

OUR SPACE, YOUR PLACE: OPENING WATER UTILITY LAND FOR LIVEABILITY

A NEW ONLINE MAP-BASED APPLICATION BY MELBOURNE WATER ALLOWS MEMBERS OF THE COMMUNITY TO SEND IN COMMUNITY CONCEPTS FOR LAND SPACES TO ENHANCE MELBOURNE'S LIVEABILITY

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ABSTRACT

Melbourne Water land is now available for projects which will benefit the wider community. These projects could include community festivals, playgrounds and parks, shared pathways, community gardens, vegetation plantings, or murals, for example.

To make the process easier, we have developed a new online map-based application called 'Our Space Your Place', which gives details of the availability, size and potential use of Melbourne Water's many hectares of land. Anyone can use the application to send in an expression of interest once they have found the right space for their community concept.

This application has assisted Melbourne Water to provide better customer service, improve our efficiency and transparency, and use more Melbourne Water land to benefit the community and enhance Melbourne's liveability.

INTRODUCTION

Melbourne Water has always had a substantial impact on the health and liveability of Melbourne. We have some important functions such as looking after public health and safety with our water, sewerage and

drainage systems that obviously make a big difference to our city.

However, there are still some significant challenges that are having a detrimental impact on the health of our cities and also the state of our economy.

- For example, physical inactivity is responsible for approximately 8,000 deaths a year in Australia and directly costs the health system at least \$400 million annually (Stephenson et al. 2000)
- The annual cost of mental illness in Australia has been estimated at \$20 billion, including the cost of lost productivity and labour (Council of Australian Governments 2006)
- It was estimated there were 374 excess deaths during the heatwave in Victoria for the week of 26 January to 1 February 2009 (Victorian Department of Health 2009)

These are real problems for our cities and our work as a business has a direct impact on these in Melbourne. Obviously they are complex and need multilayered solutions, however the quality of the city environment should be considered as one of the important levers in addressing these challenges. It has been comprehensively demonstrated through research that:

- Attractive, accessible green space encourages greater levels of physical activity (Giles-Corti et al. 2005), (Sugiyama et al. 2008)
- Contact with nature can improve mood, and lower levels of stress, anxiety and depression (White et al. 2013), (Alcock et al. 2014), (Kardan et al. 2015)
- Shade, evapotranspiration and insulation provided by greening can help reduce the impact of extreme temperature events and reduce peak energy demands (Loughnan et al. 2013), (Norton et al. 2015), (Shanahan et al. 2015)

Melbourne Water owns or manages over 33,000 hectares of land and is the largest land owner in Victoria, behind the Crown. While we have been doing good work in this area already, we have a lot of potential to offer more value to the community from our land, without compromising the integrity of the services we already provide.

Opening up our land for liveability outcomes is important, given that our extensive landholding is one of the most significant contributions we can make to addressing these new health and liveability challenges for a rapidly densifying Melbourne, in which the type of environment to support liveability is becoming increasingly more precious.

Therefore we are now looking to offer our land to support more services that increase the liveability of Melbourne and we have put a specific focus on how our land can support active transport, recreation, urban cooling, a sense of community and a sense of place.

OUR SPACE YOUR PLACE WEB APPLICATION

One of the ways we are making it easier for our customers to connect with us over our land is via the new Our Space Your Place web application that we have recently released. This application allows anyone to browse Melbourne Water land, look at the estimated availability of this land and express interest in using it to benefit the community.

We are open to considering a whole range of activities on our land. Projects could include community festivals, playgrounds and parks, shared pathways, community gardens, vegetation plantings, or murals, for example.

When customers browse our land they will see it broken down into various availability categories that give general guidelines on the types of appropriate uses. Customers can also download our land data from the application if they want to use it in their own GIS systems.

The application includes an Expression of Interest form where users can enter their contact details, proposal, funding, skills, status and community benefits. Once an expression of interest has been submitted, we support the applicant through the process of determining suitability and negotiating arrangements, and we can also connect them to suitable community groups or funding grants if extra skills or funding support are needed.

