



Partnering with local communities in regional Australia to increase resilience to flood risk

Ipswich Community Update

Background

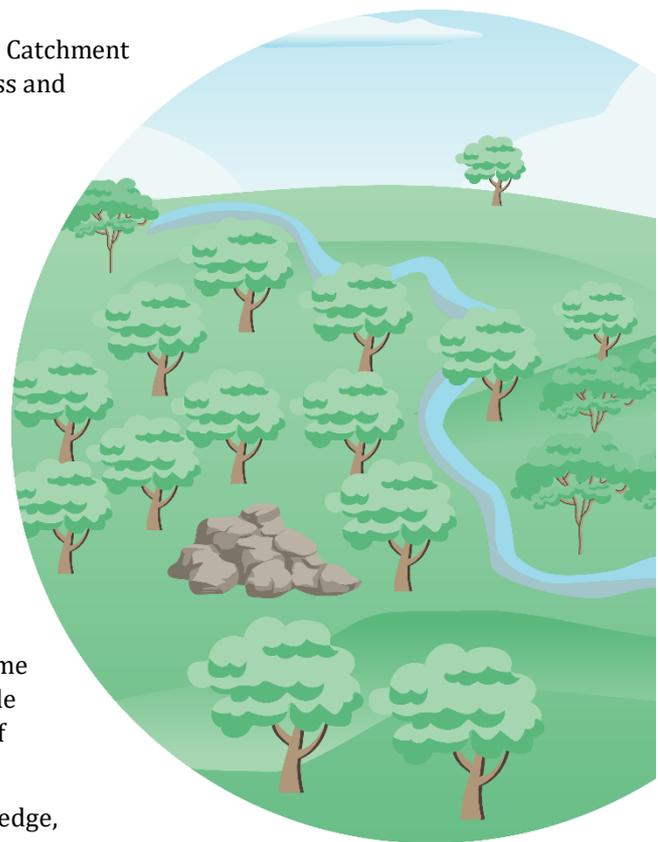
Ipswich city and surrounding areas within the Bremer River Catchment are regularly subject to flooding, often resulting in severe loss and damage, impacting the area's population, economy, and environment.

Reducing the risk and impacts of flooding has traditionally been done using built infrastructure including dams and levees. However, with climate change increasing, the incidence and severity of extreme weather, different ways of managing floods and reducing flood risks need to be brought into the mainstream.

The Institute for Climate, Energy and Disaster Solutions (ICEDS) at the Australian National University (ANU) has been tasked by the Federal Government's National Emergency Management Authority to produce national guidelines aimed at supporting local decision-making to implement natural solutions to flooding that will not only reduce flood risk but will maintain/restore catchment ecology and connections between rivers and floodplains. Some examples of Nature-based Solutions (NbS) to flooding include reforestation, the development of wetlands, reactivation of ancient river courses such as paleochannels and more.

Ipswich City Council (ICC) is committed to improving knowledge, understanding and uptake of Nature-based Solutions to flooding within their community and Australia-wide.

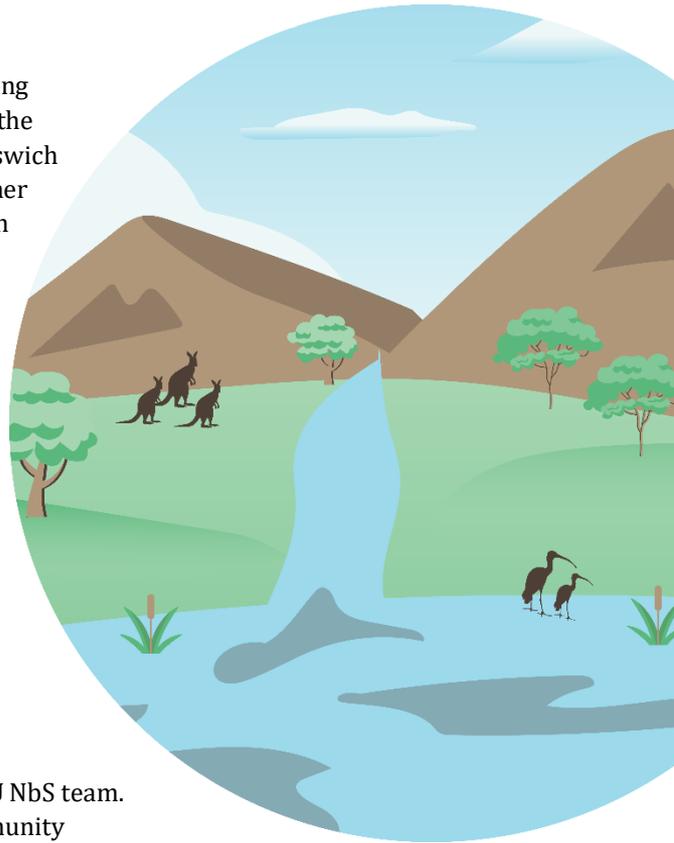
Along with several other case study sites across Australia, Ipswich City Council is partnering with ANU to investigate what, where and how Nature-based Solutions for flooding will work best in their local area. What is learned will inform the national guidelines.



