

Co Design

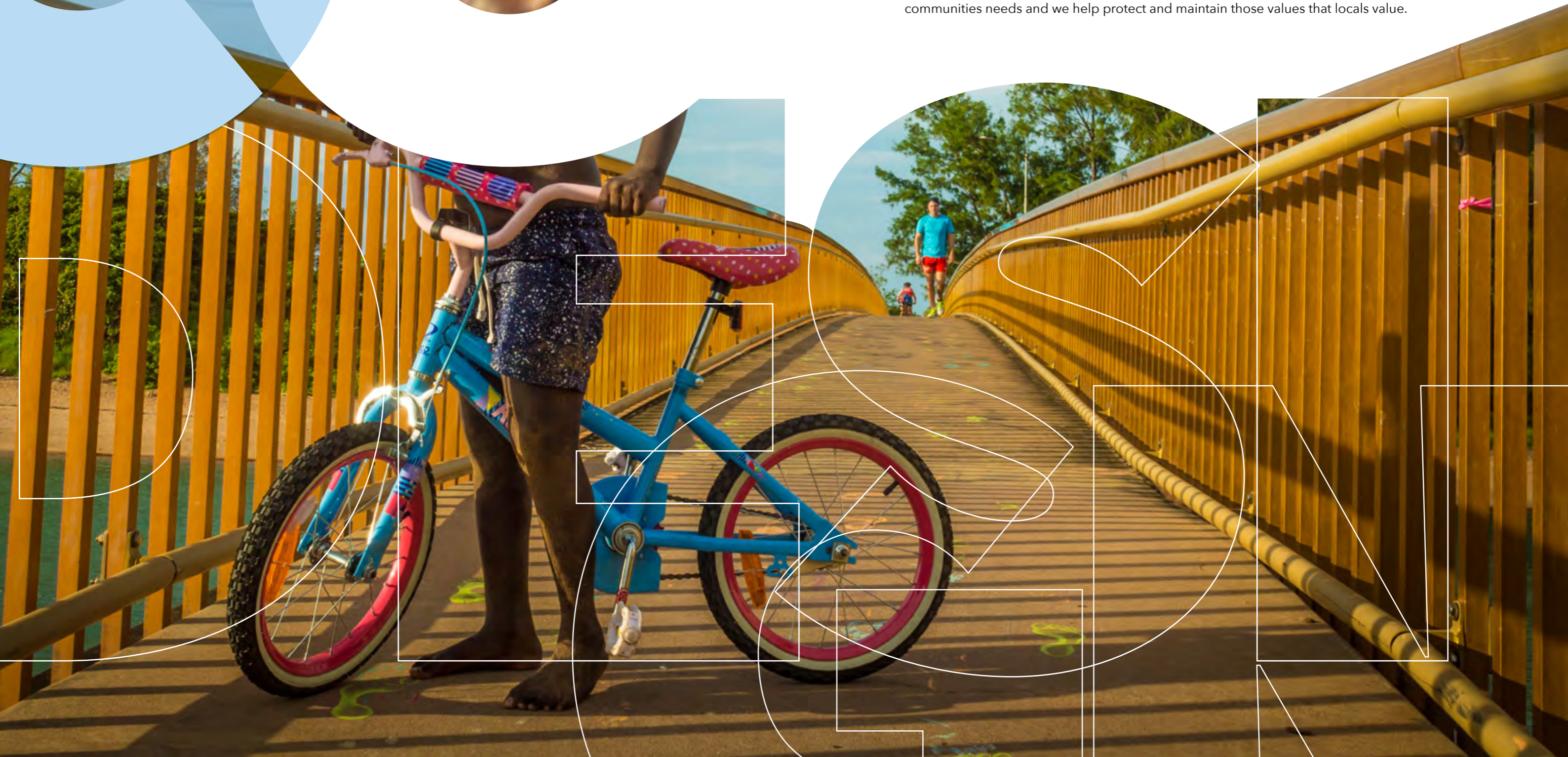
Connecting Community to ^{our} Creeks





OUR ENVIRONMENT
OUR HOME
OUR IDENTITY

The Healthy Land and Water Co-Design approach encourages governments to work together with their communities to design spaces that include a local communities environmental, cultural, social and economic values of place. By working together we build stronger, more connected communities, we create spaces that are usable, loveable and appropriate for the local communities needs and we help protect and maintain those values that locals value.