The purpose of this application is to reduce the barriers for people and organisations who are interested in using Melbourne Water land for liveability purposes. It complements the range of projects we are already working on to achieve more community benefit from our land.

Refer to the figures at the end of the paper for screenshots of the application at the time of writing (July 2016).

DEVELOPMENT PROCESS

In developing the application the first step was to confirm the key questions our customers were asking, and therefore the data requirements that we had and the most appropriate way of conveying the information.

The range of potential users was considered and it was decided to make the data publicly accessible to all. A list of key questions and users was developed from the enquiries the Liveability team had been receiving at Melbourne Water from a range of groups, including all levels of government, non-government organisations, private organisations, community groups and the general public. The initial data set of attributing availability categories to all of Melbourne Water's land was developed in extensive consultation with our asset managers across the business.

- First, four availability categories were developed as follows:
- Likely Available: These areas are likely to be available for community projects and could be used for a variety of purposes depending on the space.
- Restrictions Apply: These areas are likely to be available for small scale or adaptable infrastructure such as park benches, goal posts, landscaping and temporary food vans. They are unlikely to be available for large scale infrastructure due to access, drainage, safety, current lease or license agreements, or other requirements.
- Access Only: These areas are likely to be available for access related activities such as walking, running or yoga. Twenty four hour access is usually required and infrastructure is unlikely to be permitted.
- Unavailable: Access to these areas is unlikely to be permitted for safety and security reasons (Note special permits and options for murals or other amenity improvements may be available on request).

Rules were then applied to each asset, such as a three metre buffer zone from the edge of water pipelines classified as an Access Only category. This process was repeated and checked for every asset type we own, including water supply, sewerage, drainage and environmental infrastructure as well as the various overlays on our land such as flooding and predicted sea level rises. The resulting list of rules was then compiled using an FME process to generate the availability layers that are seen in the application.

It was determined that an interactive, web-based application would be the most effective method of conveying the data. An intuitive visual interface for the data was developed using ESRI's ArcGIS Online platform, to make the spatially-based data accessible to non-GIS users. This was combined with ESRI's Open Data Portal so users could also download the GIS data to use in their own systems if desired. A spatially-based online application form (ESRI's Geoform) was also linked to the application to enable users to directly express interest in using any of Melbourne Water's land parcels.

An internal referrals process was then developed to check expressions of interest that were received, including a multiple land use policy and procedure, referral teams to check suitability of proposals and contractual agreements.

A number of checks on the application were also carried out by specialists across the organisation, including a data management risk assessment, a security assessment, a privacy impact assessment and a legal review.

Simultaneously to these assessments we piloted the application and tested our prototype with a range of internal and external customers, as well as releasing a preliminary data set in the GovHack competition to test the appetite and potential uses for this information. Valuable feedback was received from our testing process and, after modifying the interface and updating our assessments accordingly, the application was released publicly on the Melbourne Water website in November 2015 (under Get Involved > Use Our Land).

The process of developing the application took approximately nine months from initial scoping to the first public release.

The next steps were to promote the application to the range of possible users via a variety of forums, and to continually improve the functionality of the application. Improvements planned at the time of writing (July 2016) include more engagement features, additional data sets and the ability to view liveability projects being constructed across the city.

It should be noted that this process is purely for the community use of our land. Melbourne Water already has an established process for dealing with commercial use of our land but this was found not to be suitable for projects of a liveability nature.

OUTCOMES

Since releasing the application publically, Melbourne Water has received a number

of expressions of interest across a broad variety of uses. A sample of the type of applications include a range of education programs from various school and community groups, a fishing competition, various tree planting and revegetation type projects, a community performance stage and a number of community gardens.

The following is a case study project that has arisen from the development of this data and application. (Refer to Melbourne Water’s website for more liveability project case studies).

Hope City Mission Case Study

Construction is complete of a linear strip of above-ground community garden beds on a Melbourne Water pipe track behind the Hope City Mission distribution centre in Croydon (Figure 1). Hope City Mission will use the crops grown to support clients in knowing how to use fresh produce and prepare healthy meals.



