



## Changing trends in digital consulting during uncertain times

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*29<sup>th</sup> NSW Coastal Conference  
Living with Uncertainty*



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### Overview

- > The challenge
  - Pre 2020
  - That pandemic
  - The digital shift
- > The opportunity
  - Online surveys
  - Experience builder
  - Drone modelling
  - 3D visualization
  - Field maps
  - Mapping portals
  - QR codes



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# 01 The challenge

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## 01 Pre 2020

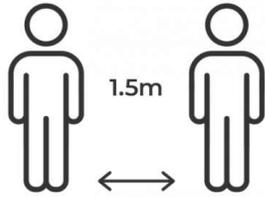
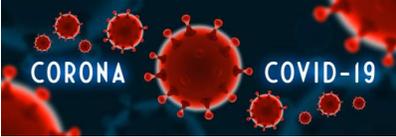


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# 01 That pandemic

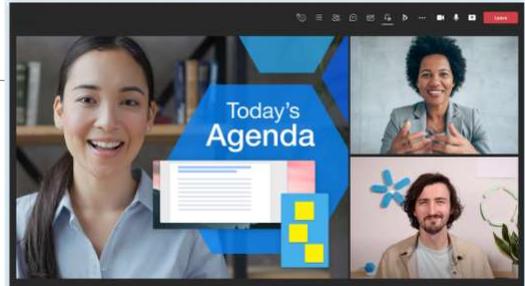


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# 01 The digital shift



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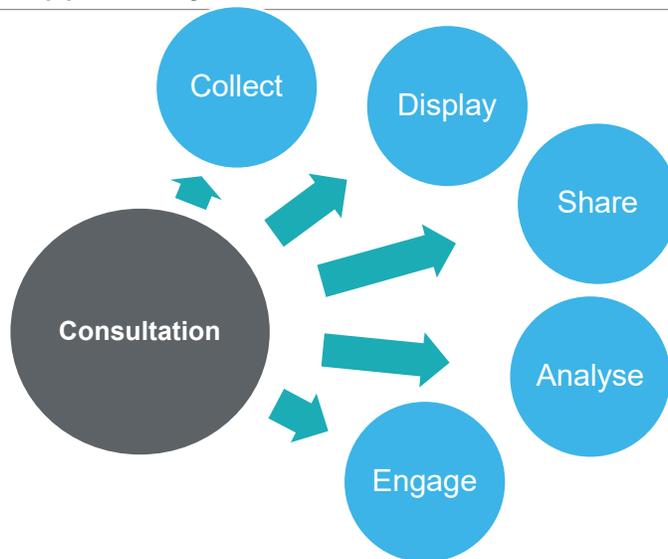
# 02 The opportunity

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## 02 The opportunity



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# 2.1 Online surveys

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## 2.1 Online surveys

**Cardno** Lake Illawarra Maritime Assets Prioritisation and Usage

Find address or place

Filter list by map

- Berkeley Boat Harbour Wharf
- Dix's Wharf
- Heritage Park Viewing Platform 1
- Heritage Park Viewing Platform 2
- Heritage Park Viewing Platform 3
- Heritage Park Viewing Platform 4
- Hooka Creek Platform
- Kanahooka Jetty East
- Kanahooka Jetty West
- Koonawarra Bay Jetty Structure East
- Koonawarra Bay Jetty Structure West
- Mullet Creek Wharf Kanahooka
- Old Merinda Wharf
- Purry Burry Point Jetty Primbee
- Tuggerah Bay Jetty Berkeley
- Windang Boardwalk
- Windang Wharf
- Wollamal Point Jetty

The Department of Planning, Industry and Environment (DPIE) – Crown Land have been working with Cardno to undertake a review of Lake Illawarra's ferries and waterway recreational infrastructure to determine the current and potential community use of the structures.

As part of this process, DPIE and Cardno are requesting input from the local community and frequent visitors to Lake Illawarra to complement existing structural assessment data to consolidate and upgrade these structures based on community use and values.

Please select the structures you wish to comment on, complete the multiple choice questions, and write your remarks in the comment boxes provided. Opportunities for feedback will close on 30 January 2021, and be combined with other community feedback being undertaken as part of this process.