What is Co-Design?

For Australian communities, the environment around them isn't just the place they call home - it's their identity.

We know that when communities are authentically involved in the building and design of public open space that is in their local area it can inspire far-reaching change.

The advantages of Co-Design include:

- Increases quality of life
- Unites people from diverse cultures and beliefs for a mutual cause
- Establishes places for communities to gather and socialise
- Improves education and conservation efforts
- Reconnects the community to its natural environment

In this workshop, you'll learn how to implement Co-Design, a framework enabling you to create these positive changes in your own community.



What are the benefits?

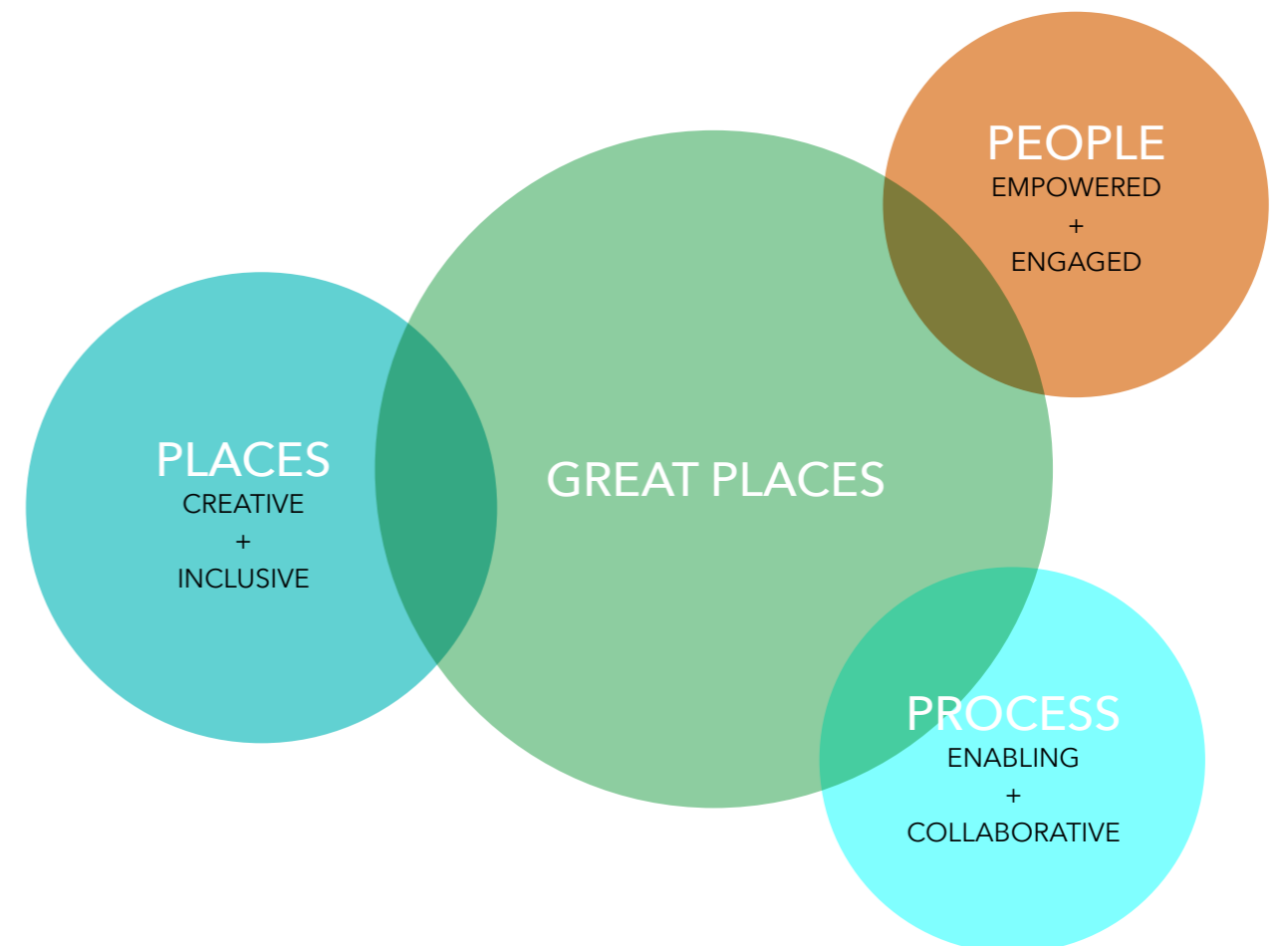
Co-design brings together governments and the communities they serve for a common cause - to bring positive improvements to their natural environments to create a better quality of life.

