

Big Plans for Small Creek – Community co-design for a 1.6 km waterway naturalisation project.

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Key Points

- 1.6 km concrete channel being converted back into a healthy functioning waterway
- A week-long community co-design process fostered a sense of ownership and built support for the project
- \$9m budget funded through a stormwater quality offsets scheme
- Staged construction over four years commenced in 2017/18.

Abstract

Small Creek, in Ipswich Queensland, was straightened and lined with concrete as the catchment urbanised several decades ago. Ipswich City Council is reinstating 1.6 km of naturalised channel to deliver multiple benefits to the community.

A level of community engagement was sought that would sow the seeds for long-term community ownership – a critical element of successful waterway revegetation projects. Design Your Creek Week was the centrepiece of the community consultation. Held in November 2016, it was a hands-on co design process where the design team immersed itself in the site for five days and worked with over 180 participants to develop Big Plans for Small Creek.

Key benefits of this approach were:

- It was rapid – after five days on site, highly resolved concept designs were produced that had been modelled, interrogated, workshopped, and documented.
- It was robust – enabling the design team to really know the site, its surrounds, and the local residents.
- It was efficient – investigation, consultation and endorsement were all handled concurrently so there was less rework and fewer hold points.
- It was transparent – both Council and the community got to see, and be involved in, all the inner workings and processes.
- It built momentum and helped ensure funding, approvals and permits were forthcoming.

The project will be delivered in four stages with Stage 1 constructed during 2017/2018.

Keywords

Community consultation, co-design, waterway naturalization, stormwater quality, flooding

Introduction

The concrete drain running from Whitehill Road to Warwick Road through Raceview was a meandering natural stream that flowed into Deebing Creek. In 2016, it was a straight concrete channel offering very little value to the community or environment.

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Like most waterways of the region, it was once surrounded by large iconic tree species such as the Queensland blue gum *Eucalyptus tereticornis*, with an understorey of native grasses and bushes. In the early days following European colonisation of the area the catchment was cleared and grazing introduced, instigating a period of ongoing decline.

The creek was replaced in the early 1980's with a concrete drain. The few trees that still exist are remnants of the original landscape and the large remnant *E. tereticornis* are likely to be indicators of the historic channel alignment.

Ipswich City Council sought to naturalise Small Creek to provide healthier waterways for the community, habitat for birds, options for path and bikeway connections and the opportunity for residents to enjoy a natural waterway in their neighbourhood.

Conventional consultation approaches

Conventional approaches to community consultation typically involve presenting well resolved designs to the community for comment. This tends to attract feedback from only a small cross-section of the community who speak English, can read design plans, and have access to the consultation material and the means to respond (typically via an online submission). Such an approach rarely involves rich two-way conversations, and on the public participation spectrum¹ this typically aligns with the 'inform' level of participation, the lowest level below consult, involve, collaborate and empower.

These approaches typically prolong project development timeframes due to the time needed to prepare and vet consultation materials, provide a window of opportunity for comment, and then to review and attempt to integrate often divergent feedback.

Due to the effort expended in creating the draft design for consultation, and the typically inconclusive or divergent feedback obtained, the design becomes 'sticky' and there are rarely wholesale changes to the design arising from this process.

Key technical issues such as flood modelling are often done behind closed doors and are presented as fixed design constraints and often poorly understood.

Using this style of approach, project proponents such as local authorities can carefully control the messaging and avoid raising unrealistic expectations. There is a strong appeal to using such an approach in a risk-averse setting such as a local government.

The need for a different approach

Community creek-care groups are vital to the long-term success of waterway rehabilitation efforts as local governments are not well placed to deliver the labour-intensive tasks of weeding, litter removal and supplementary planting. A deep level of community engagement was sought that would sow the seeds for long-term community ownership – a critical element of successful waterway revegetation projects.

Waterway design is a highly iterative process, involving consideration of channel morphology, vegetation structure, hydraulics and flooding, waterway engagement opportunities (stepping stones and paths), safety, nuisance and maintenance considerations. Proper consideration of these matters requires a deliberative and

¹ https://www.iap2.org.au/Tenant/C0000004/00000001/files/IAP2_Public_Participation_Spectrum.pdf accessed 14/07/2018

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iterative process where various design options can be tested against various criteria and then subsequently refined.