Figure 1: Construction of community garden beds on Melbourne Water land to support Hope City Mission’s Foodbank and life skills workshops.

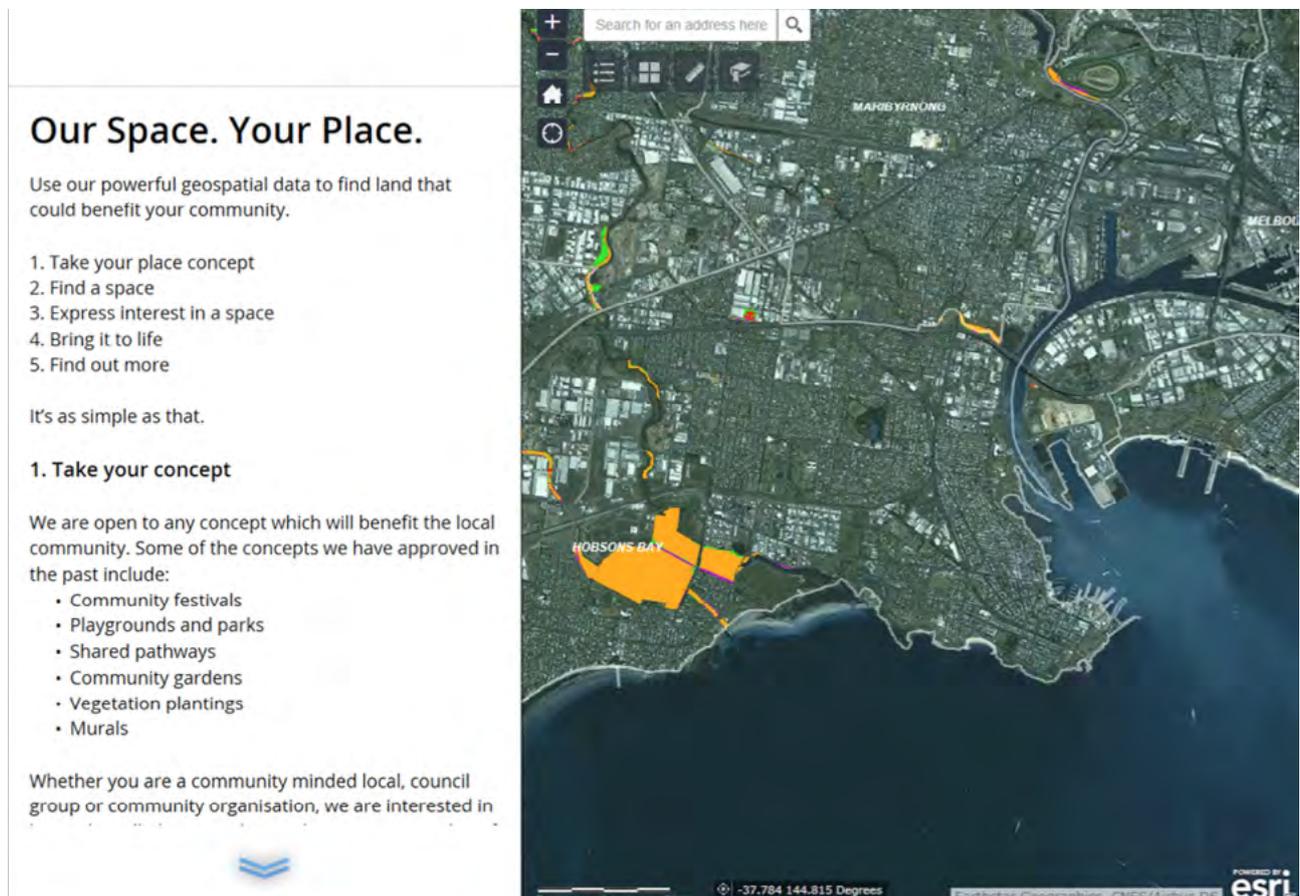


