jam installed = \$20,000

Associated offstream watering and fencing = \$30,000

#### **Ipswich City Council Contributions**

On ground implementation contribution = \$60,000 (over 2 years)

#### **In Kind**

Planning, engagement and modelling = \$27,000

#### **Healthy Land and Water Contrinbutions**

Pilot Best mangement practice demonstration project to include pile fields, offstream watering, vegetation and fencing = \$60,000

#### **In kind**

Assosicated land/stock management workshop = \$8,000

Project design and planning = \$9,000 (10 days at \$900 per day)

Installation and onground management = \$9,000 (10 days at \$900 per day)

**Total costs for phase 1 = \$173,000 of which \$55,000 is inkind provided by HLW and ICC**

## B Mid Slope and Aluvial Revegetation.

### *Background and synopsis*

As identified in the Upper Black Snake Creek Improvement Plan the issues of salinity in the catchment have been exacerbated by post european clearance of catchment vegetation for agriculture. It is estimated that the catchment in and around Marburg has lost over 80 percent of the remnant vegetation cover over the last 200 years .

Objectives:

- decrease saline ground water expression
- increase roughness and increase freshwater infiltration of upper catchment to delay flood peaks
- habitat restoration (Regional Ecosystem 12.15.3 bluegum on alluvium and endangered brigalow)



**Figure 6 – Current Vs aspirational projected future vegetation cover Source: Upper Black Snake Creek Improvement Plan Final Report**

The areas that need to be targeted for rural revegetation have been previously identified (mid slopes. and alluvium) through the Upper Black Snake Creek Improvement plan. Ipswich City Council has run land owner workshops in the area with Healthy Land and Water, formerly SEQCatchments, and West Moreton Landcare to encourage better practice. Further to this there are existing land owners signed up as partners in the area who are eligible for funding assistance and free tree programs under current voluntary conservation programs.



Other mechanisms for the delivery of revegetation include:

- The production of a specific Black Snake Creek partnership program as is currently being developed for Franklin Vale Catchment. This could be funded through existing means including Enviroplan and offsets
- acquisition of appropriate land for the delivery of vegetation offsets through revolving funds or facilitation of a third party eg. QTFN
- small scale cyclical timber/tree plantation

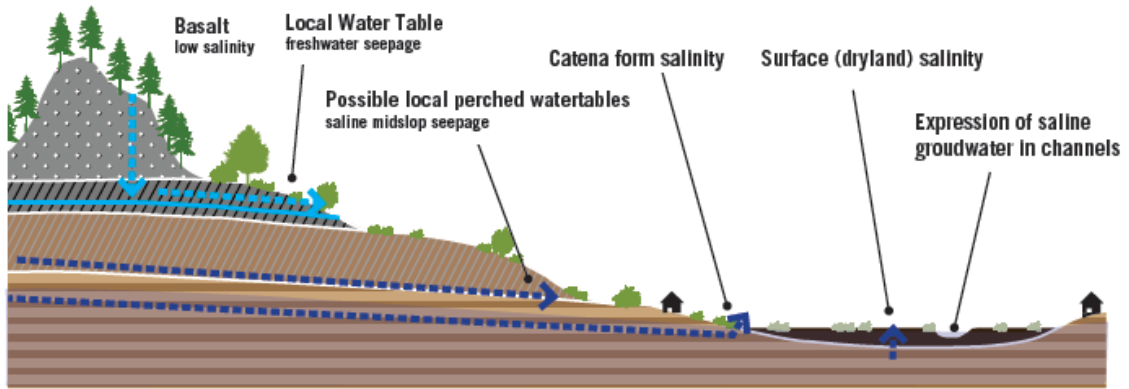


Figure 7 - Salinity expression and target areas for reveg

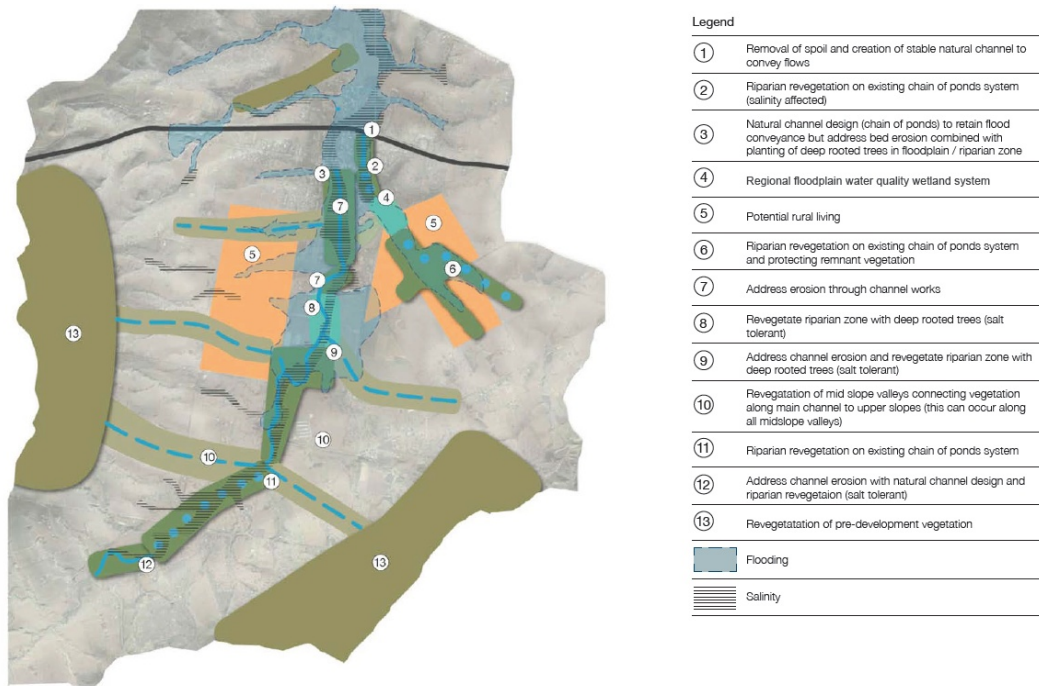
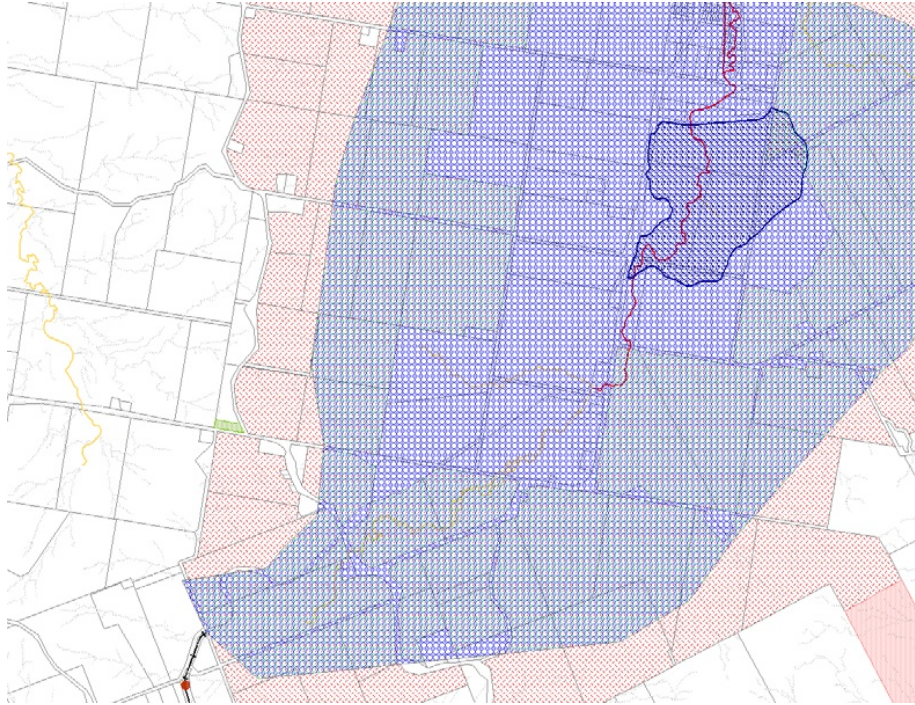


Figure 18 - Proposed locations of actions across the Upper Black Snake Creek catchment

Figure 8 Actions and locations from The Plan





**Figure 9 – Properties around the Upper (red), Midslopes and Alluvial Flats (blue) Marburg and Tallgalla**

### *Delivery*

Figure 9 is a broad overview of potential locations to identify key properties and property owners to approach as partners in the program.

Based on discussions in the field in November 2017 with Ipswich City Council, West Moreton Landcare and Healthy Land and Water, four adjoining properties have been identified to be approached for involvement in the project for 2018 (Figure 10).

The objective is 10,000 plants to be established, broadly representing preclear regional ecosystems (Figure 11). As a broad guide, plants will be established in rows with 4 metre spacing to allow machinery access for interrow slashing and in row weed control. Anticipated density will be approximately 2,500 – 5,000 plants per hectare, though overall density will be negotiated with individual landholders to meet their requirements.

Anticipated costs for this area \$12.00 per plant including project management and maintenance for a minimum of 12 months. These locations can and may cross over with sites relevant to the Tributary Revegetation project (Below). This may deliver improvements in flood risk as well as water quality.

There may be the opportunity to establish some plants on ICC property, however it is anticipated that the majority of plants will be established with private landholder partners. West Moreton Landcare have agreed to assist in this process.

Plant supply, installation and maintenance of the plants will be delivered by a combination of Healthy Land and Water staff and sub-contractors on private property. Each landholder will have a signed project agreement based on the standard Healthy Land and Water template.



Figure 10 – Potential landholder partners for mid slope revegetation





## C Eastern Western Tributaries Revegetation and Peak Delay Projects

### *Background and Synopsis*

As part of an original flood study for Marburg commissioned by Ipswich City Council and appendix A of the Upper Black Snake Creek Improvement Plan, the Eastern and Western tributaries of the Black Snake were identified as contributors to flooding in and around the township. Originally detention was proposed in the form of Dams on both tributaries and the main channel, however after cost benefit analysis only the main channel received a flood mitigation scheme. This has since proved worthy however no actions were taken on the other tributaries.

Ipswich City Council with E2 DesignLab and BMT WBM had previously looked at the potential to use revegetation to delay and reduce flows from these tributaries in echoing methods used elsewhere including Europe and the UK. Initial investigations proved inconclusive. However ICC have re-examined the option using the latest theories and models and believe there may be scope to implement a project that will improve both water quality, local habitat and have a positive effect on localised flood risk.

Since the production of the improvement plan Ipswich City Council engaged Ipswich Rivers Improvement Trust to carry out re-profiling of the Eastern tributary channel the in the reach immediately upstream of the Warrego Highway.

- Objectives;-
- mitigate local flood risks by managing peaks/lag time
  - Improve water quality through managing stream power and volumes and increasing sully stability
  - Improve local habitat by increasing cover of veg in the catchment

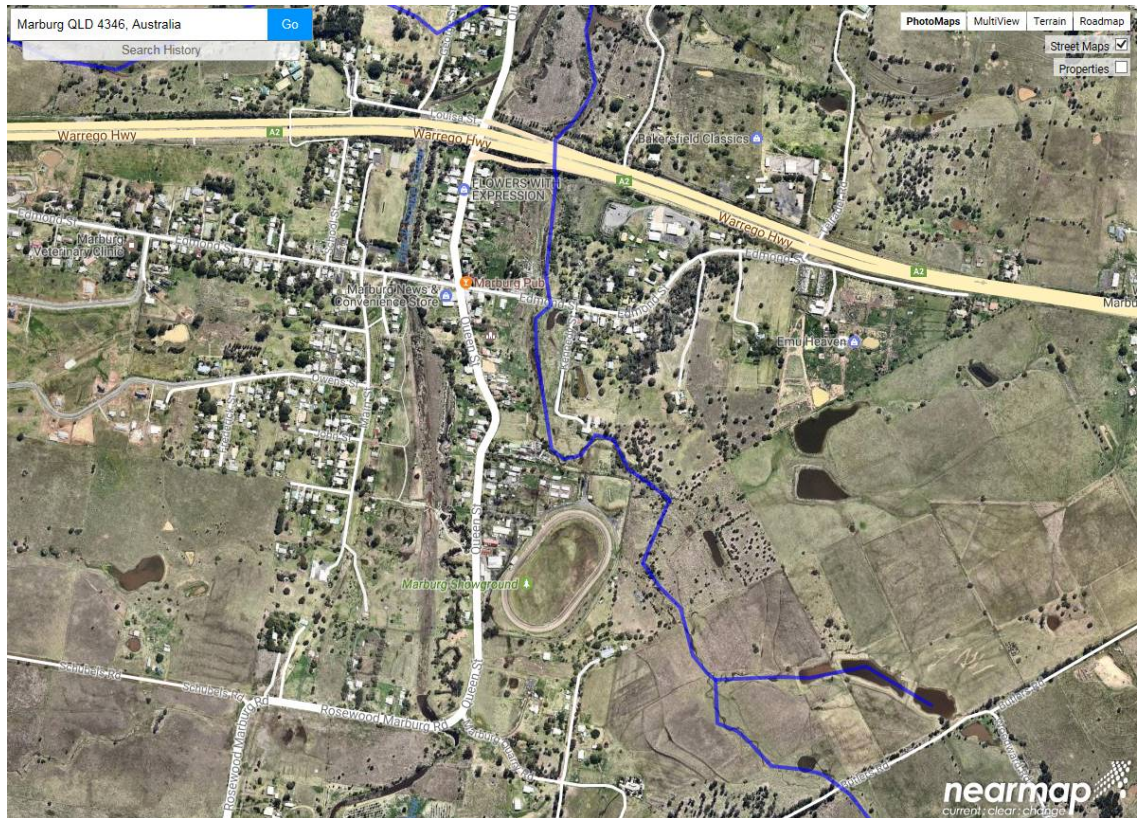


**Figure 10 Western Tributary**

Measures on the Western Tributary would include;

- Approximately 1km<sup>2</sup> of native revegetation in partnership with 2 existing private conservation partners, Healthy Land and Water and West Moreton Landcare.
- Investigation into the re-instatement of historic dams and dam walls on the waterway
- Exploration and modelling of the use of further attenuation devices such as leaky weirs log jams and similar in stream structures





**Figure 11 - Eastern Tributary**

Measures on the Western tributaries would include

Identify and sign up land overs to Voluntary Conservation Agreements or similar and commence re-establishment of riparian vegetation and improvement of the chain of ponds



19 April 2018

Mr Bryce Hines  
Acting Chief Operating Officer (Works, Parks and Recreation)  
Ipswich City Council  
PO Box 191  
IPSWICH QLD 4305

Dear Bryce,

**Re: Variation to Black Snake Creek Funding Deed of Agreement**

This letter is in reference to the Funding Deed of Agreement between Council of Mayors (SEQ) and Ipswich City Council signed on 25 September 2017 for the total of \$60,000 (plus GST).

On 21/11/2017 the Milestone 1 payment of \$30,000 (plus GST) was paid in line with the Funding Agreement, with a further \$30,000 (plus GST) due and payable on completion of the Project.