Because of this, the core benefits Co-Design are:

- Community empowerment, stewardship and education
- Bringing together communities for positive change - happy, healthy interactions
- Fusing local ideas with community-centric planning
- Increased social resilience to change improves a communities inter-connectedness

Key ingredients

For creating positive environments and communities:



1. Scope and measurement

To understand what project success would look like and to identify key opportunities and risks of the Davidson St. project Healthy Land and Water worked with their Co-Design team to categorise success, risk and opportunity into three core themes and who they affect:



Based on these themes, we then devised the project scope for each, outlining:

- Goals eg. community ownership, biodiversity, methodology
- Actions eg. engage, understand, leverage
- Metrics eg. baselines, quantity
- Key design considerations eg. cultural education, removing weeds

2. Co-Design Workshops

The Davidson St. project followed a Co-Design workshop flow that supported ongoing community engagement through pre-event promotion and four workshops:

1. Flyers distributed to residents before workshops
2. A Preliminary workshop to meet with stakeholders and provide project background
3. A school engagement workshop where students have input in the design process
4. A Co-Design day where all stakeholders come together to discuss the project
5. A scout engagement day where scouts have input in the design process

3. Workshop outcomes

At these workshops, Healthy Land and Water facilitated discussions about the scale, amount of modification and key values of the site to determine which characteristics were most important in the project. Insights from the Davidson St. community included:

- Desire to keep site in natural state
- Improved accessibility
- Interest in ongoing community involvement and maintenance after the project
- Did not want exercise equipment installed

Based on these insights, a 'Success Pathway' was devised to establish key steps to project success. This allowed the Co-Design community to deeply understand the purpose and objectives of the project.

An example of a project flow:



An example of the promo material

When we engage our communities in projects that directly impact their surroundings, we can capitalise on their care and translate it into positive actions that benefit the environment.

This diagram (below) shows the far-reaching benefits of a Co-Design approach in inspiring care into action.



ADDITIONAL RESOURCE: This column welcometocup.org/file_columns/0000/0789/dick_rick.pdf from the Centre for Urban Pedagogy shows this user-led approach in action can create positive projects and on a macro level, ignite global social change and create liveable and engaged cities.

4. How do we build a co-design project?

4.1 Defining goals

Before starting the Co-Design approach, it's important to analyse and select the core objectives of the project.

4.2 Site selection

When selecting a site for a Co-Design project, it's important to consider all the characteristics of the proposed location. Desirable traits could include:

- Accessibility
- Long-term community interest
- Visibility
- Recreational appeal
- Manageable risk

Some less desirable traits to consider could be:

- Adjacent industrial areas
- No significant waterways
- Further than 500m from a community

4.3 Discovering stakeholders

The Co-Design approach harnesses the collective power of communities, councils and funders. To ensure this approach is effectively delivered, it's important to consider:

- Who are your stakeholders?
- What are the stakeholder's roles in the community? Eg. small business owner, retiree, scout, sporting club
- What are their relationships with one another?
- What are their needs?
- Who are the 'local champions' - the powerful stakeholders who champion the collective voice

4.4 Aligning with community groups

Inviting schools and scout groups to participate ensures the needs and ideas of younger community members are considered. Often, the Co-Design approach will also align with core learning outcomes and empower young people to actively participate in their environment for years to come.

Water Wise Design Tools

Strategic Waterways

Through the Strategic Waterways tool, managers assess opportunities, values, risks and hazards for a range of possible sites. They can then use this information to select project locations with the best recovery potential.