Figure 2: Screenshot from homepage of Our Space Your Place application

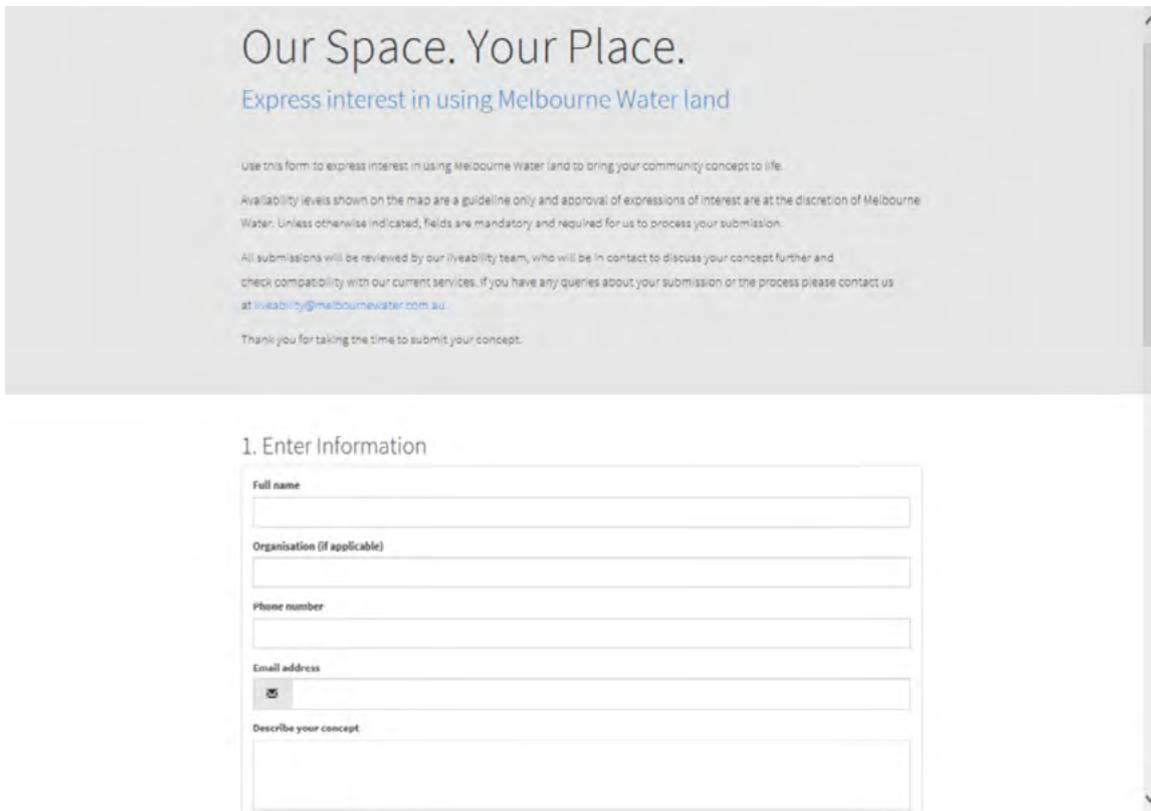


Figure 3: Screenshot from Expression of Interest Form for Our Space Your Place application