Now that the Project Management Plan (attached) has been completed and the Resilient Rivers Taskforce has approved total funding of \$120,000 it is necessary to amend the existing contract to include a further amount of \$60,000 (plus GST).

Additionally, the dates of the Milestone Payments will be adjusted as set out in the revised Plan

If you have any questions regarding the above, please don't hesitate to contact me on 3040 3480 or at [scott.smith@seqmayors.qld.gov.au](mailto:scott.smith@seqmayors.qld.gov.au).

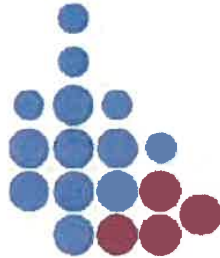
Yours sincerely



**Scott Smith**  
Chief Executive Officer

att. Black Snake Creek Project Management Plan





# **Council of Mayors**

South East Queensland

## **Resilient Rivers Initiative**

Catchment Investment Program

**Black Snake Creek Improvement Plan Delivery Phase 1: Project Management Plan**

**Version:** 0.4  
**Date:** 19 April 2018

## Document Control

### Version History

Version	Author	Change	Date
0.1	D Dawson/P. Smith	Initial Draft	27 July 2017
0.2	D. Dawson	Draft	1 August 2017
0.3	John Howie	Final Draft	17 April 2018
0.4	John Howie	For implementation	19 April 2018

<b>Title:</b>	<b>Black Snake Creek Improvement Plan Delivery – Phase 1</b>
<b>Project Lead Contacts:</b>	<b>Ben Walker and Danielle Andlemac, ICC</b>
<b>Background:</b>	<p>The Resilient Rivers Initiative (RRI) is a collaborative effort between local and state government, water utilities and key non-government organisations to improve the health and resilience of South East Queensland's catchments, rivers and Moreton Bay. Further background on the RRI is available at <a href="http://seqmayors.qld.gov.au/project/resilient-rivers-initiative/">http://seqmayors.qld.gov.au/project/resilient-rivers-initiative/</a></p> <p>As indicated in the RRI Strategy, the Catchment Investment Program was established by the Resilient Rivers Taskforce in 2016 to provide a pool of funds for priority on-ground works identified in Catchment Action Plans. A rolling program of works has been established and as funds become available, projects are prioritised for delivery.</p> <p>In 2014 Ipswich City Council (ICC), in partnership with multiple stakeholders and the local Marburg community produced the 'Upper Black Snake Creek Improvement Plan' (UBSCIP). This Plan took an integrated catchment approach to the challenges faced in the Black Snake creek catchment, focussing on water quality, salinity and flood risk. In particular, the salinity that comes out of the catchment has impacts upon the Brisbane river, and the proximity of the confluence with the Mount Crosby treatment works mean that issues are of concern to the Seqwater and Queensland Urban Utilities (QUU) who are tasked with the provision and supply of potable water to a large area of South East Queensland.</p> <p>The UBSCIP looked at potential solutions, delivery mechanisms and funding streams to deliver those solutions. Further discussions continue with key potential partners including QUU and Seqwater and the project has been included in the Catchment Action Plan for the Mid Brisbane.</p>
<b>Justification:</b>	<p>This project was confirmed as a priority for funding the Resilient Rivers Initiative Catchment Investment Program as per the process identified in the Catchment Investment Program Terms of Reference.</p> <p>The Catchment Action Plan Working Group provided in-principle support of the project at its meeting of 14 April 2017. The Resilient Rivers Taskforce provided in-principle support of the project at its meeting of 5 May 2017 and approved release of \$120,000 ex GST on 28 July 2017.</p>
<b>Catchment Action Plan:</b>	Mid Brisbane Catchment Action Plan, 2015-2018
<b>Objectives:</b>	<p>The objective of this project is to:</p> <ol style="list-style-type: none"> <li>1. Restore deep-rooted vegetation to assist lowering raised saltwater table and reduce the impacts of salinity in the Mid Brisbane River.</li> </ol>

<b>Project Description:</b>	<p><b>Overview</b></p> <p>The project is located in the Black Snake Creek catchment which is a sub-catchment of the Mid Brisbane River. The management intervention is the commencement of a long-term approach to manage salinity in the catchment. Salinity is an issue for water treatment at the downstream Mount Crosby Water Treatment Plant. The engagement of local landholders to undertake targeted large-scale revegetation occurs in this phase (Phase 1).</p> <p>Other works as per the UBSCIP managed by ICC will occur concurrently in Phase 1 which are not included in this Plan.</p> <p>Catchment Investment Program funds will be supported with additional funds in the order of \$27,000 provided by ICC.</p> <p><b>Duration</b></p> <p>Overall there will be two planting phases over 12 months years plus a two year establishment period. A staged approach is required for the scale of landholder engagement needed and seasonal requirements of vegetation establishment. Phase 1 will occur from May 2018 to June 2018.</p> <p><b>Site detail</b></p> <p>The project will be delivered in areas located within ICC local government area with the initial focus in the area around Marburg.</p>
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<b>How the success of the project will be measured:</b>	Establishment rates of vegetation. Hectares revegetated. Landholder engagement numbers and positive feedback on engagement and implementation.
<b>Governance:</b>	Attachment D
<b>Reporting Requirements:</b>	The Project Coordinator will report progress to the Council of Mayors (SEQ) Coordinator who will arrange for a progress report to be circulated to the Catchment Action Plan Working Group and Resilient Rivers Taskforce.
<b>Communications and Engagement Plan, including Project Promotion:</b>	This project has significant opportunity for positive media. A communications and engagement plan will be developed.



<b>Major Project Risks &amp; Minimisation Strategies:</b>	<b>Risks</b>	<b>Minimisation Strategies</b>
	Approvals	Works will require only local and private landowner approvals. Where further approval is required the relevant State Government bodies will be engaged
	Procurement	Procurement will be managed through the use of existing and authorised Local Government Procurement protocol and procedures (Procedure 42/22 Procurement)
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<b>Related Projects:</b>	Brisbane River Floodplain Management Strategy, Qld Reconstruction Authority	
<b>Quality Management</b>	<p>To ensure works are of the highest standard, the following key references are to be included in project contracts:</p> <ul style="list-style-type: none"> <li>• Chenoweth EPLA and Bushland Restoration Services 2012, South East Queensland Ecological Restoration Framework</li> <li>• ICC Riparian Revegetation Guidelines/Waterway and Channel Rehabilitation Guidelines</li> </ul>	
<b>Capturing the Lessons Learnt:</b>	Upon completion of the project, a project evaluation will be undertaken and provided to the Catchment Action Plan Working Group.	

**Attachment A: Targeted catchment and site maps**



Figure 1 – Target Upper Catchment and Mid-slope Properties - Marburg and Tallegalla

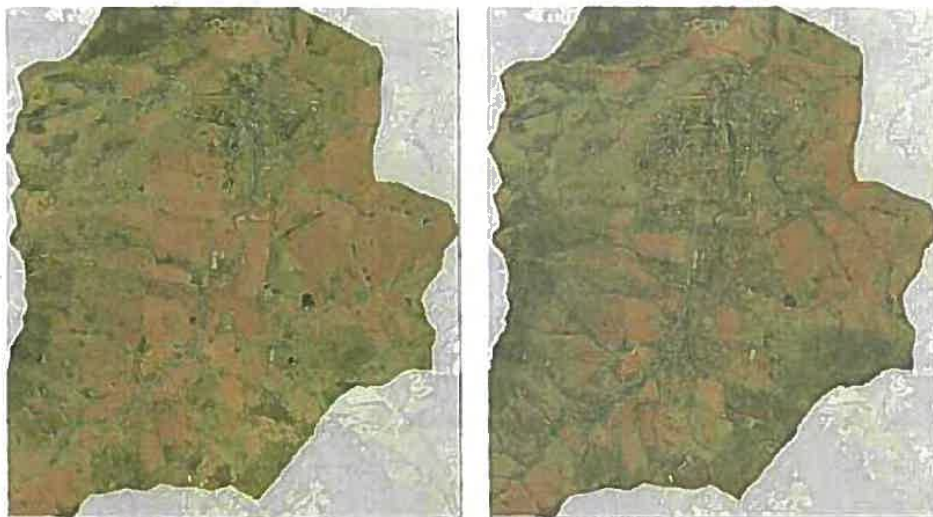


Figure 2 - Current to future aspirational condition projection - 20 - 30yr

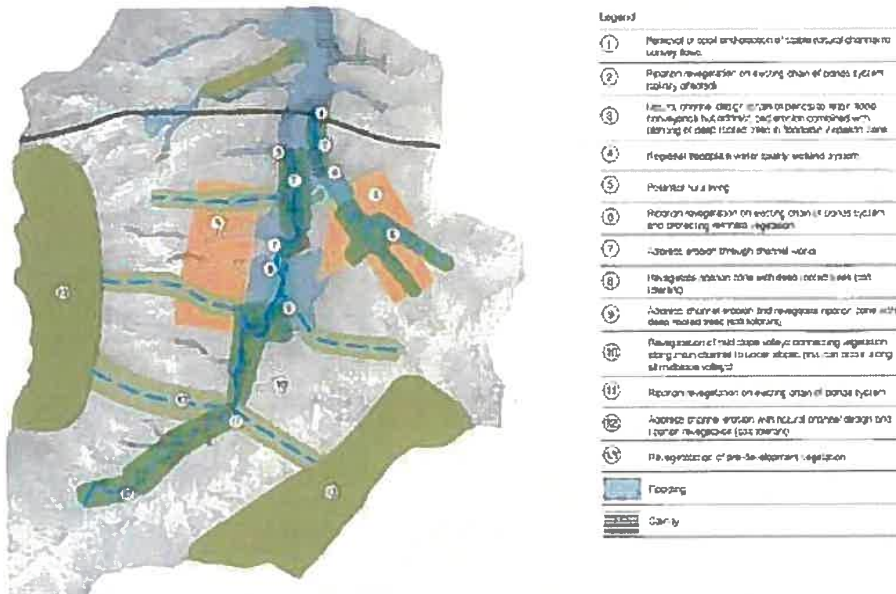
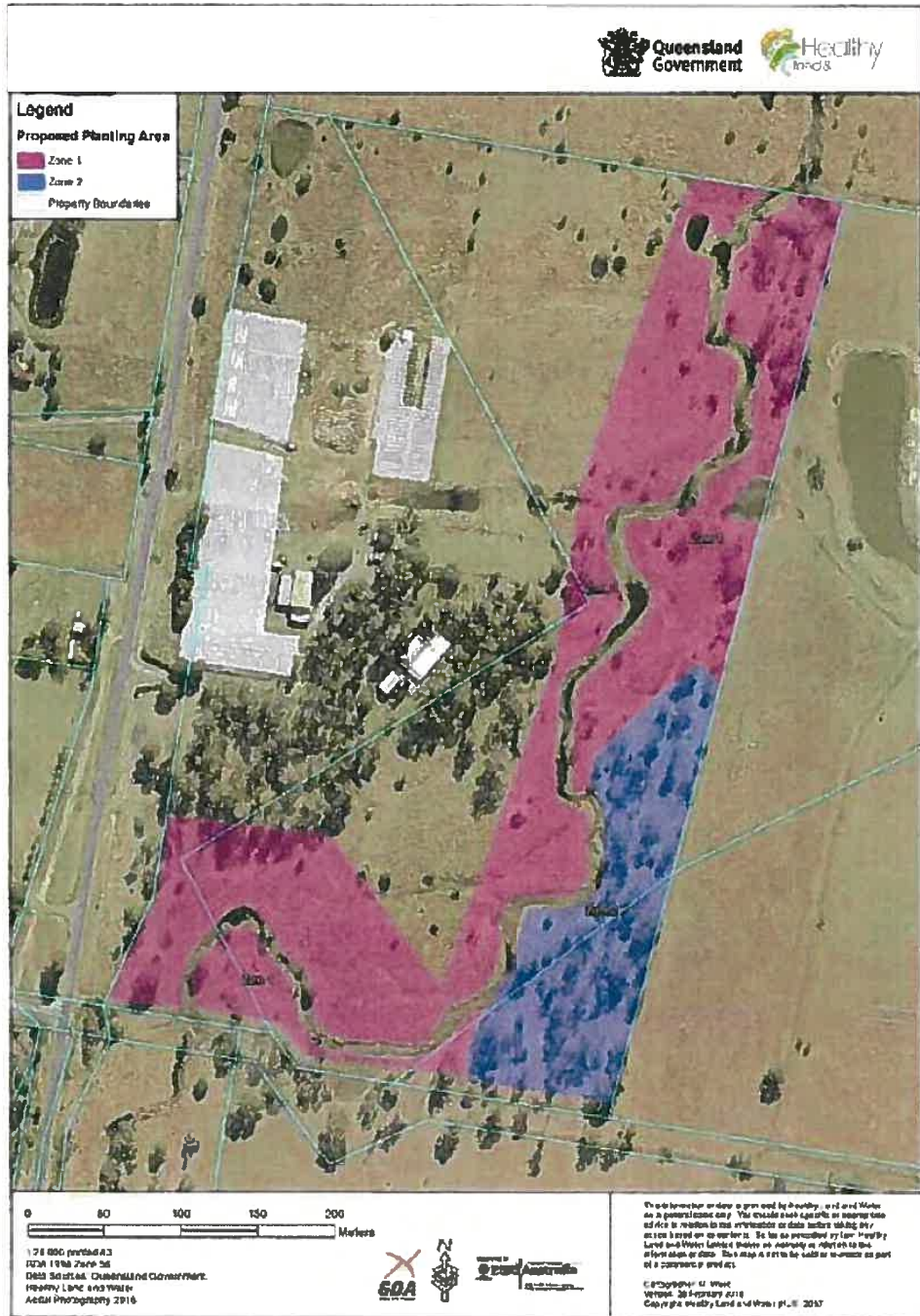