This ensures the project has a high financial, social and environmental ROI for all stakeholders in the Co-Design project. Project managers can access this tool by visiting:

www.waterbydesign.com.au/resources

Condition assessment score:

Figure 1

COLOUR	INTENSITY	
RED	109	Red = Hazard
YELLOW	140	Yellow = Risk (Where hazard overlaps a value)
GREEN	171	Green = Value
CYAN	177	Light Blue = Opportunity (Where value overlaps a need)
BLUE	183	Blue = Needs
MAGENTA	146	Magenta = Gamechanger (Where a hazard can fulfil a need)
WHITE	168	
	/250	

Example scores are for the Davidson Street - Creek Restoration Project

www.waterbydesign.com.au/case-study/davidson-street-newmarket

Living Waterways

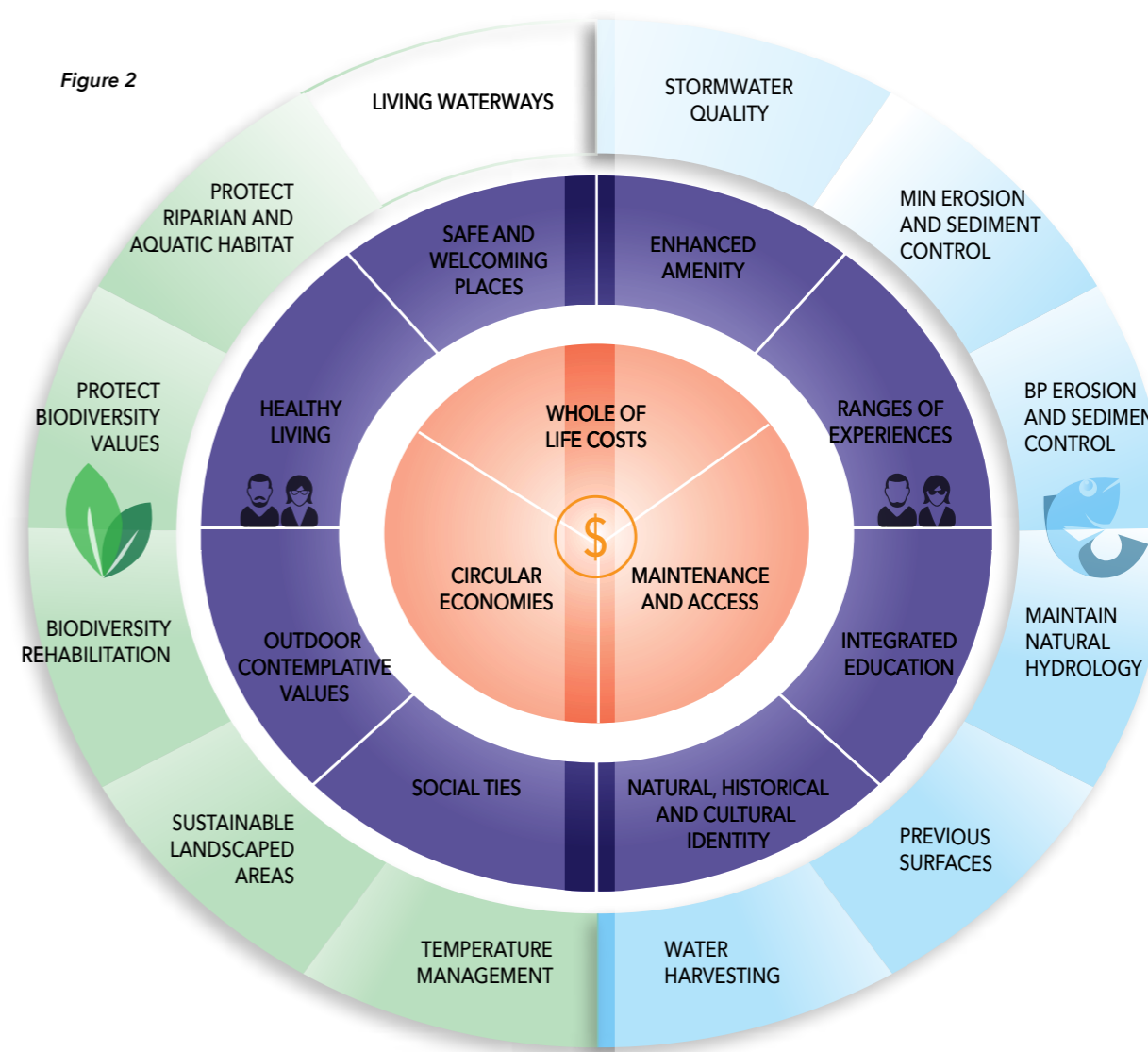
Once a specific site has been selected, the Living Waterways Framework is an additional resource helping environmental managers explore possibilities of what could be done on site. Alternative design options can be evaluated and compared.