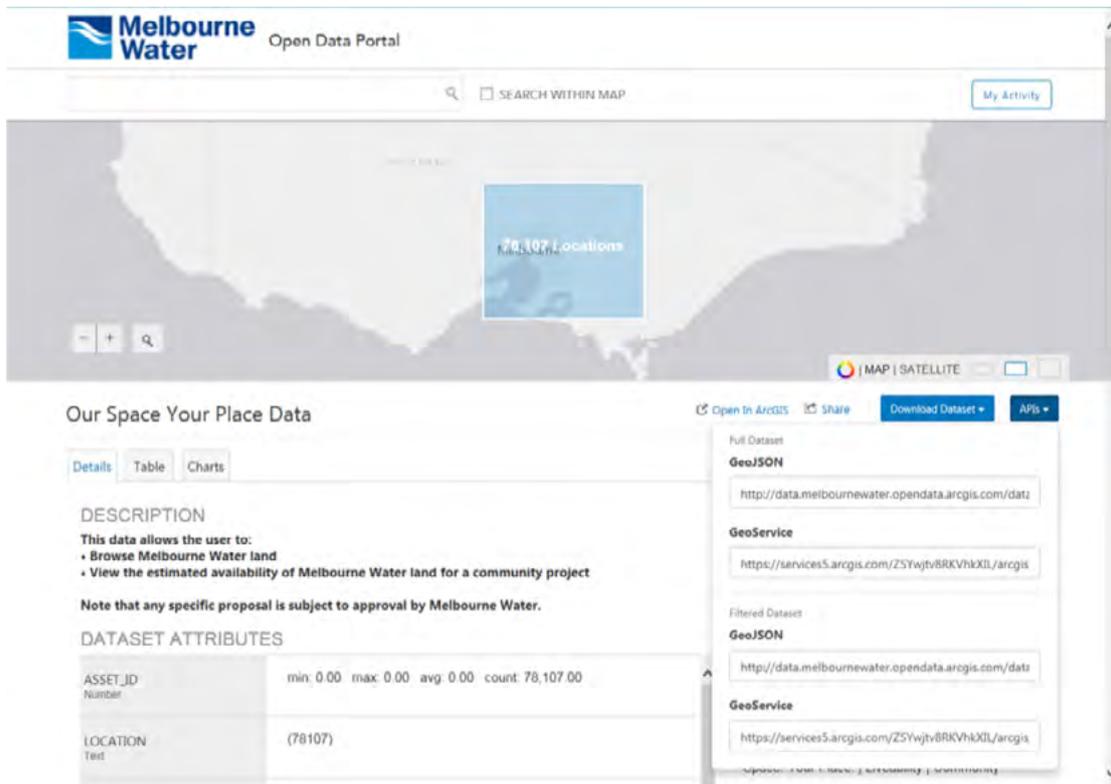


Figure 4: Screenshot from Open Data Portal showing datasets available for download from the Our Space Your Place application

Crops produced in the garden will also be used to supplement the 200+ kilograms of fresh produce that Hope City Mission distributes to the community every day.

Hope City Mission's Emergency Relief programs provide assessment-based Foodbank, financial assistance/advocacy, and life skills workshops to those in greatest need in the eastern metropolitan suburbs.

CONCLUSION

This application has complemented the 'top down', strategic approach Melbourne Water has started taking with some large scale tracts of land that involve complex collaborations with a range of stakeholders and take a long time to establish. It has enabled a simultaneous 'bottom up' approach that allows increased interaction and diversification of the stakeholders Melbourne Water would typically connect with over these issues, and make smaller, quicker changes desired by local communities.

This application makes it easier for anyone to connect with us about use of our land, makes availability levels clearer, and simplifies the process for expressing interest in using this land. It has also helped increase engagement in a liveability-focused approach across the organisation, with the development of multiple land use policies, structured referral systems and collaboration between a number of teams, which has seen Melbourne Water able to use many tracts of land for multiple benefits, rather than just being managed for a single asset requirement.

It has also allowed Melbourne Water to be more open and transparent with data sharing, and increase collaboration with other agencies in regards to land availability to improve joint decision making and the delivery of shared services.

This has in turn allowed Melbourne Water's land to support broader community outcomes, as per our liveability pillars of supporting

increases in opportunities for active transport, recreation, urban cooling, a sense of place and a sense of community. Therefore, over and above our traditional role to ensure public health and safety through water, sewerage and drainage systems, Melbourne Water land is now directly contributing to the health challenges mentioned at the commencement of the paper of increasing physical and mental wellbeing for communities in a rapidly densifying Melbourne. This is occurring via changes to the physical environment such as creating more accessible, more attractive places and increasing greening and contact with nature as well as opportunities for social connection for local communities on Melbourne Water land.

ACKNOWLEDGMENTS

I would like to acknowledge the extensive efforts of Ben Johnston and Nicky Kindler from Melbourne Water in developing the GIS data sets that the Our Space Your Place app draws on, and Dan Green in managing the expressions of interest on behalf of the Liveability team.



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