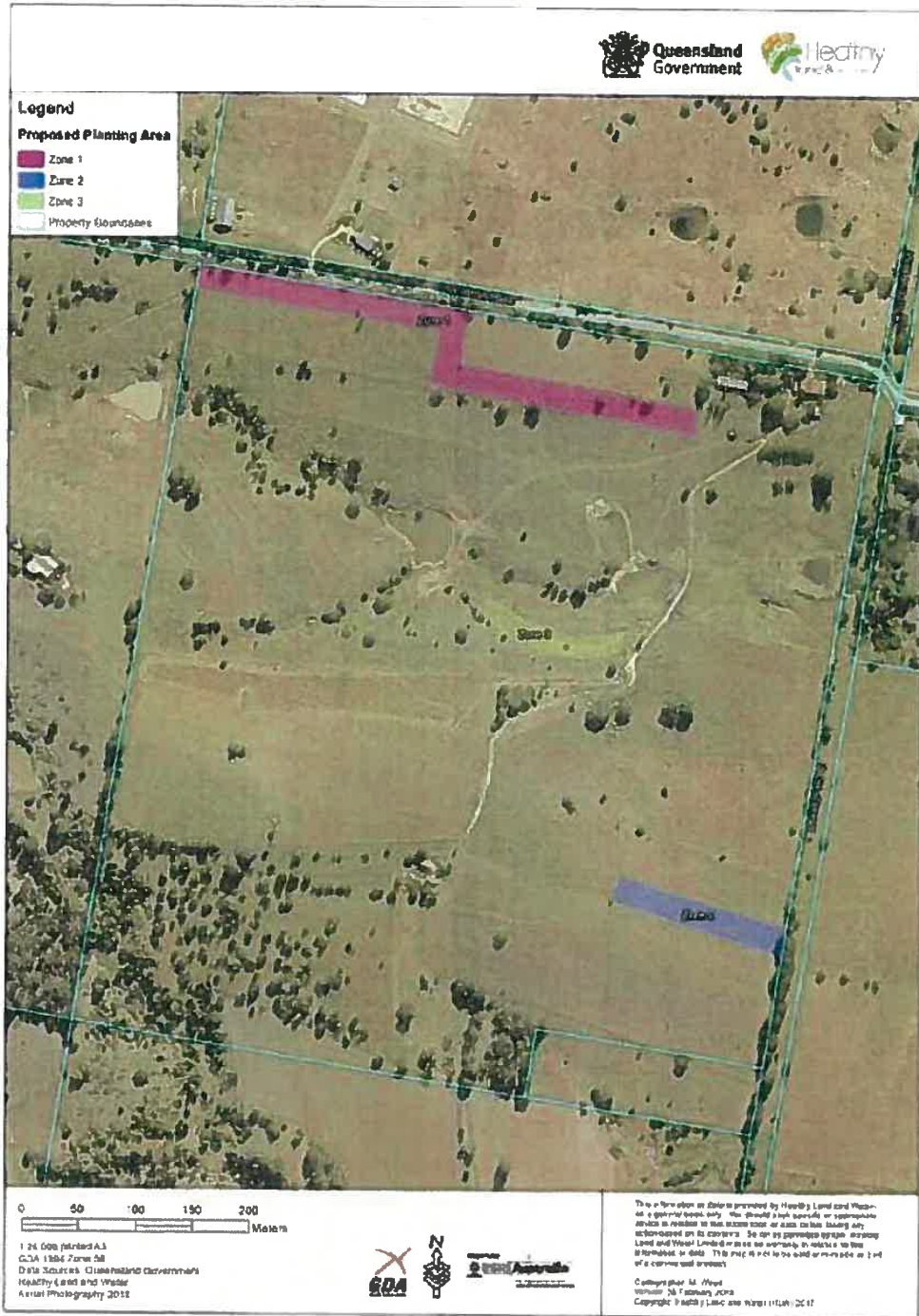
Figure 18 - Proposed locations of actions across the Upper Black Snake Creek catchment

Figure 3 - From Upper Black Snake Creek Improvement plan targeted areas and corresponding actions

Sites







**Attachment B Milestones, Program and Deliverables**

	Milestone	Amount from Catchment Investment Program	Date
1	Project Initiation and funding of initial 17/18 FY planting	\$30,000	August 2017 (actioned)
2	Report on success of initial planting [REDACTED] and second stage of planting [REDACTED]	\$60,000	October 2018
3	Report confirming maintenance KPI's met, confirmation of detail and approval for extension of works	\$25,000	October 2019
4	Final Report	\$5,000	September 2020

**Program**

Key Stage	Delivery Timeframes	
	[REDACTED]	[REDACTED]
Preliminaries	Apr – May 2018	Sept – Oct 2018
Supply and installation	May – June 2018	Oct 2018
Maintenance	June 2018 – April 2019	Nov 2018 – September 2019



**Attachment C      Budget FY 17-18**

<b>Key Stage Cost Centres</b>	<b>\$/stem</b>
Preliminaries	2.30
Supply and Plant Tubestock	5.17
Maintenance	3.77
Progress Reports	0.12
<b>Total (GST Ex)</b>	<b>\$11.37</b>

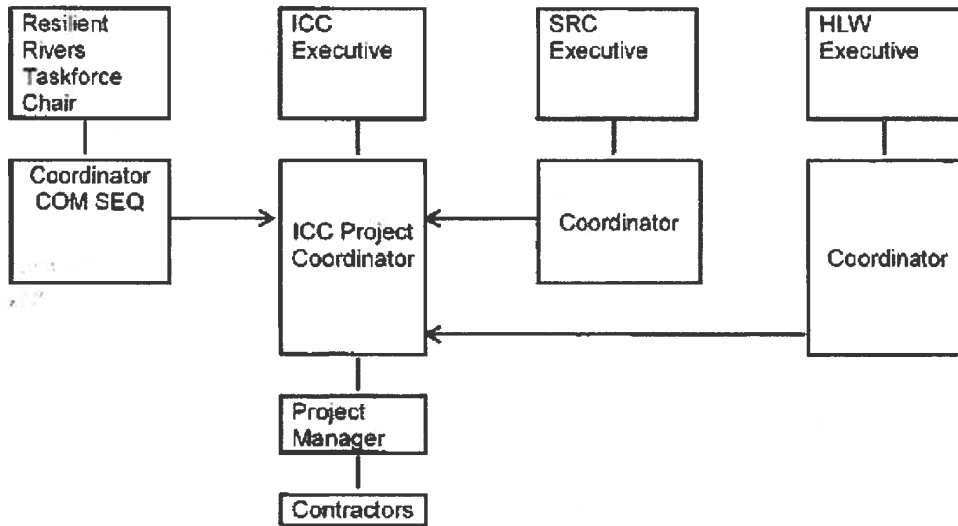
██████████ 3375 plants

██████████ 2175 plants

10,550 plants @ \$11.37/plant = \$119,953.50

Contingency, potential additional 12 months maintenance - \$27,046.50

**Attachment D Governance**



**Attachment E Communication Plan**

N/A

# **Resilient Rivers Initiative**

Catchment Investment Program

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## **Project Management Plan**

Black Snake Creek Improvement Plan Delivery

Phase 1

**Version:** 0.5

**Date:** 22 June 2018

# Document Control

## Version History

Version	Author	Change	Date
0.1	D Dawson/P. Smith	Initial Draft	27 July 2017
0.2	D. Dawson	Draft	1 August 2017
0.3	John Howlie	Final Draft	17 April 2018
0.4	John Howlie	For implementation	19 April 2018
0.5	John Howlie	Revised for implementation due to contract delays	22 June 2018



DRAFT

Black Snake Creek Improvement Plan Delivery Phase 1: Project Management Plan

<b>Title:</b>	<b>Black Snake Creek Improvement Plan Delivery – Phase 1</b>
<b>Project Lead Contacts:</b>	<b>Ben Walker and Danielle Andlemac, ICC</b>
<b>Background:</b>	<p>The Resilient Rivers Initiative (RRI) is a collaborative effort between local and state government, water utilities and key non-government organisations to improve the health and resilience of South East Queensland’s catchments, rivers and Moreton Bay. Further background on the RRI is available at <a href="http://seqmayors.qld.gov.au/project/resilient-rivers-initiative/">http://seqmayors.qld.gov.au/project/resilient-rivers-initiative/</a></p> <p>As indicated in the RRI Strategy, the Catchment Investment Program was established by the Resilient Rivers Taskforce in 2016 to provide a pool of funds for priority on-ground works identified in Catchment Action Plans. A rolling program of works has been established and as funds become available, projects are prioritised for delivery.</p> <p>In 2014 Ipswich City Council (ICC), in partnership with multiple stakeholders and the local Marburg community produced the ‘Upper Black Snake Creek Improvement Plan’ (UBSCIP). This Plan took an integrated catchment approach to the challenges faced in the Black Snake creek catchment, focussing on water quality, salinity and flood risk. In particular the salinity that comes out of the catchment has impacts upon the Brisbane river, and the proximity of the confluence with the Mount Crosby treatment works mean that issues are of concern to the Seqwater and Queensland Urban Utilities (QUU) who are tasked with the provision and supply of potable water to a large area of South East Queensland.</p> <p>The UBSCIP looked at potential solutions, delivery mechanisms and funding streams to deliver those solutions. Further discussions continue with key potential partners including QUU and Seqwater and the project has been included in the Catchment Action Plan for the Mid Brisbane.</p>
<b>Justification:</b>	<p>This project was confirmed as a priority for funding the Resilient Rivers Initiative Catchment Investment Program as per the process identified in the Catchment Investment Program Terms of Reference.</p> <p>The Catchment Action Plans Working Group provided in-principle support of the project at its meeting of 14 April 2017. The RRI Taskforce provided in-principle support of the project at its meeting of 5 May 2017 and approved release of \$120,000 ex GST on 28 July 2017.</p>
<b>Catchment Action Plan:</b>	Mid Brisbane Catchment Action Plan, 2015-2018
<b>Objectives:</b>	<p>The objective of this project is to:</p> <ol style="list-style-type: none"> <li>1. Restore deep-rooted vegetation to assist lowering raised saltwater table and reduce the impacts of salinity in the Mid Brisbane River.</li> </ol>

Black Snake Creek Improvement Plan Delivery Phase 1: Project Management Plan

<p><b>Project Description:</b></p>	<p><b>Overview</b></p> <p>The project is located in the Black Snake Creek catchment which is a sub-catchment of the Mid Brisbane River. The management intervention is the commencement of a long-term approach to manage salinity in the catchment. Salinity is an issue for water treatment at the downstream Mount Crosby Water Treatment Plant. The engagement of local landholders to undertake targeted large-scale revegetation occurs in this phase (Phase 1).</p> <p>Other works as per the UBSCIP managed by ICC will occur concurrently in Phase 1 which are not included in this Plan.</p> <p><b>Duration</b></p> <p>Site preparation and planting will occur from September to November 2018 plus a one year initial maintenance/establishment period. Infill planting may be required over the maintenance/establishment period to achieve the high standard of outcome and landholder engagement desired.</p> <p>An additional 2 years of maintenance will be required, to be arranged between the key stakeholders during the maintenance establishment period.</p> <p><b>Site detail</b></p> <p>The project will be delivered in areas located within ICC LGA with the initial focus in the area around Marburg.</p>
<p><b>Project Maps:</b></p>	<p>Attachment A</p>
<p><b>Supporting documents:</b></p>	<p>The project will be delivered as per; The Upper Black Snake Creek Improvement Plan.</p>
<p><b>Key deliverables:</b></p>	<p>Key milestones in the delivery of the project are included in Attachment B.</p>
<p><b>Budget and Procurement Requirements:</b></p>	<p>(2017-18) \$120,000 Catchment Investment Program. Details at Attachment C</p>
<p><b>How the success of the project will be measured:</b></p>	<p>Establishment rates of vegetation. Hectares revegetated. Landholder engagement numbers and positive feedback on engagement and implementation.</p>
<p><b>Governance:</b></p>	<p>Attachment D</p>

Black Snake Creek Improvement Plan Delivery Phase 1: Project Management Plan

<b>Reporting Requirements:</b>	<p>The Project Coordinator will report progress to the Council of Mayors (SEQ) Coordinator who will arrange for a progress report to be circulated to the CAPs Working Group and Resilient Rivers Taskforce.</p> <p>Activities leading into and during implementation will be coordinated and reported through the COM Catchment Investment Program manager.</p>	
<b>Communications and Engagement Plan, including Project Promotion:</b>	<p>This project has significant opportunity for positive media. A communications and engagement plan will be developed.</p>	
<b>Major Project Risks &amp; Minimisation Strategies:</b>	<b>Risks</b>	<b>Minimisation Strategies</b>
	Approvals	Works will require only local and private landowner approvals. Where further approval is required the relevant State Government bodies will be engaged
	Procurement	Procurement will be managed through the use of existing and authorised Local Government Procurement protocol and procedures (Procedure 42/22 Procurement)
Private Land Owner Engagement	Use existing networks and ongoing/existing partnerships in key strategic locations	
<b>Related Projects:</b>	Brisbane River Floodplain Management Strategy, Qld Reconstruction Authority	
<b>Quality Management</b>	<p>To ensure works are of the highest standard, the following key references are to be included in project contracts:</p> <ul style="list-style-type: none"> <li>• Chenoweth EPLA and Bushland Restoration Services 2012, South East Queensland Ecological Restoration Framework</li> <li>• Ipswich City Council Riparian Revegetation Guidelines/Waterway and Channel Rehabilitation Guidelines</li> </ul>	
<b>Capturing the Lessons Learnt:</b>	<p>Upon completion of the project, a project evaluation will be undertaken and provided to the CAP Working Group.</p>	

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## Attachment A Targeted catchment and site maps

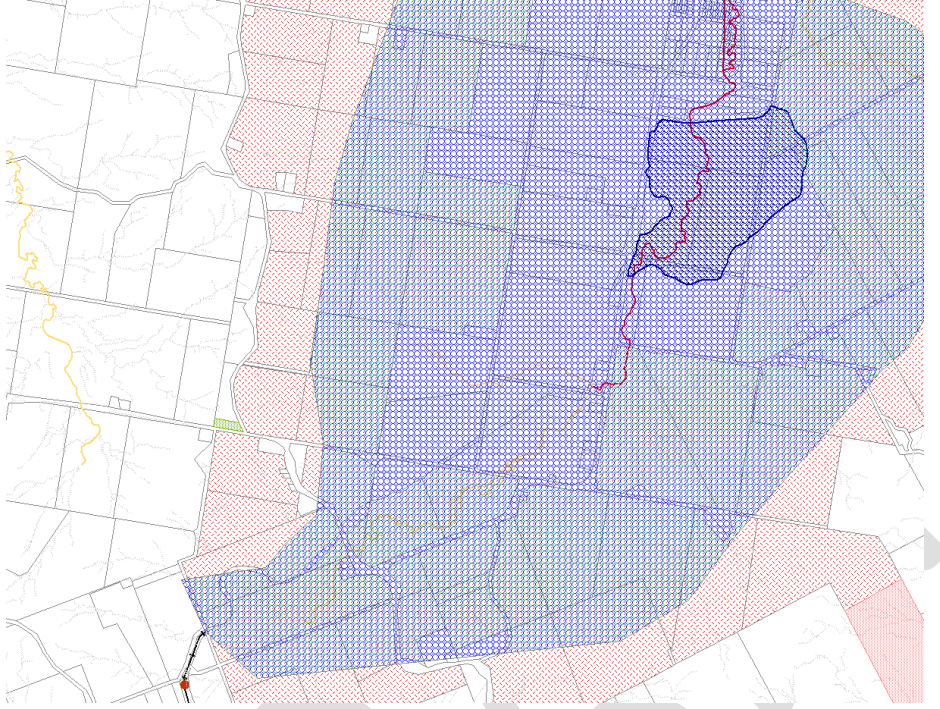


Figure 1 – Target Upper Catchment and Mid-slope Properties - Marburg and Tallegalla