Scoring is based on four themes embedded in the Living Waterways scoring system:

- Living water
- Living environment
- Living communities
- Living economies

This process is vital to ensuring an enduring, engaging, affordable space is delivered for the community and the environment. To learn more, visit www.waterbydesign.com.au/resources

Figure 2



4.5 Developing a plan

Once the aforementioned aspects have been considered, we develop a plan for the community Co-Design sessions. Considerations include:

- Number of sessions
- Event timeline
- Budget
- Communication channels
- Activities

4.6 Monitoring and Evaluation

Throughout the Co-Design project, ongoing monitoring and evaluation ensures the site is on track to meet the needs of all stakeholders and achieve the standards set before commencement.

Considerations include observing:

- Environmental behaviour and values by different community sectors
- Water literacy
- Social benefits
- Wellbeing index
- Waterway condition

5. Davidson Street: CoDesign Case Study

Background

The Australian government awarded Healthy Land and Water (HLW) a grant to improve the Davidson St, Newmarket area. Through the Co-Design approach, we achieved our overarching goals to:

- Enhance and restore local creek systems using water sensitive urban design
- Revitalise, maintain and improve the environment
- Build environmental awareness
- Make green space more accessible

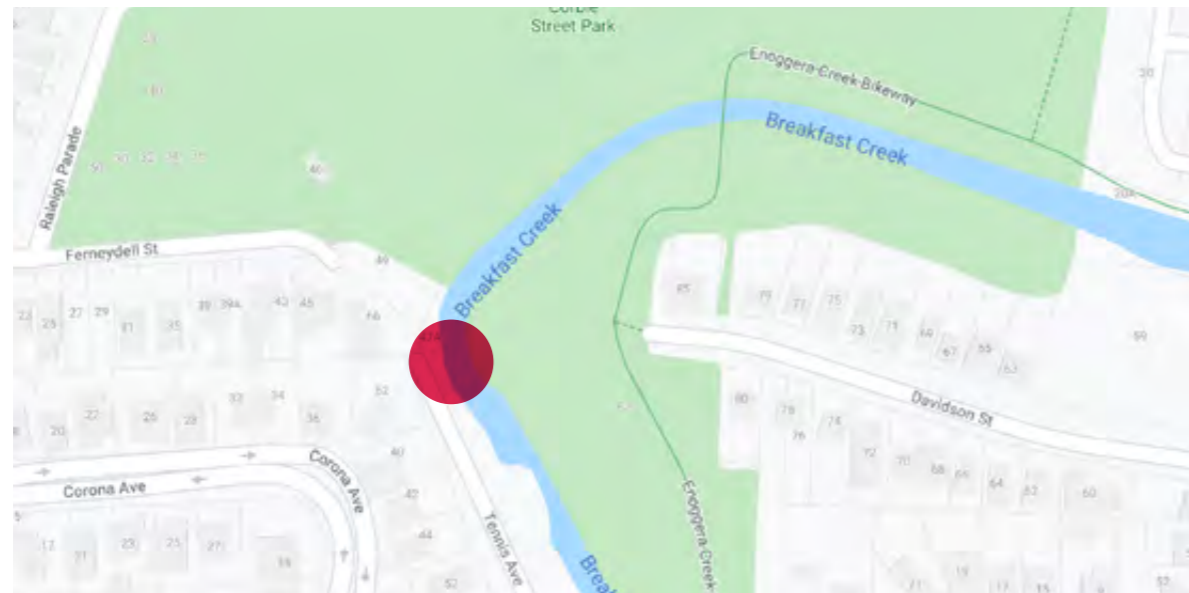


Figure 1 - Project location (Source: Google maps)

6. Project objectives

The Davidson St. project saw the section of Enoggera Creek revitalised by the Co-Design approach through community engagement and positive physical improvements to the location. Prior to this, the site had received poor health ratings and was stressed by sediment and run off. The main aim of the Davidson St. project was to:

- Provide an improvement to the local environment,
- Improve the water quality entering the Brisbane River and;
- Ensure ongoing upkeep and value by engaging the community

It was determined that the environmental health of the site depended on the local community taking ownership. The Co-Design approach helped to bridge this gap.