What has been done?

Ipswich City Council experts facilitated an initial data sharing agreement with ICEDS that is continuing to be essential to the successful collaboration that is driving the NbS project. Ipswich City Council facilitated the participation of numerous partner organisations and community representatives to work with the ANU research team of hydrologists, economists and social scientists. Extensive discussions have been held to review local flood maps and key documents and detailed modelling has been conducted for a range of flood scenarios to identify suitable sites and types of NbS.

The success of NbS relies heavily on community acceptance and participation and community consultation is a key element. Ipswich project partners recommended that the community would be consulted early in the process so that the decisions around the type and location of the proposed NbS could be informed by their input.



Community workshops

ICC hosted two community meetings facilitated by the ANU NbS team.

The first, in August 2023 was attended by around 19 community representatives. The meeting explored the level of understanding of NbS to flooding within the community, potential co-benefits of NbS, identified existing local nature-based projects and heard suggestions on the purpose, structure and content of national NbS guidelines.

The ICC workshop emphasised that the ICEDS NbS to flooding project should complement existing NbS efforts in the Ipswich Local Government area, with reference to the Ipswich Integrated Catchment Plan.

With the help of ICC, the ICEDS Research Team was also able to showcase the NbS project at the Sustainable Ipswich Festival in October 2023. The following week a second community workshop was held to obtain more specific community feedback on the various NbS options that were emerging from the hydrological modelling done in the previous months.

Participants saw benefits from NbS that would include encouraging physical activity, benefits for future generations, improved soil health and habitat corridors for wildlife. They also acknowledged that changing government priorities could influence the uptake of NbS to flooding. These include land use for residential purposes vs agriculture. They also raised concerns about who would pay, not only for NbS establishment costs but for ongoing maintenance.

Expert Panel

Held in December 2023 and hosted by ICC, the purpose was to consider the findings of the hydrodynamic modelling thus far and other ecological, social or institutional factors that might impact the success of the proposal. The panel included community representation, and was a valuable step forward toward firming up decisions about the choice of NbS to flooding in Ipswich. Participants also advised on a draft NbS Framework.

Next Steps

Based on the latest hydrodynamic modelling and ongoing discussions with ICC, it has been agreed that the most feasible NbS will be a combined approach including establishing wetlands, afforestation on existing floodplains and urban NbS to flooding that are currently being scoped around the city.

Closely linked with the choice of NbS, the ecological co-benefits and impacts of the NbS are being assessed. Socio-economic and institutional costs and benefits will also be analysed. From this, it is expected that options for a business case will be developed to support a bid by ICC for funding to implement the proposal in the future.

While the NbS will be supported by robust hydrological, economic and ecological modelling, an assessment of the extent to which institutional and social factors enable or hinder the project will be critical. Therefore, the Ipswich partners will be asked to contribute to the development of a protocol to evaluate these factors to be incorporated into a holistic NbS decision-making process. The protocol will further inform decisions and ways of strengthening support and addressing potential barriers to NbS.

A second expert panel will be held later this year when the draft project outcomes will be provided to ICC and its local partners for their feedback. These findings will be used to inform the integrated catchment study report detailing the NbS being investigated and will also provide context to the National Guidelines on Nature-based Solutions to flooding.

For further information about the project you can contact us at:

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