Figure 2 - Current to future aspirational condition projection - 20 - 30yr

## Black Snake Creek Improvement Plan Delivery Phase 1: Project Management Plan

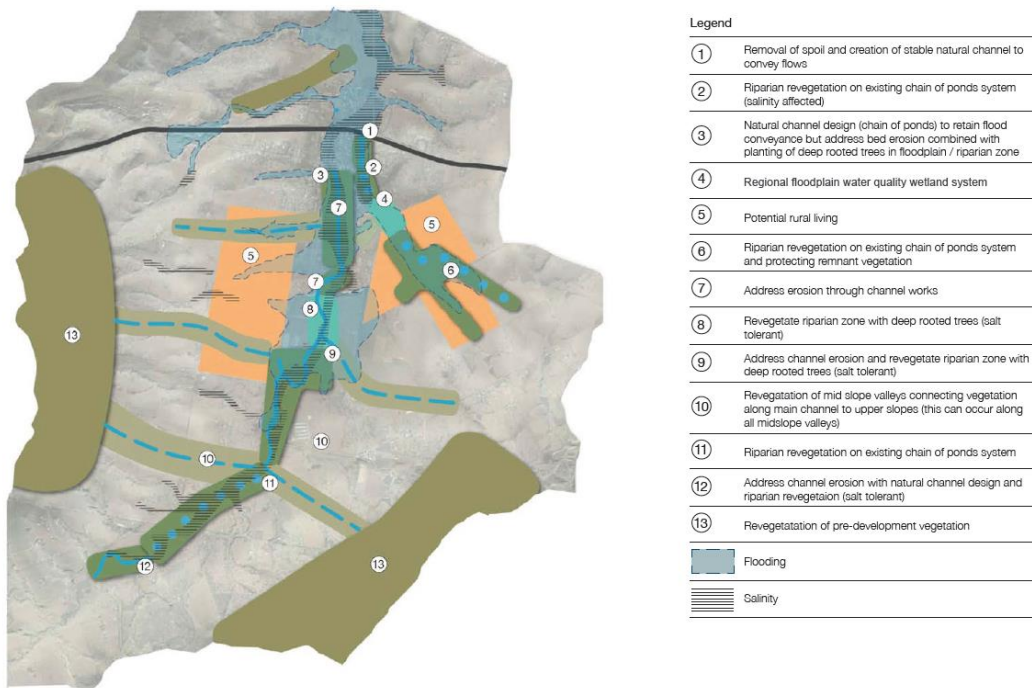


Figure 18 - Proposed locations of actions across the Upper Black Snake Creek catchment

Figure 3 - From Upper Black Snake Creek Improvement plan targeted areas and corresponding actions

## Sites

See attached HL&W site management plans for [REDACTED] and [REDACTED] properties

## Attachment B Milestones, Program and Deliverables

	Milestone	Amount from Catchment Investment Program	Date
1	Project Initiation and funding of initial 17/18 FY planting	\$30,000	August 2017 (actioned)
2	Report on success of initial planting (Site 1) and second stage of planting (Site 2)	\$60,000	October 2018
3	Report confirming maintenance KPI's met, confirmation of detail and approval for extension of works	\$25,000	October 2019
4	Final Report	\$5,000	November 2019

## Program

Key Stage	Delivery Timeframes	
	Site 1	Site 2
Preliminaries	September 2018	September 2018
Supply and installation	October 2018	October 2018
Maintenance	November 2018 – October 2019	November 2018 -October 2019

**Attachment C Budget FY 17-18**

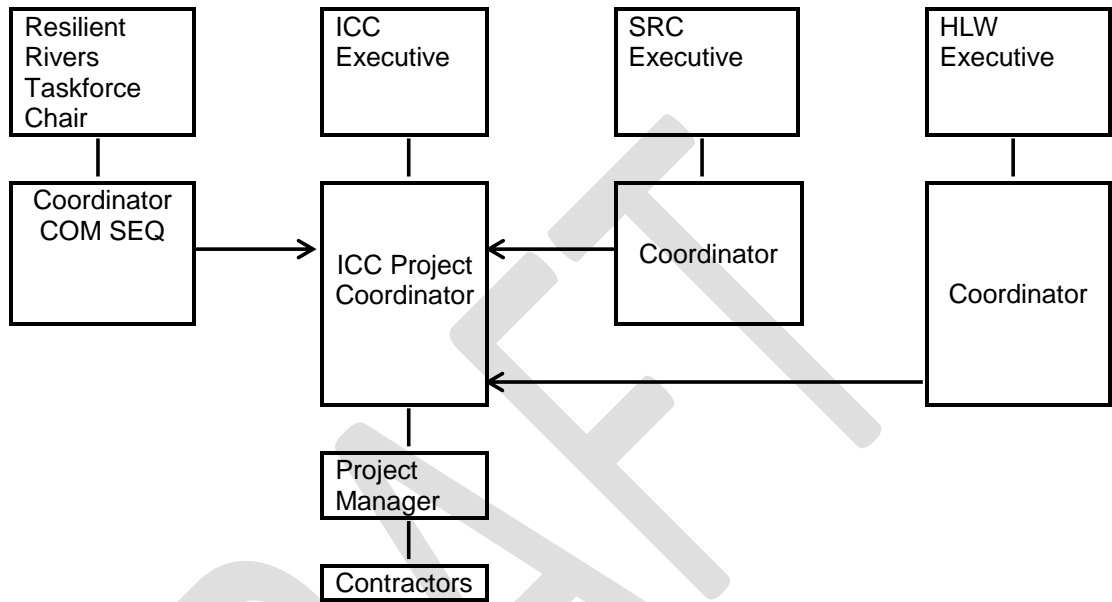
Key Stage Cost Centres	\$/stem
Preliminaries	2.44
Supply and Plant Tubestock	5.46
Maintenance incl watering	3.95
Progress Reports	0.15
<b>Total (GST Ex)</b>	<b>12.00</b>

Site 2 8375 plants

Site 1 1625 plants

10,000 plants @ \$12/plant = \$120,000

### Attachment D Governance



### Attachment E Communication Plan

TBC

# Upper Black Snake Creek Planting

Site Plan: [REDACTED]

## 1 Background

Black Snake Creek has a high water tables in many areas and associated dryland salinity. This project is part of a larger program looking to increase vegetation cover throughout the catchment, reduce groundwater recharge and thereby reduce waterway and soil salinity over the long term.

This site is located on a 39 hectare private property at [REDACTED] Marburg. The property is recently under new ownership and currently has cattle agisted. The site has an elevation of 130 – 150 metres above sea level and is in the recharge zone with no surface soil salinity readily observable, though the EC of the property's dams has not been measured. The discharge zone is approximately 700 metres east (downslope) of the site at an elevation of 80 – 90 metres above sea level with readily identifiable alluvial soils and waterway channels that intercept the water table.

The planting areas in Figure 1 have been identified through discussions with the landholders, [REDACTED] [REDACTED] Healthy Land and Water and key project stakeholders, as suitable for the establishment of vegetation.

The zones identified for planting as a part of this project are those areas which can be efficiently established and protected by fencing within the short timeframe available. Further areas are likely to be planted in subsequent years to achieve the property planning objectives of the landholders.

The landholders primary objective with this planting is the establishment of screening vegetation for privacy and the secondary objective of reducing wind speeds, with recharge reduction and biodiversity subsequent benefits.

There are three zones to be planted as identified in Figure 1. Zone 1 is 1.1 hectares running parallel to Berlins road, Zone 2 is 0.25 hectares parallel to Kraatzs Road and Zone 3 is 0.35 hectares within a gully running through the property. All areas are currently pasture, with productive and invasive species typical for the area present. Preclear Regional Ecosystem mapping identifies this area as 12.9-10.6 *Acacia harpophylla* open forest on sedimentary rocks.



## 2 Access and facilities

The landholder is to be notified via email or text the day prior to accessing the property and preferably with more than 24 hours' notice.

The site is to be accessed via a gate on Berlins Road adjacent to the only shed on the property. This gate will be secured with a second padlock to allow site access for delivery of the project. The padlock must be co-locked or 'daisy chained' with the primary padlock to allow access by both the owners and the project delivery team.

Water for spraying and watering activities must be brought to site or from an offsite source such as the Queensland Urban Utilities standpipe opposite 136-144 Queen Street, Marburg. On farm water supplies may be fully utilised with typical farm operations, could be difficult to access and the quality is unknown.

## 3 Site Preparation

The landholder will arrange for the site to be grazed to reduce the bulk of the pasture. Following this, if required, the site will be slashed to facilitate access and subsequent works. To allow for efficient maintenance by slashing post establishment, the site will be planted in rows 3.5 metres apart. To optimise visual screening, wind interception and to maximise the row length, the rows will run longitudinally, though this will be flexible to allow for efficient planting configuration.

The planting rows will be deep ripped, preferably with a narrow tyne implement, to depth of 300 mm or a practical maximum depth of 450 mm if a soil compaction layer is identified between 300 mm and 450 mm. Rows will be sprayed twice with herbicide to control grasses and broadleaf weeds three to six weeks apart using glyphosate (such as Weedmaster Duo) plus a wetter to improve effectiveness. Timing for the first spray rotation will be dependent on sufficient soil moisture and ambient temperature for the pasture and weed species to be actively growing and able to take up chemical.

Table 1.

Item	Quantity
Total site area	1.45 ha
Planting density	3.5 m rows, 2 m spacing
Zone 1 area	1.1 ha
Zone 2 area	0.25 ha
Zone 3 area	0.35 ha
Zone 1 plant numbers	1,125
Zone 2 plant numbers	120
Zone 3 plant numbers	380
Total plants	1,625



## 4 Planting

Timeframes of an April to May 2018 planting have been revised due to project inception delays. To avoid the cold, dry winter conditions, it is recommended that planting be undertaken during September and October. This will allow plants to establish and take advantage of growing conditions during summer. Exact timing during this timeframe will depend on soil moisture conditions and ambient temperatures.

Tubestock are to be delivered to site the day before planting and species should be mixed into batches for each zone, to ensure each species is relatively well distributed across the site.

Tubestock are to be watered after delivery and again while still in the trays immediately prior to planting. Tubestock should be planted at 2 metre spacings between plants, with speed spades likely to be the most effective technique due to soft soil and current high soil moisture conditions.

All plants will receive slow release fertiliser at planting and be watered as soon as practically possible after planting; all plants must be watered the day they are planted. Each plant will be watered with between three and five litres of water, depending on site conditions at planting.

## 5 Maintenance

It is recommended the site be maintained through weed control and watering. A minimum of six rotations for weed control are recommended to be undertaken within 12 months of planting. An indicative maintenance rotation is outlined in Table 2, with the first weed control rotation anticipated to be undertaken within four weeks of planting to ensure tubestock are not overrun by weeds during optimal growing conditions. Subsequent weed control should be guided by site conditions, with warmer temperatures and higher rainfall necessitating more frequent maintenance.

*Caesalpinia decapetala* is present adjacent to the site and maintenance rotations which complete scheduled works early could utilise any surplus time controlling this weed.

Five watering rotations are also recommended, with two anticipated to be required within four weeks of planting. Site conditions should be monitored for soil moisture and plant stress with watering undertaken only if deemed required.



Table 2.

Activity	Timing
Initial spraying	Early Sept
Secondary spraying	Early Oct
Planting completed	Early Oct
Watering rotation 1	Mid Oct
Maintenance rotation 1	Early Nov
Watering rotation 2	Early Nov
Maintenance rotation 3	Dec – Feb
Watering rotation 3 & 4	Dec – Feb
Maintenance rotation 4	Mar – Jun
Watering rotation 5	Mar – May
Maintenance rotation 5 & 6	Jul – Sept



# 6 Site Map

Figure 1.





## 7 Species List

Table 3 contains an indicative species list for the site based on pre-clear regional ecosystem mapping (R.E. 12.9-10.6) and remnant vegetation identified on the site. Note that only canopy and understorey species are being planted, a departure from typical ecological restoration plantings. This is due to the focus of the project being on groundwater use and recharge reduction, necessitating a selection of endemic, high water use plants.

Table 3. Species List

Species	Ratio	Quantity*
<i>Acacia fasciculifera</i>	12%	195
<i>Acacia harpophylla</i>	12%	195
<i>Acacia salicina</i>	2%	32
<i>Alchornea ilicifolia</i>	2%	32
<i>Alectryon connatus</i>	2%	32
<i>Alectryon diversifolius</i>	2%	32
<i>Alectryon tomentosus</i>	2%	32
<i>Aphananthe philippensis</i>	2%	32
<i>Araucaria bidwillii</i>	2%	32
<i>Araucaria cunninghamii</i>	2%	32
<i>Atalaya salicifolia</i>	2%	32
<i>Brachychiton discolor</i>	2%	32
<i>Breynia oblongifolia</i>	2%	32
<i>Bridelia leichhardtii</i>	2%	32
<i>Callitris baileyi</i>	2%	32
<i>Citrus australiensis</i>	2%	32
<i>Citrus australis</i>	2%	32
<i>Cupaniopsis parvifolia</i>	2%	32
<i>Ficus fraseri</i>	2%	32
<i>Ficus virens</i> or <i>F. obliqua</i>	2%	32
<i>Flindersia australis</i>	7%	120
<i>Flindersia collina</i>	7%	120
<i>Flindersia xanthoxyla</i>	2%	32
<i>Geijera salicifolia</i>	2%	32
<i>Grevillea robusta</i>	2%	32
<i>Harpullia hillii</i>	2%	32
<i>Harpullia pendula</i>	2%	32
<i>Hymenosporum flavum</i>	2%	32
<i>Jagera pseudorhus</i>	2%	32
<i>Mallotus philippensis</i>	2%	32
<i>Melaleuca bracteata</i>	2%	32
<i>Melia azedarach</i>	2%	35



<i>Rhodosphaera rhodanthema</i>	2%	32
<i>Sterculia quadrifida</i>	2%	32
<i>Streblus brunonianus</i>	2%	32
	100%	1,625

\* Final ratio and quantity of species will depend on further discussions with landholder and availability at time of ordering





## Revision History

Revision No.	Revision date	Details	Prepared by	Reviewed & Approved by
00	15/03/2018	Site Plan [REDACTED]	Mark Waud, Western Area Manager	Ross Bigwood, Rural Team Manager
01	13/04/2018	Site Plan [REDACTED]	Mark Waud, Western Area Manager	
02	15/06/2018	Site Plan [REDACTED]	Mark Waud, Western Area Manager	

## Distribution List

Copy No.	Date	Type	Issued to	Name
00	15/03/2018	Electronic	Ipswich City Council	Ben Walker
00	15/03/2018	Electronic	Healthy Land and Water	Administration
01	13/04/2018	Electronic	Ipswich City Council	Ben Walker
01	13/04/2018	Electronic	Healthy Land and Water	Administration
02	15/06/2018	Electronic	Ipswich City Council	Ben Walker
02	15/06/2018	Electronic	Healthy Land and Water	Administration

[info@hlw.org.au](mailto:info@hlw.org.au)

[www.hlw.org.au](http://www.hlw.org.au)



# Upper Black Snake Creek Planting

Site Plan: [REDACTED]

## 1 Background

Black Snake Creek has high water tables in many areas and associated dryland salinity. This project is part of a larger program looking to increase vegetation cover throughout the catchment, reduce groundwater recharge and thereby reduce waterway and soil salinity over the long term.