Community Codesign

‘Design Your Creek Week’ was the centre piece of the community consultation. Held in November 2016, it was a hands-on co design process where the design team immersed itself in the site for five days and worked with over 180 participants to develop Big Plans for Small Creek.

It was inspired by the set-up-shop process developed by landscape architect John Mongard which delivered key projects such as the foreshore renewal for The Town of 1770.

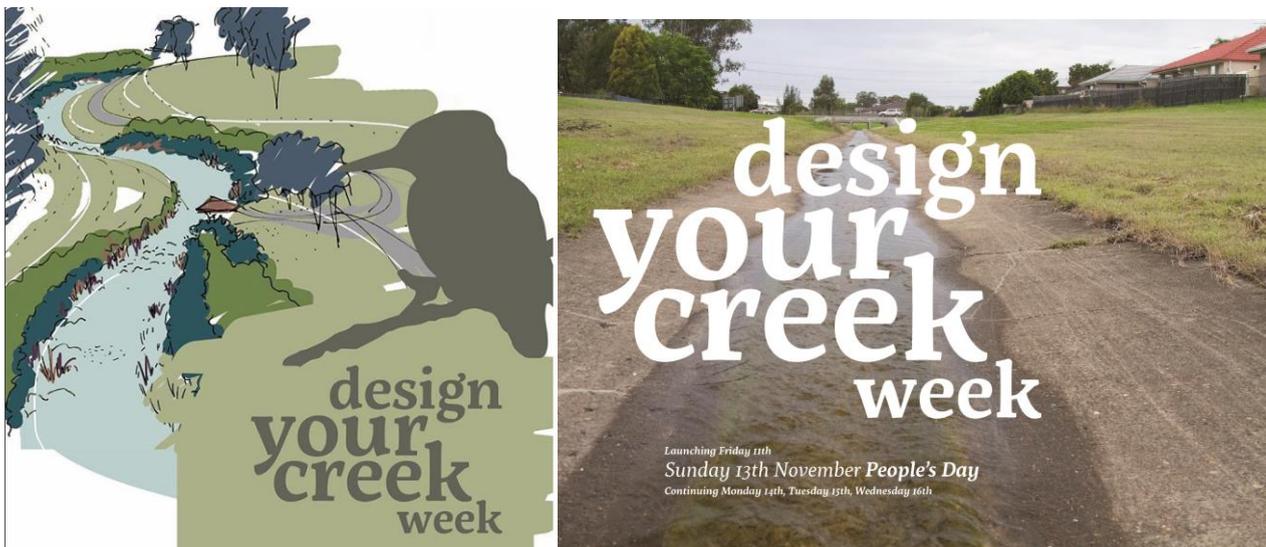


Figure 1 – Marketing collateral for Design Your Creek Week

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Codesign Process

Preparation for the community co-design process included:

- refining and confirming timing and programme;
- working with Council to develop a marketing and communication strategy;
- developing marketing collateral and visual assets for print and social media. A social media campaign was launched four weeks before *Design Your Creek Week*;

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- revisiting the site to further understand its existing geomorphology, vegetation, fauna, sun and shade, movement and access and base flows;
- working with Council to plan the site setup with marquees, catering, activities, audiovisual, furniture and amenities;
- meeting with Bremer State High School to discuss opportunities for the students to participate, and
- making sure that every decision we took aligned with the shared goals of the combined Council and consultant team.

We established six principles that guided our approach to planning and running Design Your Creek Week, outlined in Table 1:

Table 1: Principles for Community Co-Design

Design Principle	Description
Design Transparency	Work out in the open rather than behind closed doors in a remote office environment; Start the process with open minds and a blank sheet of paper, not a design that we are trying to 'sell'.
Work Collaboratively	Exploit the diversity of skills within the design team to share the workload, physically and technically; Let the design evolve from the comments and input received.
Experience the Creek	See how the site operates from early morning to evening, and from weekdays to weekend; Feel and see what happens in different weather conditions; See the places that are comfortable and inviting, and those that are not.
Use Resources Wisely	Minimise 'one-use' items; Favour facilities and materials that could be hired, reused or recycled.
Record It	Use as many means possible to capture important discussions and casual conversations, including notes, sketches, photography, video.
Share the Learning	Share knowledge and past experiences from council staff, local community & consultant team so everyone is on the same page.