Who are we doing this for?

Outlined below are the goals, actions, metrics and initial design considerations we had for the Davidson Street Project.

	THE COMMUNITY	THE ENVIRONMENT	COUNCIL GOVERNMENT
GOALS	<p>COMMUNITY OWNERSHIP</p> <ul style="list-style-type: none"> - Sense of place - Pride - Improve facilities - Improve usage - Improve access to creek - Improve enviro education /awareness 	<p>INCREASED BIODIVERSITY</p> <ul style="list-style-type: none"> - Water quality improvement - Maintenance by habitat group - Improve habitat quality - Improve enviro education/ awareness 	<p>METHODOLOGY FOR CODESIGN</p> <ul style="list-style-type: none"> - Lit review of guiding principles to inform engagement approach - Case studies - Guidelines - Publications - Stats
ACTIONS	<ul style="list-style-type: none"> - Define what " Community " is for the project - Who is talking to who? - Engagement plan - Engage - Analysis of engagement 	<ul style="list-style-type: none"> - Baseline analysis and data review - hydrology etc - Understand the site/site analysis - Determine actions on the basis of social survey 	<ul style="list-style-type: none"> - Determine what exactly we will research and who the participants are - Leverage off existing research base - Credibility rigor - Data Collection - Analysis/comparatives - Report
METRICS	<ul style="list-style-type: none"> - Existing usage - Existing knowledge of place - Stewardship Q's - Diverse stakeholders - Living Waterways Score 	<ul style="list-style-type: none"> - Baseline biodiversity - Stormwater sampling - Fauna counts - Living Waterways Score 	<ul style="list-style-type: none"> - Establish baseline - Number of papers - Influence? - Engagement events
DESIGN	<ul style="list-style-type: none"> - Maintainable by community - Destination - Cultural education - Environmental education - Usable and enjoyable - Safe 	<ul style="list-style-type: none"> - Stormwater mine - Remove weeds - Remove sediment - Improve habitat - Exemplar site 	<ul style="list-style-type: none"> - Remote sensing

Project Scoping

The project success pathway for Davidson Street is detailed below. When scoping your project you may want to consider similar themes.

PRINCIPLE	WHAT?	WHY?	HOW?	IDEAS
<p>ACCESS</p> 	<p>Connect the community to the creek</p>	<ul style="list-style-type: none"> - Encourage ownership - Encourage stewardship - Maintenance 	<ul style="list-style-type: none"> - Pathway - Viewing location - Way finding signage 	<ul style="list-style-type: none"> - Permeable paths (e.g. gravel) - Flood resilient - use existing site levels - Pram access/offroad - Access to water edge - maintenance
<p>AMENITY</p> 	<p>Capitalise on natural beauty usable beautiful landscape</p>	<ul style="list-style-type: none"> - People want to visit site - Encourage relaxation - Encourage pride of place 	<ul style="list-style-type: none"> - Make the most of existing trees and views - Materials species selection 	<ul style="list-style-type: none"> - Seating (in shade, near play, with views) - Natural materials - Aesthetic planting design
<p>INTEREST</p> 	<p>Designs to draw them in - keep them interested</p>	<ul style="list-style-type: none"> - Spark curiosity/exploration - Encourage sense of place - Encourage word of mouth 	<ul style="list-style-type: none"> - Discovery trail - Interpretive sculpture 	<ul style="list-style-type: none"> - Local artwork - Interactive web links - Scavenger hunt
<p>PLAY</p> 	<p>Provide a safe fun environment for children</p>	<ul style="list-style-type: none"> - Get them away from iproducts - Get them interested in learning about nature keep them returning to park (with adults) - Childhood development 	<ul style="list-style-type: none"> - Nature play - Discovery trail 	<ul style="list-style-type: none"> - Balance logs - Stepping stones - Climbing ropes - Soft fall? - Access to water edge
<p>EDUCATION</p> 	<p>Teach audience about cultural and environmental values</p>	<ul style="list-style-type: none"> - Improve connectedness of community - Appreciation of natural systems foster stewardship 	<ul style="list-style-type: none"> - Bush tucker trail - Signage - Interpretive artwork 	<ul style="list-style-type: none"> - Outdoor classroom - Stormwater mining - Clear manhole LED lighting
<p>ENVIRONMENT</p> 	<p>Provide benefit to environmental</p>	<ul style="list-style-type: none"> - Improve habitat - Improve waterway health 	<ul style="list-style-type: none"> - Stormwater infiltration /dispersal - Revegetation - New habitat 	<ul style="list-style-type: none"> - Stormwater mining - Native species - Logs rocks - Water wise street trees
<p>RESILIENT</p> 	<p>Create enduring space for community and environment</p>	<ul style="list-style-type: none"> - Lower lifecycle cost - Low impact - Low maintenance 	<ul style="list-style-type: none"> - Lower flood impact - Flood proof structures - Low maintenance 	<ul style="list-style-type: none"> - Low profile - minimal earthworks - Durable - Resilient species - Maintenance access
<p> PROJECT SUCCESS</p>				