This site is an approximately 9.2ha area of private property at [REDACTED]. The property is currently a commercial hydroponic operation and has a small number of livestock.

The planting area in Figure 1 has been identified through discussions with the landholder, [REDACTED] Healthy Land and Water and key project stakeholders as suitable for the establishment of vegetation.

The site has been split into two zones for planning purposes, with Zone 1 consisting of 7.3 ha of more low-lying areas dominated by grass and Zone 2 being 1.9 ha of slightly more elevated land with higher levels of remnant vegetation. Preclear Regional Ecosystem mapping identifies this area as 12.3.3 *Eucalyptus tereticornis* woodland on Quaternary alluvium.

Zone 1 has small areas affected by salinity which will impact plant establishment and survival. Six hectares is estimated as suitable for planting after excluding the waterway channel, existing vegetation and sections of saline soil, though the actual area may vary.

Zone 2 has higher levels of remnant vegetation including regenerating and suckering native species and has an estimated area of 0.5 ha in which to establish plants.

## 2 Site Preparation

The site will be slashed to facilitate access and subsequent works. All native woody vegetation including small regenerating species will be avoided and, if necessary, marked with flagging tape prior to slashing.

To allow for easier site management through slashing, the site will be planted in rows, four metres apart. The rows are preferably at an angle of 45 degrees to the main flow of water through the site, though this will be flexible to allow for a practical planting configuration.

The planting rows will be sprayed twice with herbicide to control grasses three to six weeks apart using a frog friendly glyphosate (such as Weedmaster Duo) plus a wetter to improve effectiveness. Timing for the first spray rotation will be dependent on sufficient soil moisture and ambient temperature for the pasture and weed species to be actively growing and able to take up chemical.

Table 1.

Item	Quantity
Total site area	9.2 ha
Planting density	1,250/ha (4 m rows, 2 m spacing)
Zone 1 area	6.2 ha plantable
Zone 2 area	0.5 ha plantable
Zone 1 plant numbers	7,750
Zone 2 plant numbers	625
Total plants	8,375

### 3 Planting

Timeframes of an April to May 2018 planting have been revised due to project inception delays. To avoid the cold, dry winter conditions, it is recommend that planting be undertaken during September and October. This will allow plants to establish and take advantage of growing conditions during summer. Exact timing during this timeframe will depend on soil moisture conditions and ambient temperatures.

Tubestock are to be delivered to site the day before planting and species should be mixed into batches for each zone, to ensure each species is relatively well distributed across the site.

Tubestock are to be watered after delivery and again while still in the trays immediately prior to planting. Tubestock should be planted at 2 metre spacings between plants, with speed spades likely to be the most effective technique due to soil type and anticipated high soil moisture conditions, though the high clay content may preclude this option under certain circumstances.

All plants will receive slow release fertiliser at planting and be watered as soon as practically possible after planting, all plants must be watered the day they are planted. Each plant will be watered with between three and five litres of water, depending on site conditions at planting.



## 4 Maintenance

It is recommended the site be maintained through weed control and watering. A minimum of six rotations for weed control are recommended to be undertaken within 12 months of planting. An indicative maintenance rotation is outlined in Table 2, with the first weed control rotation anticipated to be undertaken within four weeks of planting to ensure tubestock are not overrun by weeds during optimal growing conditions. Subsequent weed control should be guided by site conditions, with warmer temperatures and higher rainfall necessitating more frequent maintenance.

Five watering rotations are also recommended, with two anticipated to be required within four weeks of planting. Site conditions should be monitored for soil moisture and plant stress with watering undertaken only if deemed required.

Table 2.

Activity	Timing
Initial spraying	Early Sept
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Watering rotation 1	Mid Oct
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Maintenance rotation 3	Dec – Feb
Watering rotation 3 & 4	Dec – Feb
Maintenance rotation 4	Mar – Jun
Watering rotation 5	Mar – May
Maintenance rotation 5 & 6	Jul – Sept





## 5 Site Map

Figure 1.



Level 19, 160 Ann St, Brisbane QLD 4000 | PO BOX 13204 George St, Brisbane QLD 4003

T. 07 3177 9100 | F. 07 3177 9190

hlw.org.au

## 6 Species List

Table 3 contains an indicative species list for the site based on pre-clear regional ecosystem mapping (R.E. 12.3.3) and remnant vegetation identified on the site. Note that only canopy and understorey species are being planted, a departure from typical ecological restoration plantings. This is due to the focus of the project being on groundwater use and recharge reduction, necessitating a selection of endemic, high water use plants.

Table 3. Species List

Species	Ratio	Quantity*
<i>Acacia fasciculifera</i>	1.30%	110
<i>Acacia harpophylla</i>	1.30%	110
<i>Acacia maidenii</i>	1.30%	105
<i>Acacia salicina</i>	1.30%	105
<i>Alectryon diversifolius</i>	1.30%	105
<i>Alphitonia excelsa</i>	1.30%	110
<i>Angophora subvelutina</i>	1.30%	110
<i>Araucaria cunninghamii</i>	1.30%	110
<i>Atalaya salicifolia</i>	1.30%	105
<i>Callitris baileyi</i>	1.30%	110
<i>Casuarina cunninghamiana</i>	3.30%	285
<i>Corymbia tessellaris</i>	15.00%	1,260
<i>Cryptocarya triplinervis</i>	1.30%	110
<i>Cupaniopsis parvifolia</i>	1.30%	105
<i>Eucalyptus moluccana</i>	15.00%	1,260
<i>Eucalyptus tereticornis</i>	30.00%	2,515
<i>Ficus coronata</i>	1.30%	110
<i>Ficus obliqua</i>	1.30%	110
<i>Flindersia australis</i>	1.30%	110
<i>Flindersia collina</i>	1.30%	110
<i>Harpullia pendula</i>	1.30%	105
<i>Hymenosporum flavum</i>	1.30%	105
<i>Jagera pseudorhus</i>	1.30%	105
<i>Mallotus philippensis</i>	1.30%	110
<i>Melaleuca bracteata</i>	3.40%	285
<i>Melaleuca viminalis</i>	3.40%	285
<i>Melia azedarach</i>	1.30%	110
<i>Rhodospaera rhodanthema</i>	1.30%	105
<i>Trema tomentosa</i>	1.30%	110
		8,375

\* Final ratio and quantity of species will depend on availability at time of ordering





## Revision History

Revision No.	Revision date	Details	Prepared by	Reviewed by	Approved by
00	12/03/2018	Site Plan [REDACTED]	Mark Waud, Western Area Manager	Bob Hampson, Chair, West Moreton Landcare	Ross Bigwood, Rural Team Manager
01	13/04/2018	Site Plan [REDACTED]	Mark Waud, Western Area Manager		
02	15/06/2018	Site Plan [REDACTED]	Mark Waud, Western Area Manager		

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4	13/04/2018	Electronic	Healthy Land and Water	Administration
5	15/06/2018	Electronic	Ipswich City Council	Ben Walker
6	15/06/2018	Electronic	Healthy Land and Water	Administration

Citation: Healthy Land and Water (2018), Site Plan [REDACTED] Ipswich City Council

[info@hlw.org.au](mailto:info@hlw.org.au)

[www.hlw.org.au](http://www.hlw.org.au)

Q-ICC-BSCIP-18 Site Plan [REDACTED]





# Products and Services Contract

Contract No.	Date
<b>Parties</b>	<b>Ipswich City Council</b> PO Box 191, Ipswich QLD 4305 Email: <span style="float: right;">("Council")</span>
	<b>Healthy Land and Water</b> ACN [115 662 989 Address: PO Box 13204, George St, Brisbane Qld 4003; Physical: Level 19/160 Ann St, Brisbane City QLD 4000 Email: <span style="float: right;">("Supplier")</span>
<b>Description</b>	Upper Black Snake Creek Planting

By signing below, the parties are entering into a contract that consists of this cover page and the attached terms and Schedules.

<b>Signed by [Insert Name and Position] on [Insert Date] as duly authorised Council delegate</b> [under section 238 of the <i>Local Government Regulation 2012</i> /in accordance with section 236 of the <i>Local Government Act 2009</i> ]
Signature of [Insert Name of Ipswich City Council]:
Signature of Witness:
Full name of Witness:

<b>Signed for and on behalf of the Supplier in accordance with s.127 of the Corporations Act 2001 (Cth):</b>
Signature of Director
Full name of Director
Signature of Director or Company Secretary
Full name of Director or Company Secretary

**OR**

<b>Signed for and on behalf of the Supplier by its authorised CEO:</b>
Signature of CEO
Full name of CEO

## Schedule 1 - Contract Details

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### 1. Product List

#### 1.1 Items and Prices

Products and Services in accordance with:

Appendix A - Site Plan for [REDACTED]

Appendix B – Site Plan [REDACTED]

Appendix C – Black Snake Creek Improvement Plan Delivery Phase 1

#### 1.2 Updating the list

Where the Supplier makes generally available modified or upgraded versions of a Product in the list, the Supplier will offer to include those modified or upgraded versions in the list.

---

### 2. Stock locations and minimum levels

Not Applicable

---

### 3. Supplier Personnel and Rates for Services

Position description	Rate (GST exclusive)
Preliminaries and Project Management	\$24,400
Supply and Plant Tube Stock	\$54,600
Maintenance	\$39,500
Progress reports	\$1,500
TOTAL	<b><u>\$120,000</u></b>

---

### 4. Minimum insurance

Public liability                      \$20 million per claim and for an unlimited number of claims

Product liability                      \$10 million per claim and for an unlimited number of claims

---

### 5. Additional Insurance

Policy Type	Amount of Cover

---

### 6. Contract Specific Terms

As those specified in 1.1 Items and Prices plus the following below:

KPI for survival: 90% survival rate after 6 months and an 80% survival rate after 12 months

Notwithstanding clauses 4.2 and 24.1(b) of the Operative Terms or any other term of this contract, HLW's liability for failure to achieve the KPI will be limited to replacement and replanting of the tube stock that do not survive to a similar standard to the original planting to achieve KPI.

Ipswich City Council may not give any direction or require any variation or other change under any term of this Contract where to do so may adversely impact, delay or disrupt the Supplier's ability to comply with the above KPI or any requirement of a landowner as regards the plantings or any other obligation of the Supplier under this Contract. The KPI applies instead of clause 10.3 (Warranty Period) of the Operative Terms of the contract.

If Ipswich City Council gives any direction or requires any change under the contract or requires any reporting under the contract in addition to that specified in Sch 2 Item 11 (that is not a formal variation to which the variation clause in the contract applies), it will pay HLW its reasonable costs of complying with the direction, change or reporting.

*The following are Authorised Subcontractors for the purpose of the contract:*

Site 1 – [REDACTED]

Site 2 – [REDACTED]

*West Morten Landcare Group*

*Other subcontractors that HLW notifies to Council.*

HLW will use its best endeavours to perform the contract notwithstanding any delay to or adverse impact on performance attributable to [REDACTED], [REDACTED] and West Moreton Landcare Group. However, HLW will not be responsible to Ipswich City Council for any such delay or adverse impact.

## Schedule 2 - Contract Order

# Contract Order

This Contract Order, once it is completed and signed by both parties, creates a binding obligation between Council and the Supplier for the supply of the Products and Services specified in this Contract Order under the Products and Services Contract between the parties.

1. Contract Order Details				
<b>1.1 Council Representative</b>	Insert Name			
<b>1.2 Council Executive</b>	Insert Name			
<b>1.3 Supplier Representative</b>	Name: Insert Name Position: Telephone: Email:			
<b>1.4 Supplier Executive</b>	Insert Name			
<b>1.5 Contract Order number</b>	[Insert only once Contract Order is finalised and ready to be signed]			
<b>1.6 Order Period</b>	From contract start to expiry			
2. Products				
Item	Description of Products	No. Units	Price per Unit (excl. GST)	Total Price
1.	Preliminaries	10,000	\$2.44 per stem	\$24,400
2.	Supply and Plant Tube stock	10,000	\$5.46 per stem	\$54,600
3.	Maintenance	10,000	\$3.95 per stem	\$39,500
4.	Progress Reports	10,000	\$0.15 per stem	\$1,500
5.	Total	10,000	<b><u>\$12 per stem</u></b>	<b><u>\$120,000</u></b>

3. Products Specifications	
<b>Property</b>	
Total site area	1.45 ha
Planting density	3.5 m rows, 2 m spacing
Zone 1 area	1.1 ha
Zone 2 area	0.25 ha
Zone 3 area	0.35 ha
Zone 1 plant numbers	1,125
Zone 2 plant numbers	120
Zone 3 plant numbers	380
Total plants	1,625
<b>Property</b>	
Total site area	9.2 ha
Planting density	1,250/ha (4 m rows, 2 m spacing)
Zone 1 area	6.2 ha plantable
Zone 2 area	0.5 ha plantable



Zone 1 plant numbers	7,750
Zone 2 plant numbers	625
Total plants	8,375

**4. Documentation**

**5. Product Delivery**

Products	Delivery Due Date	Delivery Location
Preliminaries		██████████
Supply and installation of plants		██████████
Maintenance of Plants		██████████
Preliminaries		██████████
Supply and installation of plants		██████████
Maintenance of Plants		██████████

**6. Scope of Services**

*Refer clause 1.1*

**7. Service Levels**

*Refer clause 1.1*

**8. Service Fees**

Item	Service	Fee (exclusive GST)
1.	Preliminaries	\$2.44 per stem
2.	Supply and Plant Tube stock	\$5.46 per stem
3.	Maintenance	\$3.95 per stem
4.	Progress Reports	\$0.15 per stem
5.	Total	<b><u>\$12 per stem</u></b>

**9. Approved Expenses**

<b>Approved expenses</b>	Not Applicable
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<b>10. Invoicing for Products and Services</b>	
<b>Timing of invoices</b>	
<b>(a) Invoices for Products</b>	Within 7 days of schedule 2 item 8 milestones, with first payment (preliminaries) occurring after the signing of the contract
<b>(b) Invoices for Services</b>	Within 7 days of schedule 2 item 8 milestones

<b>11. Progress and Performance Reports and Meetings</b>	
<b>Timing of Reports</b>	
<b>(a) Intervals</b>	Not Applicable
<b>OR (b) By milestones</b>	
Healthy Land and Water will report progress to the Council of Mayors (SEQ) Coordinator who will arrange for a progress report to be circulated to the CAPS Working Group and Resilient Rivers Taskforce. The report will reference milestones and deliverables as agreed in the Project Plan (Appendix C).	
<b>Content of Reports</b>	
The report will reference milestones and deliverables as agreed in the Project Plan (Appendix C).	
Suggested final report format:	
<ul style="list-style-type: none"> <li>a. Description of works undertaken</li> <li>b. Recommendations for future site management</li> <li>c. Spatial data file of site zones in KMZ or SHP format</li> <li>d. Before and after photo monitoring</li> </ul>	
<b>Timing of Meetings</b>	
As required by time to time or as requested by Council	

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## Operative terms

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### 1. Definitions

In this Contract:

**Additional Disclosee** means a third party to whom Confidential Information is disclosed pursuant to clause 16.2.

**Authorised Subcontractor** means a contractor of the Supplier approved under clause 29.16.

**Business Day** means a day that is not:

- (a) a Saturday or Sunday; or
- (b) a public holiday, special holiday or bank holiday in Ipswich, Queensland.