Figure 2 – Creek Week (clockwise from top left – hands-on creek models, students day, ideas captured by local families, schools day, Council maintenance staff contributing their ideas.

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Participants

Participants in the co design process included:

- Residents (~100 people)
- Council officers covering engineering, development assessment, flooding, planning, landscape architecture (~20 people)
- Council maintenance officers from three different teams (parks, waterways and natural areas) (~40 people)
- Local Councilors (x3)
- School students from Bremer State High School (~80 students)
- Local business representatives
- Traditional owners
- Local church representatives

Activities

Key activities throughout Creek Week included:

- Small Talks – A series of short talks by academics and subject matter experts on waterway ecology, geomorphology, overseas exemplar projects, designing for people and place.
- Flood markers – marking the heights of historical flood events on major trees to help participants appreciate the flood behavior of the site
- Flood modelling – computer was set up and able to run 2D flood model simulations (the model was tuned to a run time of 30 minutes to provide rapid feedback on various scenarios).
- Physical Creek models – two small flumes were built that had different sediment gradings, slopes and low rates, allowing participants to get their hands wet and build an appreciation of fluvial geomorphology
- Door-knocking local residents
- Observing – understanding the site at different times of the day to learn how local residents use the site, changes in sunlight and shadows, and learning the soundscape.
- Maintenance pledges – local residents were invited to show their commitment to the project by pledging how many days a year they would volunteer to work on the creek.
- People’s Day – A Sunday during Creek Week when the general public was invited along to a sausage sizzle and kids were encouraged to make artworks from recycled materials.
- Student’s Day – which started with a lecture at the nearby Bremer State High School followed by a walk up the ‘drain’ and a series of hands-on workshops.
- Traditional Owners day.
- Note that the site was set up and accessible for drop in visits over five days in addition to the structured sessions noted above.
- At the end of *Design Your Creek Week*, a session was held with the local Councilors and senior managers to present the concept design.

Co-Design Lessons

- Start with a blank page and listen deeply to what participants have to say, and be alert to the gems of wisdom that are on offer.
- Show people that you have considered their input, and if it is not able to be accommodated in the project explain to them directly the reasons why – this leads to increased trust and collective learning.
- Do not underestimate the physical demands of setting up and packing up each day. Even with six people on hand the process was exhausting. Invest in the health and wellbeing of the team.
- Daily debriefing sessions are highly valuable to assimilate knowledge and keep the team together.

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- Draw out the contentious issues – the idea of renaturalising a creek was evidently a popular idea. Rather than ‘sell’ the idea of creek naturalisation, we intentionally drew attention to the potential downsides such as snakes, mosquitos, flooding and maintenance challenges.
- Cook lots of sausages
- Invest at least two weeks full time in preparation for a week-long consultation.



Figure 3 – Bringing it together - Hand-drawn illustrations were used to rapidly test and validate ideas with the participants



Figure 4 – The big sell – Three Councilors and several senior managers were presented the concept at the end of Creek Week. Their response: ‘How soon can we build it’.

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Project status

The project has been divided into four stages.

Detailed design for Stages 1 and 2 was completed in June 2017. Construction of Stage 1 occurred in 2017/18, and construction of Stage 2 is expected to occur in 2018/19.

The overall project budget is \$9 million, funded through Ipswich City Council's stormwater quality offsets scheme.

Conclusions

Ipswich City Council is naturalising 1.6 km of concrete channel to deliver multiple benefits to the community.

A community co-design process was undertaken in order to achieve a deep level of community engagement that would sow the seeds for long-term community ownership – a critical element of successful waterway revegetation projects. Design Your Creek Week was the centrepiece of the community consultation. Held in November 2016, it was a hands-on co design process where the design team immersed itself in the site for five days and worked with over 180 participants to develop 'Big Plans for Small Creek'.

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Acknowledgments

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