7. Conceptual Design

Based on the findings from the workshops, a conceptual design was created. It included;

- Improved physical and visual access**
through proposed viewing platforms and walking trails
- Nature play**
elements using wood and rock, moveable and permanent objects
- Revegetation**
through extended riparian buffers and protected habitat niches
- Design safety and resilience**
through minimal earthworks and secure design elements
- Increased amenities**
through more bubblers and nature-facing benches/picnic areas
- Improved signage and education**
indigenous and historical references, interpretive signage
- Water sensitive urban design**
through stormwater mining and recycled water
- Public safety**
through softfall areas and levelled ground inconsistencies

8. Awareness

The two biggest environmental considerations Co-Design participants need to be aware of are:

1. Disturbance of habitat
2. Water pollution

Considerations at the Davidson St. project included:

1. Minimal habitat disturbance eg. retain mature trees, rocks and logs, understory and native fauna
2. Erosion and sediment control eg. fencing, managing stockpiles, stabilisation and vehicle management
3. Allowing for future options eg. stepping stones, water fountain, improvement of instream habitat and invasive species eradication

ADDITIONAL RESOURCE: You can view the entire Davidson St. Case Study by following this link:

www.hlw.org.au/project/the-davidson-st-creek-restoration-project/

9. Communications and Education

Capturing the journey

Capturing the journey of co-design is an important component of the process and can help to deliver the following outcomes:

- Motivate others in the community to join in a contribute
- Promote the great work that you have achieved for your funders or stakeholders
- Makes a great case study example for future projects
- Inspires others to want to either join in your project or create one of their own

Facebook/LinkedIn Groups are a great way to stay in touch and get immediate updates. You can send design files and get input from the group very quickly. Alternatively you might want to set up an email group that can also perform this function.

For Davidson St we also set up a comprehensive website as well as an App linked to an online digital resource.

ADDITIONAL RESOURCES:

The video from the Davidson St. project has been published online and is available at: www.waterbydesign.com.au/wbd-video

The community website (pictured right) is available at: <https://wsca.waterbydesign.com.au/site/>

St Ambrose's School Projects <https://wsca.waterbydesign.com.au/site/html/schools.html>



10. Showcasing this Co-Design project

Healthy Land and Water ensured the Davidson St. project was thoroughly documented through using a video and website. The purpose of these communication channels was to:

- document the process
- capture learnings
- promote the project
- generate interest with residents / professional community
- keep viewers up to date with progress
- explain key features of the project
- potentially generate further investment

11. Project benefits

After works were completed on site at Davidson Street, some of the key benefits delivered to the community and local environment included:

- Improved quality of life
- Community building and stewardship activities
- Improved access to creek
- Interactive and informative signage
- Habitat boxes
- Replanting native species
- Stormwater soakage basins
- Increased education, interest and participation in conservation
- Increased nature play
- Re-establishing the site as a refuge for residents and wildlife
- Ongoing legacy

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an initiative of Healthy land & water

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