**Commencement Date** means the earlier of:

- (a) the date of this Contract; and
- (b) the first Delivery Due Date specified in the Contract Order.

**Confidential Information** means (subject to clause 18.1(e)) information of or provided by the Discloser to the Receiving Party that is by its nature confidential information, is designated by the Discloser as confidential, or the Receiving Party knows or ought to know is confidential but does not include information which is or becomes, without a breach of confidentiality, public knowledge.

**Contract** means this document and any other document incorporated by reference.

**Contract Material** means Material that is provided by the Supplier to the Council in the course of providing the Services whether new or existing.

**Contract Order** means an order in the form specified in Schedule 2, or if there is no order in the form specified in 0, a purchase order issued by the purchasing system of Council which references the Contract No of this Contract, which the parties agree is to be entered on the terms of this document as contemplated by clause 6.

**Council Representative** means the person specified in the Contract Order, or any other person notified by Council to the Supplier.

**Council Property** means any property or information of Council (including information created or obtained by the Supplier in the course of this Contract that relates to Council or its residents, customers, businesses or other interests) in the custody or control of the Supplier or its Personnel and includes a Product once title in that Product has passed to the Council in accordance with this Contract..

**Defect** means an aspect of a Product that is Defective.

**Defective**, in relation to a Product, means that it:

- (a) does not conform to the Specifications;
- (b) has an error, defect or malfunction;
- (c) is not fit for the purpose made known by Council or is not of acceptable quality as that term is defined in section 54 of the Australian Consumer Law;
- (d) does not conform with a sample or test product provided by the Supplier; or
- (e) otherwise does not comply with the requirements of this Contract.

**Delivery Due Date** means the date on which a Product is due for delivery as specified in the Contract Order.

**Delivery Location** means the location where a Product is to be delivered as specified in the Contract Order.

**Discloser** means the party providing or disclosing Confidential Information.

**Documentation** means comprehensive operating manuals, installation instructions (where applicable), reference material and other relevant publications and aids required to enable a Product to be used by Council Personnel, including any documentation specified in the Contract Order.

**Endemic Failure**, in relation to a type of Product, means that 5% or more of the Products delivered to date are Defective during their Warranty Period.



**Executive**, in relation to a party, means the person specified in the Contract Order, or any other person notified by the party to the other party.

**Fees** means the fees to be paid for the Services as set out in the Contract Order.

**Force Majeure** means an event beyond the reasonable control of the affected party, which occurs without the fault or negligence of the affected party but, in the case of the Supplier, does not include acts or omissions of Supplier Personnel or other customers of the Supplier.

**GST Act** means the *A New Tax System (Goods and Services Tax) Act 1999* (Cth).

**Information Privacy Act** means the *Information Privacy Act 2009 (Qld)*.

**Intellectual Property Rights** includes all present and future rights in relation to copyright, trade marks, designs, patents or other proprietary rights, or any rights to registration of such rights whether created before or after the date of this Contract, and whether existing in Australia or otherwise.

**Material** means tangible and intangible information, documents, reports, software (including source and object code), inventions, data and other materials in any media whatsoever.

**Moral Rights** means the moral rights granted under the *Copyright Act 1968* (Cth), and any similar rights existing under foreign laws.

**Order Period** means the period of a Contract Order defined in clause 6.2.

**Personal Information** has the meaning given in the Information Privacy Act.

**Personnel** of a person means that person's directors, officers, employees, agents, contractors and their respective Personnel but in respect of Council, includes the Council councillors and excludes the Supplier and its Personnel.

**Price** means the price for a Product specified in the Contract Order.

**Privacy Laws** means the Information Privacy Act, the *Privacy Act 1988* (Cth) and any other applicable law, statute, regulation, ordinance, code, standard or requirement of any government, governmental or semi-governmental body which relates to privacy or the use or protection of information about individuals.

**Product** means a product the Supplier is required to supply under this Contract.

**Product List** means the list of Products from which Council may order specified in Schedule 1.

**Receiving Party** means the party who receives Confidential Information from the Discloser.

**Regulatory Requirements** means:

- (a) any Commonwealth, State or Territory Act, regulation, order, by-law or other regulatory instrument of any kind;
- (b) any condition or requirement of an authority, permit or licence which the Supplier must hold by law or in connection with fulfilling its obligations under the Contract;
- (c) any code or other instrument made, or agreement required to be entered into (including network use of system, co-ordination or access agreement, community service obligation, concession or rebate agreements), under any Act, regulation, order or instrument referred to in paragraph (a); and
- (d) any condition or requirement of an authority, permit or licence held by Council,

with which Council or the Supplier must comply, together with any voluntary code or other instrument which Council from time to time advises the Supplier is a regulatory requirement with which the Supplier must comply.

**Related Body Corporate** has the meaning given in section 50 of the *Corporations Act 2001* (Cth).

**Service Levels** means the service levels for the Services set out in the Contract Order.

**Services** means the services ancillary to the supply of a Product as specified in a Contract Order.

**Specifications** means specifications for a Product or Service set out in:

- (a) clauses of this Contract;
- (b) the schedules to this Contract;
- (c) a Contract Order;

- (d) the Documentation; and
  - (e) the current applicable specifications published generally by the manufacturer,
- and to the extent of any inconsistency between these specifications, the specifications listed earlier in this definition prevail over those listed later.

**Supplier Representative** means the person specified in the Contract Order, or any replacement person notified by the Supplier to Council.

**Term** means the period of the Contract defined in clause 5.

**Warranty Period** means, for each Product, the period commencing on delivery of the Product to Council and continuing for the period specified in Schedule 1 or if no period is specified, a period of 12 months.

**WHS Legislation** means the *Work Health and Safety Act 2011 (Qld)* and the *Work Health and Safety Regulation 2011 (Qld)* any relevant codes of practice, guidelines and advisory standards.

---

## **2. Supply of Products**

### **2.1 Supply of Products**

The Supplier will supply and Council will acquire Product on the terms of this Contract.

### **2.2 Delivery**

The Supplier will deliver a Product to Council:

- (a) to the Delivery Location;
- (b) by the Delivery Due Date;
- (c) in accordance with the Contract Order; and
- (d) during Council's normal business hours (unless otherwise agreed).

### **2.3 Documentation**

- (a) Upon delivery of a Product, the Supplier will supply Council with the Documentation. Council may make as many copies of the Documentation as it requires.
- (b) The Supplier will supply updated Documentation to Council if:
  - (i) the correction of a Defect requires a change to the Documentation;
  - (ii) the existing Documentation is inaccurate; or
  - (iii) for any other reason, changes to the Documentation are made by the Supplier.

### **2.4 Failure to deliver Product by the Delivery Due Date**

If the Supplier fails to deliver a Product by the Delivery Due Date, Council may, without prejudice to Council's other rights and remedies, at its option either:

- (a) cancel the Order by notifying the Supplier (and clause 6.3 does not apply in this situation); or
- (b) notify the Supplier of a new Delivery Due Date for the Order.

### **2.5 Product locations and levels**

If specified in Schedule 1, during the Order Period, the Supplier will maintain the minimum levels of Product on the Product List at each location specified in Schedule 1.

---

## **3. Services**

### **3.1 Supply of Services**

- (a) If the Contract Order indicates that Services are to be performed under the Contract, then the Supplier will supply and Council will acquire the Services on the terms of this Contract.
- (b) Except as expressly provided in this Contract, the Supplier is responsible for providing all the Supplier's Personnel and any other facilities, systems, technical knowledge, expertise and all other resources necessary to provide the Services.

### **3.2 Service requirements**

The Supplier will:

- (a) perform the Services:
  - (i) in accordance with the requirements of the relevant Contract Order;
  - (ii) with due care and skill and in a professional, punctual and diligent manner; and
  - (iii) in the manner Council reasonably requires;
- (b) inform itself of Council's requirements; and
- (c) comply with directions of the Council Representative when providing the Services at the location specified in the Contract Order.

### **3.3 Supplier Personnel**

- (a) The Supplier will provide the Services using:
  - (i) the Supplier Personnel (if any); and
  - (ii) Authorised Subcontractors (if any).
- (b) The Supplier warrants that the Supplier Personnel providing the Services possess and will use the specific skills, qualifications and experience required for the Services.
- (c) Council may, in its reasonable discretion, require the Supplier to remove Personnel from providing the Services. The Supplier will promptly at no additional cost to Council arrange for the removal of those Personnel and their replacement with Personnel reasonably acceptable to Council.

### **3.4 Reports on performance**

- (a) The Supplier must submit reports to Council:
  - (i) detailing the Supplier's progress and performance against the Service Levels in the form directed by Council; and
  - (ii) at the intervals or milestones specified in the Contract Order; and
- (b) The Supplier Representative must meet with the Council Representative to review the performance of the Contract:
  - (i) at Council's request, with the provision of reasonable notice; and
  - (ii) at the intervals specified in the Contract Order.

---

## **4. Service Levels**

### **4.1 Supplier to ensure Service Levels are met**

The Supplier will ensure the Services meet the Service Levels.

### **4.2 Rebate**

- (a) Where the Services are not performed in accordance with the Service Levels during the applicable period of measurement under the Contract Order, Council may issue a notice advising that it wishes to claim the rebate amount calculated in accordance with the Contract Order. The Supplier will deduct the rebate amount in the next invoice, and if there are no further invoices, the Supplier will refund the amount to the Council.
- (b) Exercise of rights pursuant to clause 4.2(a) will be without prejudice to other rights of action or remedy which have accrued or may accrue due to failure of the Services.

---

## **5. Term**

This Contract commences on the Commencement Date and continues until the Contract is terminated under clause 24.

---

## **6. Management of Contract Orders**

### **6.1 Ordering procedure**

- (a) If Council wishes to acquire Product or Services, Council may send to the Supplier a Contract Order.

- (b) Council and the Supplier may then negotiate the terms of the Contract Order. The Supplier warrants it will not seek to negotiate Prices for a Product or Fees for Services that exceed those set out in Schedule 1 or amendments to the terms of this Contract.
- (c) Upon execution of the Contract Order by both parties, the terms of the Contract Order are included as part of this Contract. The Contract Order may be executed in counterparts.
- (d) If the Contract Order is not executed by the parties but the Supplier provides Product after receiving a Contract Order, the terms of the Contract Order as it was issued by Council are included as part of this Contract from the date that is the earlier of the date that the Supplier communicates its acceptance in writing of the Contract Order, or the date the Supplier provides the Product.
- (e) The parties may enter into more than 1 Contract Order, and the details in each Contract Order only apply to the Product and Services to be provided under that Contract Order.
- (f) For each Contract Order, the Council is not required to make any payments unless and until:
  - (i) the Contract Order is executed by both parties; or
  - (ii) the Supplier provides Product as contemplated by clause 6.1(d) and has confirmed in writing to the Council its acceptance of the Contract Order in the form issued by the Council.

## **6.2 Order Period for Contract Orders**

The Supplier will provide the Product and Services specified in a Contract Order commencing on the Delivery Due Date and continuing:

- (a) where an Order Period is specified in the Contract Order, to the end of that Order Period; or
- (b) where no Order Period is specified in the Contract Order, until the Products and Services have been provided and other requirements of the Contract Order have been met.

## **6.3 Cancellation of Contract Orders**

- (a) Council may notify the Supplier that it wishes to cancel a Contract Order at any time.
- (b) Within 3 days after receiving a notice under clause 6.3(a), the Supplier will notify Council of the costs (if any) that have been or will be incurred by the Supplier as a direct result of the cancellation of the Contract Order and which the Supplier cannot recoup from a third party or avoid.
- (c) Upon receiving the Supplier's notice under clause 6.3(b), Council may confirm that the Contract Order is to be cancelled by notifying the Supplier, in which case Council will pay the Supplier the costs set out in the Supplier's notice, subject to the Supplier providing Council with an invoice and satisfactory documentary evidence of such costs being incurred. A Contract Order will not be cancelled unless Council gives notice confirming the cancellation under this clause 6.3(c).

## **6.4 No guaranteed volume or value of Products and Services**

- (a) Any forecasts, estimates or volumes discussed between the parties, advised by Council or otherwise arising before or during the Term are indicative only, are not binding on Council and are not a guarantee in any form or manner as to the volume or value of Product or Services that will be required under this Contract.
- (b) The parties acknowledge that unless and until it is specified in an executed Contract Order, nothing in this Contract requires Council to acquire from the Supplier any particular Product or Service during the Term.

---

## **7. Payment**

### **7.1 Prices**

The Price for a Product is set out in the Contract Order.

### **7.2 Fees**

The Fees for the Services are set out in the Contract Order.

### **7.3 No other amounts payable**

- (a) Except as expressly provided in this Contract, the Prices and Fees specified in this clause are the only amounts payable by Council for the Products and Services, and include taxes, duties, charges and expenses.

- (b) The Supplier is solely responsible for managing its resources in supplying the Products and Services in accordance with this Contract. In particular (but without limitation) there will be no separate or additional charges for:
  - (i) measuring or reporting performance of the Services against the Service Levels;
  - (ii) correcting any failures to meet any Service Levels;
  - (iii) re-performing non-conforming Services;
  - (iv) creating or updating Documentation;
  - (v) repairing or replacing Defective Products;
  - (vi) collecting Products that have been rejected under clause 9.3(a); and
  - (vii) compliance with directions given in accordance with this Contract.

#### **7.4 Expenses**

Council will only reimburse expenses incurred by the Supplier which have the prior written approval of Council and, where applicable, are in accordance with any rules or rates set out in the Contract Order.

#### **7.5 Invoices**

The Supplier may invoice Council at the times set out in the Contract Order.

#### **7.6 Payment**

- (a) Subject to clause 7.6(b), Council will pay the Supplier the amount due under an invoice within 30 days after the date of receipt of a correctly rendered invoice. An invoice is correctly rendered if:
  - (i) the amount claimed in the invoice is due for payment in accordance with the Contract Order;
  - (ii) the Supplier has complied with its obligations as at the date of the invoice;
  - (iii) the invoice identifies the Products and Services for which payment is being invoiced;
  - (iv) the invoice separately identifies and itemises any approved expenses;
  - (v) the invoice specifies a correct Contract Order number allocated by Council and notified by Council to the Supplier; and
  - (vi) the invoice is a tax invoice in the proper form for the purposes of the GST Act.
- (b) Council is not liable to pay fees or expenses in respect of the supply of any Product or Service which Council reasonably determines as not being performed in accordance with this Contract.
- (c) If there is a dispute regarding Price, Fees or expenses, Council does not have to pay the relevant portion of the invoice until the query or dispute is resolved.
- (d) If an invoice is found to have been incorrectly rendered after payment by Council, the underpayment or overpayment will be recovered by or from the Supplier.

#### **7.7 Services on a time basis**

- (a) If Services are to be charged on a time basis, the Supplier:
  - (i) will perform the Services in a reasonable number of person hours; and
  - (ii) will provide to Council with each invoice, details of the work performed by its Personnel (including their position, the number of hours of work performed and the Service to which the work relates), as well as the total Fees accrued to date.

#### **7.8 GST**

- (a) Terms used in this clause 7.8 have the meaning given to them in the GST Act.
- (b) If a party is a member of a GST group, references to GST which the party must pay and to input tax credits to which the party is entitled, include GST which the representative member of the GST group must pay and input tax credits to which the representative member of the group is entitled.
- (c) All amounts stated in and payable under this Contract include GST unless otherwise indicated. Where GST is payable by an entity in relation to a supply that it makes under or in connection with this Contract, and the consideration for that supply excludes GST, the party providing the consideration will pay an additional amount equal to the GST when any part of the consideration is first payable.

- (d) The amount of GST will be calculated at the prevailing GST rate. If the GST rate is varied, the consideration payable for any supply under this Contract will be varied to reflect the change of rate and any reduction in any other tax, duty or statutory charge connected with the rate change.
- (e) Where GST applies to any supply made under this Contract, the supplier will deliver to the recipient a valid tax invoice or adjustment note at or before the time payment for the supply is required.
- (f) If this Contract requires a party to reimburse or indemnify the other party for any expense, loss or outgoings ("**Reimbursable Expense**") the amount required to be paid by the first party will be the sum of:
  - (i) the amount of the Reimbursable Expense net of input tax credits (if any) to which the other party is entitled in respect of the Reimbursable Expense; and
  - (ii) if the other party's recovery of the Reimbursable Expense from the first party is a taxable supply, any GST payable in respect of that supply.

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## **8. Title and risk**

- (a) Title in a Product passes to Council upon delivery.
- (b) Risk of loss or damage to a Product passes to Council upon the delivery of the Product.

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## **9. Quality testing**

### **9.1 Inspection and testing**

Council may inspect and test a Product to confirm that it is not Defective within a reasonable time of the Product being delivered to Council.

### **9.2 Defective Products**

If in the opinion of Council, a Product is Defective, Council may, without prejudice to Council's other rights and remedies, at its option:

- (a) accept the Product subject to a reasonable reduction in the Price;
- (b) reject the Product; or
- (c) accept the Product on terms acceptable to Council.

### **9.3 Rejected Products**

If a Product is rejected by Council under clause 9.2(b), the Supplier will, within 7 days after receiving notification of the rejection, without prejudice to Council's other rights and remedies:

- (a) collect the Product from Council; and
- (b) refund to Council all amounts paid by Council in respect of the Product including Fees for Services related to that Product.

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## **10. Warranty and repair**

### **10.1 Warranties**

The Supplier warrants that:

- (a) during the Warranty Period, a Product will not be Defective;
- (b) the Products are new and have not been previously used;
- (c) it is entitled to supply the Products and that at the time title in a Product passes to Council, the Product is free from all liens, charges and encumbrances of any kind;
- (d) the Products and Documentation, and the acts of Council or a person authorised by Council in relation to the Products and Documentation, will not infringe the Intellectual Property Rights or Moral Rights of any person;
- (e) Documentation will be of a reasonable standard, up to date and in English; and
- (f) the Products comply with applicable laws.



## **10.2 Warranty repairs**

Without limiting clause 9, where a Product is Defective during the Warranty Period, Council may advise the Supplier and the Supplier will arrange for the repair or replacement (as necessary) of the Product at no cost to Council.

## **10.3 Continued availability**

For a period of 3 years commencing on expiry of the Warranty Period, the Supplier will:

- (a) continue to supply a Product (including spare parts, replacements, upgrades and attachments);
- (b) supply appropriate substitutes for a Product if for any reason it is no longer available; and
- (c) repair a Defective Product for a price agreed between the parties or, failing agreement, a reasonable price. For clarity, Council is only required to pay a price if it specifically requests repair services under this clause 10.3(c).

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## **11. Endemic Failures**

### **11.1 Notification of Endemic Failure**

Where there is an Endemic Failure of a type of Product, Council may issue a notice that it is returning some or all of that type of Product ordered during the Ordering Period. The notice will set out the Products to be collected, their location, whether Council requires replacement or refund and the date for collection.

### **11.2 Consequences of Endemic Failure**

- (a) Where Council issues a notice under clause 11.1 the Supplier will collect the Products within 7 days after the specified date for collection and at the option of Council will also:
  - (i) replace the returned Products at no cost to Council; or
  - (ii) refund to Council all amounts paid by Council in respect of the returned Products.
- (b) If Council issues a notice under clause 11.1, Council may cancel any outstanding orders for that type of Product by notifying the Supplier (and clause 6.3 does not apply in this situation).

---

## **12. Variations**

### **12.1 Council request to vary**

Council may by notice ("**Variation Notice**") request the Supplier to vary the Contract Order.

### **12.2 Quotation on variation**

Within 7 days after receiving a Variation Notice, the Supplier will provide to Council a reasonable quotation ("**Variation Quotation**") which details:

- (a) the variation as requested by the Variation Notice;
- (b) a reasonable variation (if any) to the Price or Fees including evidence justifying the variation; and
- (c) all relevant specifications, time frames and operational requirements relating to the varied Contract Order additional to but not inconsistent with those in the Variation Notice.

### **12.3 Supplier request to vary**

The Supplier may request a variation to a Contract Order by providing the Council with a Variation Quotation.

### **12.4 Acceptance or rejection of variation**

Council may by notice to the Supplier:

- (a) accept the Variation Quotation within 14 days after receiving it;
- (b) reject the Variation Quotation at any time if that Variation Quotation has not already been accepted; or
- (c) require the Supplier to give effect to the Variation Notice in a reasonable time and for:
  - (i) a variation in Price or Fees based on the Price or Fees specified in this Contract;
  - (ii) if paragraph (i) is not applicable, a variation in Price or Fees based on the rates usually charged by the Supplier in the ordinary course of its business; or

- (iii) if neither paragraph (i) nor paragraph (ii) is applicable, a reasonable variation in Price or Fees having regard to the reasonable cost to the Supplier of effecting the variation.

## **12.5 When variation takes effect**

A variation takes effect under this clause only if and when Council accepts the Variation Quotation under clause 12.4(a) or requires the Supplier to effect the variation under clause 12.4(c).

## **12.6 Extension**

Council may by written notice to the Supplier, extend by a reasonable time the date on which the Products or Services are to be delivered or supplied.

## **12.7 Other variations**

Except as set out in this clause, this Contract may only be varied by a legally binding agreement signed by or on behalf of each party.

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## **13. Relationship management**

### **13.1 Council Representative**

- (a) Council appoints the Council Representative to oversee the work of the Supplier. In carrying out this Contract, the Supplier will comply with the reasonable directions of the Council Representative.

### **13.2 Supplier Representative**

- (a) The Supplier appoints the Supplier Representative to represent the Supplier in connection with all matters relating to this Contract.
- (b) A direction given by Council to the Supplier Representative will be regarded as having been given to the Supplier.
- (c) Matters within the knowledge of the Supplier Representative will be regarded as being within the knowledge of the Supplier.
- (d) If the Council Representative makes a reasonable objection to the appointment of a person as the Supplier Representative, the Supplier must terminate the appointment and appoint another person, subject again to the reasonable objection of the Council Representative.

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## **14. Intellectual property**

### **14.1 Contract Material**

The Supplier grants to Council a non-exclusive and non-transferable licence to exercise the Intellectual Property Rights in the Contract Material (and to sublicense these rights).

### **14.2 Warranty Contract Material**

The Supplier warrants that the Contract Material and the acts of Council or a person authorised by Council in relation to the Contract Material, other than those prohibited by this Contract, do not infringe the Intellectual Property Rights or Moral Rights of any person. The Supplier warrants that it has the right to grant the rights under this clause.

### **14.3 Warranty Products**

The Supplier warrants that the Products and the use of a Product by Council or a person authorised by Council, other than a use prohibited by this Contract, will not infringe the Intellectual Property Rights or Moral Rights of any person.

---

## **15. Compliance**

### **15.1 Compliance with applicable laws and policies**

The Supplier will, in providing the Products and Services, comply with and ensure its Personnel comply with:

- (a) applicable Regulatory Requirements; and
- (b) Council's policies (including privacy, harassment, discrimination, environmental, use of IT resources, workplace health and safety and security policies and any codes of conduct), when on Council's premises, lands for which Council has access rights, or when using Council Property.

## **15.2 Induction**

- (a) If requested by Council, the Personnel of the Supplier will:
- (b) attend and complete any induction session required by Council; and
- (c) comply with all requirements communicated by Council in that induction session.

---

## **16. Confidentiality**

### **16.1 Confidential Information**

Subject to clause 16.2 and 16.3, each party must not, during or after this Contract, disclose Confidential Information directly or indirectly to any third party.

### **16.2 Exceptions**

A party may disclose Confidential Information:

- (a) to comply with the law, or any Regulatory Requirements;
- (b) to any of its Personnel, but only to the extent that it is necessary to disclose the information for use by the party in relation to this Contract;
- (c) to obtain the consent of a third party to a term of, or to an act under, this Contract; or
- (d) to enforce its rights or to defend a claim or action under this Contract.

### **16.3 Disclosure by Council**

In addition to the disclosures permitted by clause 16.2, Council may disclose Confidential Information:

- (a) to any person for the purpose of the operations of the Council;
- (b) to any Minister and their personal and departmental advisers; and
- (c) where disclosure is required to be made in accordance with established governmental policies, procedures or for public accountability purposes.

### **16.4 Breach of confidentiality**

If the Receiving Party becomes aware of a suspected or actual breach of this clause by the Receiving Party or an Additional Disclosee, the Receiving Party will immediately notify the Discloser and take reasonable steps required to prevent or stop the suspected or actual breach.

### **16.5 Use of Confidential Information**

The Supplier will only use Council's Confidential Information for the purposes of this Contract.

### **16.6 Return of Confidential Information**

The Supplier will return or destroy (at Council's direction) Materials containing Confidential Information when they are no longer required by the Supplier, or otherwise when directed by Council.

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## **17. Privacy**

The Supplier acknowledges that it is a contracted service provider within the meaning of section 34 of the Information Privacy Act, and agrees in respect of all Personal Information collected, used, disclosed or otherwise handled by or on behalf of the Supplier or under or in connection with this Contract to:

- (a) comply, and ensure that all Personnel also comply, with:
  - (i) the Information Privacy Act, as if the Supplier or relevant Personnel was the Council; and
  - (ii) all other Privacy Laws,
  - (iii) in respect of that Personal Information;
- (b) ensure Personal Information is protected against misuse, interference and loss and against unauthorised access, use, modification or disclosure;
- (c) not use or otherwise deal with Personal Information other than for the purposes of this Contract, unless required by law;
- (d) not disclose Personal Information without the written consent of Council, unless required by law;

- (e) ensure that only authorised Personnel have access to Personal Information and that Personnel will only be authorised for access on a need to know basis;
- (f) immediately notify Council if:
  - (i) it becomes aware or suspects there has been an unauthorised use, copying or disclosure of, or other security breach in relation to Personal Information, or
  - (ii) it becomes aware that a disclosure of Personal Information is, or may be, required by law;
- (g) not do anything with Personal Information that will cause the Council to breach any Privacy Law;
- (h) comply with any reasonable request, direction or inquiry made by the Council in relation to Personal Information or the Privacy Laws; and
- (i) at Council's request, arrange for its Personnel to execute a document in a form reasonably required by Council to protect Personal Information.

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## **18. Council Property**

### **18.1 Property of Council**

Council Property remains the property of Council and the Supplier will treat Council Property accordingly, including:

- (a) ensuring that Council Property, to the extent practicable, is marked, or otherwise signified as the property of Council;
- (b) observing security measures reasonably required by Council in relation to the Council Property;
- (c) ensuring that third parties do not gain on-line or physical access to the Council Property without Council's consent;
- (d) ensuring that Council Property remains on premises controlled by Council (except to the extent that this agreement expressly authorises the Supplier to keep Council Property on other premises); and
- (e) Council Property is the Confidential Information of Council and not of the Supplier.

### **18.2 Use of Council Property**

The Supplier will not use or modify Council Property except in the proper performance of this Contract or unless agreed in writing by both parties. Council may use or disclose Council Property for any purpose.

### **18.3 Preservation of Council Property**

The Supplier will take reasonable care (including adhering to security procedures) of Council Property and with the preservation, installation or handling of it. The Supplier indemnifies Council for loss or destruction of, or damage to, Council Property that is caused by an act or omission of the Supplier or its Personnel and will promptly inform Council of damage to Council Property.

### **18.4 Return of Council Property**

- (a) The Supplier will hand over to Council any Council Property, within 7 days after a request by Council. For electronic materials, the Supplier will provide them to Council in an editable form and on media, both as reasonably required by Council.
- (b) If the Supplier fails to deliver up all things in accordance with clause 18.4(a), Council may enter the Supplier's premises during normal business hours on not less than 12 hours' prior notice in order to collect such things and the Supplier will at all reasonable times permit or assist a person authorised by Council to do so.

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## **19. Indemnity**

### **19.1 Indemnity by the Supplier**

The Supplier indemnifies and will defend Council and its employees, agents and contractors ("**Those Indemnified**") against all claims, liabilities, losses, damages, costs and expenses (including legal fees, costs and disbursements) made or awarded against, or suffered or incurred by, Those Indemnified arising from or incurred in connection with:

- (a) a breach of clauses 15, 16, 17 or 18 of this Contract by the Supplier; or

- (b) an infringement or alleged infringement of a person's Intellectual Property Rights or Moral Rights by the Contract Material or a Product arising from an act (which is not prohibited by this Contract) of Council, or a person authorised by Council, in relation to the Product or Contract Material,

except to the extent that the loss or damage is due to any negligent or unlawful act or omission or conduct by the Council or its Personnel.

## **19.2 Compliance with Council's directions**

In conducting a claim, suit or action in respect of which the Supplier indemnifies Those Indemnified, the Supplier will, at the Supplier's expense, comply with Council's reasonable directions.

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## **20. Insurance**

### **20.1 Insurance policies**

The Supplier will maintain during the Term:

- (a) public liability insurance of at least the amount specified in Schedule 1;
- (b) products liability insurance of at least the amount specified in Schedule 1;
- (c) workers' compensation insurance as required by law; and
- (d) any additional or increased insurance specified in the Contract Order,

with a reputable insurer which is reasonably satisfactory to Council. The Supplier will maintain any claims-made insurance policy for 3 years after the Term.

### **20.2 Evidence of insurance**

The Supplier will provide Council with a copy of the insurance policies (if requested) and certificates of currency within 7 days after:

- (a) the date of this Contract;
- (b) a renewal or amendment of a policy; or
- (c) a request by Council.

### **20.3 Notification**

Council may request the Supplier to notify an insurer of an event arising in connection with this Contract. If the Supplier fails to provide Council with evidence of that notification within 14 days after a request by the Council, Council may notify the insurer on the Supplier's behalf.

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## **21. Performance of failed obligations**

### **21.1 Council may perform the Supplier's obligations**

Where the Supplier fails to perform an obligation of the Supplier under this Contract and the failure is not remedied within 21 days after Council notifying the Supplier of the failure, Council or its nominee may perform the obligation.

### **21.2 Performing obligations on the Supplier's behalf**

The Supplier authorises Council to act on the Supplier's behalf in performing the Supplier's obligations under clause 21.1 where Council notifies the Supplier that it does so in that capacity.

### **21.3 Supplier responsible for costs**

Where Council or its nominee performs an obligation of the Supplier under clause 21.1, the costs of that performance may be set off by Council in accordance with clause 29.14.

### **21.4 Supplier responsible for obligation**

The Supplier is not relieved from its failure to meet an obligation by Council performing that obligation in accordance with clause 21.1.

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## **22. Audit**

- (a) The Supplier will, upon 7 days' notice during normal business hours or as otherwise agreed, permit and provide persons ("**Auditors**") nominated by Council supervised access to the Supplier's premises, books, records, documents, computer systems, equipment and other property to verify compliance by the Supplier with its obligations under this Contract and its likely capacity to continue to comply with

its obligations in the future. Council is not entitled to use this right of access for purposes that are not related to this Contract.

- (b) The Auditors may make copies of books, records, documents and other materials, and the Supplier will provide the Auditors with the necessary facilities to enable them to do so.

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## **23. Dispute resolution**

### **23.1 Dispute resolution process**

- (a) The Supplier and Council will adhere to the following procedure in respect of any dispute arising out of or in connection with this Contract prior to either of them commencing litigation or other external dispute resolution procedure.
- (b) The Council Representative or Supplier Representative may notify the other in writing of the occurrence of a dispute and they will meet within 7 days after receipt of the notice at a mutually convenient time and place or by telephone conference.
- (c) If after 7 days after a notice is issued under (b), the Council Representative and Supplier Representative cannot resolve the dispute to their satisfaction as agreed in writing, then either of them may give notice of the inability to resolve such dispute to their respective nominated Executives. Within 14 days after receipt of the notice, the Executives will meet (at a mutually convenient place or by telephone conference) and attempt to resolve the dispute.
- (d) If after 30 days after a notice is issued under (c) the Executives have not resolved the dispute to their satisfaction as agreed in writing then either party may proceed in accordance with its remedies at law.
- (e) The parties may agree to escalate the dispute to any level at any time, or to attempt to resolve the dispute through mediation.

### **23.2 Continuity during dispute**

Notwithstanding the existence of a dispute, each party will continue to perform its obligations under this Contract.

### **23.3 Urgent interlocutory relief**

Nothing in this clause prevents either party from commencing court proceedings relating to any dispute arising from this Contract at any time where that party seeks urgent interlocutory relief.

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## **24. Termination**

### **24.1 Termination by Council for cause**

Council may terminate any Contract Order or this Contract, immediately by notifying the Supplier if:

- (a) the Supplier is in breach of any term of this Contract and has failed to remedy the breach within 21 days after notice by Council;
- (b) the Supplier fails to achieve the same Service Level during 3 consecutive periods of the applicable period of measurement under the Contract Order;
- (c) the Supplier has in the sole opinion of Council, committed an unacceptable breach of a requirement under clause 15.1(b);
- (d) the Supplier becomes subject to any form of insolvency or bankruptcy administration;
- (e) the Supplier (where the Supplier is an individual) or a member of the Supplier's board of directors (where the Supplier is a company), the Supplier Representative or one of the Supplier's Personnel involved in supplying the Services, is convicted of, or is being investigated or prosecuted for, any offence involving fraud or dishonesty, or any other offence which is punishable by imprisonment; or
- (f) this Contract is or becomes contrary to any law.

### **24.2 Termination by the Supplier for cause**

The Supplier may terminate this Contract immediately by notifying Council if Council is in breach of any terms of this Contract and has failed to remedy the breach within 30 days after notice by the Supplier.



### **24.3 Effect of termination or expiry**

- (a) Termination or expiry of this Contract will not affect the operation of clauses 7.7, 13, 16, 17, 18.4, 19, 20, 22, 23, 25, and 29 or any rights or remedies already accrued to either party under, or in respect of any breach of, this Contract.
- (b) In addition, unless specifically stated, termination or expiry of this Contract does not affect any other contract between the parties.

---

## **25. Transition Out Services**

### **25.1 Services provided by the Supplier**

On request by Council, the Supplier will:

- (a) provide Council or its nominee with cooperation, assistance, advice, explanations and information reasonably requested by Council;
- (b) do acts and things and execute deeds, documents and instruments as are necessary or desirable; and
- (c) comply with Council's reasonable directions,

to ensure the completion and continuity of the Services (**Transition Out Services**).

### **25.2 Examples of Transition Out Services**

Without limiting the generality of clause 25.1, the Transition Out Services may include:

- (a) developing or modifying, together with Council, a plan for the continuity and orderly transition of responsibility for the Services to Council or another person;
- (b) continuing to perform, for a reasonable period (as determined by Council) any or all of the Services and charge prices (if any) at the rates set out in the applicable Contract Order;
- (c) providing all cooperation, assistance, advice, access to equipment and systems, explanations, information, documentation, training, details of data formats and fields (including database schema), reasonably necessary or desirable in order to ensure the efficient continuity and transition;
- (d) transferring data, documentation and records to Council or its nominee; and
- (e) using its best endeavours to cause any subcontractor of the Supplier or other third parties which are utilised by the Supplier in the provision of the Services, to enter into agreements with Council or its nominee on terms and conditions no less favourable than those offered to the Supplier.

### **25.3 Time**

Unless otherwise agreed between the parties the time required to carry out the Transition Out Services will be a reasonable time having regard to the amount of work required by the Supplier.

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## **26. Work health and safety**

### **26.1 General obligations**

The Supplier must ensure:

- (a) that it and its Personnel, comply with their work health and safety duties and obligations including compliance with the WHS Legislation;
- (b) that Personnel performing the Services are appropriately trained, inducted, licenced, experienced, competent and qualified to perform the Services;
- (c) the health and safety of Council Personnel are not put at risk or affected by the Supplier or its Personnel in performance of the Services;
- (d) that it and its Personnel do not do anything or fail to do anything that causes Council to be in breach of the WHS Legislation or obstructs, hinders or interferes with any action Council believes is reasonably required to comply with the WHS Legislation;

### **26.2 Incident reporting**

- (a) The Supplier must report to Council:
  - (i) any breach of the WHS Legislation, as soon as practicable; and

- (ii) any notifiable incident as defined by the WHS Legislation, within the timeframe required by the WHS Legislation (as if Council was the regulator for the purposes of the WHS Legislation).
- (b) If any notifiable incident occurs in relation to the Services, the Supplier is responsible for notifying the regulator in accordance with the WHS Legislation.
- (c) Council reserves its rights to:
  - (i) require the Supplier to undertake an investigation in relation to any notifiable incident;
  - (ii) conduct its own investigation in relation to any notifiable incident, in which case the Supplier must cooperate with Council and provide any assistance Council requires.
- (d) On request from Council, the Supplier must provide to Council as soon as practicable, copies of any investigation report or other information relevant to any incident, including any notices or correspondence issued by the regulator.

### **26.3 Mutual obligations**

- (a) To the extent the Supplier and Council have a duty in relation to the same matter under WHS Legislation, so far as reasonably practicable, the parties must consult, cooperate and coordinate activities with each other and any other person who has a duty in relation to the same matter under the WHS Legislation.
- (b) The Supplier and Council agree that any dispute about work health and safety, including disputes about compliance with WHS Legislation or this clause 26, will be managed under clause 23.

---

## **27. Relationship**

### **27.1 Parties' relationship**

The relationship between Council and the Supplier is that of principal and independent contractor. Nothing in this Contract will be taken as establishing the Supplier or any Supplier Personnel as an employee or agent of Council without the express written authority of Council.

### **27.2 No claims in respect of employee entitlements**

The Supplier and its Personnel have no claim upon Council in respect of:

- (a) remuneration to employees (if any) including superannuation, leave, other entitlements, taxes or duties;
- (b) claims under workers' compensation, industrial relations or anti-discrimination legislation; and
- (c) claims under any other law affecting or relating to the relationship between an employer and employee.

### **27.3 Payment of tax**

The Supplier is solely responsible for payment of any taxes imposed on the Supplier arising directly or indirectly from the provision of the Products and Services (including, without limitation, income tax). Council may deduct instalments of tax from payments to the Supplier if required to do so under tax legislation. This does not constitute an admission or representation by Council that the Supplier or any of its Personnel are an employee of Council.

### **27.4 No authority to bind Council**

The Supplier does not have the authority to bind Council by contract or otherwise. The Supplier will not represent to any party that the Supplier is an employee or agent of Council.

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## **28. Assignment by Council**

Council may assign without the consent of the Supplier, the benefit or obligations of this Contract to any present or future corporation or other entity with which the Council is consolidated, amalgamated, corporatized or merged into or to which all or substantially all of its assets are transferred, and in that event Council will notify the Supplier of the assignment.

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## **29. General**

### **29.1 Assignment**

The Supplier will not transfer or assign its rights under this Contract without the prior consent of Council (which will not be unreasonably withheld).

### **29.2 Conflicts of interest**

The Supplier warrants that to the best of its knowledge, information and belief, no conflict of interest exists or is likely to arise in the performance of this Contract, and will notify Council if any conflict of interest arises.

### **29.3 Disclosure**

If the Supplier becomes aware of a matter which is likely to affect materially the ability of the Supplier to perform this Contract, it will immediately notify Council of it.

### **29.4 Entire agreement**

This Contract constitutes the entire agreement between Council and the Supplier in relation to its subject matter.

### **29.5 Force majeure**

If a party is prevented from or delayed in performing an obligation by Force Majeure, and promptly acts to mitigate or remove the Force Majeure and its effect, then the obligation is suspended during, but for no longer than, the period the Force Majeure continues and any further period that is reasonable in the circumstances.

### **29.6 Further assurance**

Each party will promptly do further acts and execute and deliver further documents (in form and content reasonably satisfactory to that party) required by law or reasonably requested by the other party to give effect to this Contract.

### **29.7 Governing law and jurisdiction**

This Contract is governed by and construed in accordance with the law of Queensland and the parties submit to the non-exclusive jurisdiction of the courts of Queensland.

### **29.8 Indemnities**

- (a) Each indemnity in this Contract is a continuing obligation, separate and independent from the other obligations of the parties, and survives termination, completion or expiration of this Contract.
- (b) It is not necessary for Council to incur expense or to make any payment before enforcing a right of indemnity conferred by this Contract.
- (c) The Supplier must pay on demand any amount it must pay under an indemnity in this Contract.

### **29.9 Interpretation**

- (a) In this Contract:
- (b) the "Description" section and clause headings are inserted for convenience only and do not affect interpretation;
- (c) to the extent of any inconsistency between clauses 1 to 29 and a Contract Order, clauses 1 to 29 prevail; and
- (d) unless the context otherwise requires:
  - (i) a reference to a "**person**" includes an individual, the estate of an individual, a corporation, an authority, an association or a joint venture (whether incorporated or unincorporated), a partnership and a trust;
  - (ii) words importing the singular include the plural and vice versa;
  - (iii) words importing a gender include other genders;
  - (iv) if a word or phrase is given a defined meaning, any other part of speech or grammatical form of that word or phrase has a corresponding meaning;
  - (v) "**includes**" in any form is not a word of limitation; and

- (vi) a reference to "\$" or "dollar" is to Australian currency and an obligation to pay money is an obligation to pay in Australian dollars.

#### **29.10 No commissions**

The Supplier will ensure that none of:

- (a) the Supplier;
- (b) a Related Body Corporate of the Supplier; or
- (c) the Personnel of the Supplier or of a Related Body Corporate of the Supplier,

receives any money, payment or thing of value (including any disclosed or undisclosed commission, rebate, allowance or other benefit) relating in any way to the performance of any of the Services unless approved in writing by Council, other than payment of salaries, wages and entitlements in the ordinary course of business by an employer to its employees.

#### **29.11 No exclusivity**

The Supplier's appointment is non-exclusive. Council may acquire similar services from other persons or perform similar services itself.

#### **29.12 Notices**

Each communication (including each notice, consent, approval, request and demand) under or in connection with this Contract:

- (a) must be in writing;
- (b) must be addressed as set out on the cover page (or as otherwise notified by a party to the other party from time to time);
- (c) must be signed by (or, in the case of email, sent by) the party making it or (on that party's behalf) by the solicitor for, or any attorney, director, secretary or authorised agent of, that party;
- (d) must be delivered by hand or posted by prepaid post to the address, or sent by email, in accordance with clause 29.12(b) except that communications pursuant to clause 24 cannot be sent by email;
- (e) subject to clause 29.12(f), is taken to be received by the addressee:
  - (i) (in the case of prepaid post sent to an address in the same country) on the fourth day after the date of posting;
  - (ii) (in the case of email) when the email enters the information system of the addressee;
  - (iii) (in the case of prepaid post sent to an address in another country) on the seventh day after the date of posting by airmail; and
  - (iv) (in the case of delivery by hand) on delivery; and
- (f) if taken to be received under clause 29.12(e) on a day that is not a Business Day or after 5.00 pm, it is taken to be received at 9.00 am on the next Business Day.

#### **29.13 Public announcements**

The Supplier will not issue or make statements or comments to the public, the press or other persons or authorise a person to do those things, regarding this Contract or matters arising in relation to it (including referring to Council as a reference site for the Supplier) without Council's consent, which it will not unreasonably withhold.

#### **29.14 Set-off**

Council may set off money due to Council from the Supplier, or damages, costs or expenses recoverable by Council from the Supplier, against money due to the Supplier under this Contract or another contract between the parties.

#### **29.15 Severability**

If any part of this Contract is or becomes illegal, void or unenforceable, this does not invalidate the rest of this Contract.

**29.16 Subcontracting**

The Supplier will not subcontract the supply of the Products and Services without obtaining the prior approval of Council. The Supplier is responsible for the acts or omissions of its subcontractor as if they were the acts or omissions of the Supplier. The Supplier will provide Council with copies of its contracts with subcontractors upon request.

**29.17 Supplier not to employ Council employees**

The Supplier will not, without the prior written consent of Council, during and for 12 months after the Term, engage, employ or seek to engage or employ (including via a Related Body Corporate) any person who was an employee of Council during the Term or induce another person to do those things.

**29.18 Warranties**

The Supplier warrants that prior to the execution of this Contract and any Contract Order, it did not engage in any unlawful behaviour or make any misrepresentations in relation to:

- (a) the tender process conducted for the Services (if applicable); or
- (b) the negotiation and execution of this Contract or any Contract Order.

**29.19 Waiver**

Failure or omission by a party to require strict or timely compliance with any provision of this Contract will not affect any right of that party to remedies it may have in respect of any breach of a provision.