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## 2.1 Online surveys

**Cardno** Lake Illawarra Maritime Assets Prioritisation and Usage

Find address or place

Koonawarra Bay Jetty Structure West

**Koonawarra Bay Jetty Structure West**

Length  
Year of Construction

What suburb do you live in? 80

What is your primary concern about the existing structure? (e.g. safety, accessibility, etc.) 200

How often do you use this structure?  
Please Answer

How do you utilise this structure?  
Please Answer

Is there a local or other name for this structure? 50

On which days do you primarily utilise this structure?  
Please Answer

Other general comments 200

From the entire list, is this structure in your top 5 most used structures?  
Please Answer

Please enter your name or user group 50

Submit Cancel

Comments  
No comments

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## 2.1 Online surveys



This survey is targeted at the operators of business in Maryborough and aims to gain an understanding of impacts from river flooding and how business operators currently monitor flooding.

The information from the survey will be used to inform Council's understanding of the impacts of flooding to the Maryborough business community.

Use of information from the survey will be in accordance with Council's Privacy Statement: [www.frasercoast.qld.gov.au/privacy-statement](http://www.frasercoast.qld.gov.au/privacy-statement)

Any personal information you choose to provide will only be used for the purpose for which it was provided and will not be disclosed to other persons or organisations without your prior agreement or if required by law.

It is expected that this survey will take approximately 5 minutes to complete.

Q1. What is your email address?

Q2. Do you operate a business within Maryborough?

Yes  No

Submit

### Town of Cambridge Bike Plan

The Town of Cambridge is preparing a new Bike Plan to review the Town's current bicycle network and to determine ways to improve existing bicycle infrastructure to meet the needs of the Town's cyclists.

Council is seeking community feedback regarding issues with the existing cycling facilities. Please use the mapping tool below to pinpoint a particular issue and write a comment describing the problem.

Select 'Hazard or Conflict' for comments relating to issues such as missing infrastructure, unsafe crossings, etc.

Select 'Idea or Suggestion' for comments relating to suggestion for potential improvements such as signage, additional path, crossing facilities, etc.

Once submitted your points and comments are sent to a moderator for review. Please note that they will not appear on the map until this review is complete.

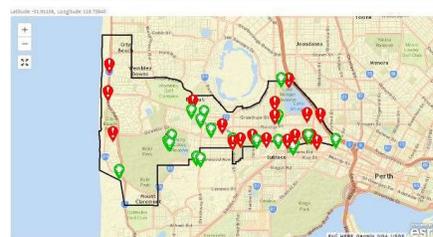
#### 1. Enter Information

Your Name (optional)  
Comment  
Category (required)  
 Hazard or Conflict  
 Idea or Suggestion

#### 2. Select Location

Specify the location for this entry by clicking/typing the map or by using one of the following options.

Search  
Find address or place



#### 3. Complete Form

Add this information to the map.

Submit Entry



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# 2.2 Experience builder

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## 2.2 Experience Builder

Shoalhaven City Council

Home | Water Quality | Coasts | Floodplain Risk Management | Biodiversity

### Integrated Environmental Monitoring Program (IEMP)

Shoalhaven City Council have a number of Environmental Monitoring initiatives, which include council staff as well as the public. This is to ensure that our natural environment stays healthy and the ecosystem values and the surroundings for the community are maintained into perpetuity.

The Shoalhaven coastline is 165 km long and we monitor beaches and water quality at various locations along this coastline. We also monitor flood-prone areas, undertake bushcare, and monitor the threatened species and habitats that exist in this area. We also ensure that any development is sustainable - by meeting the needs of the current generation, without compromising the needs of future generations.

Use this site to locate, discover and search for monitoring programs within the Shoalhaven City Council Local Government Area.

Water Quality

Coasts

Floodplain Risk Management

Biodiversity

Get Involved Shoalhaven is a space for the community to share ideas, discuss important topics, provide feedback on Council plans and contribute to the future of the Shoalhaven. Click on the link to see current Projects.

Residents and visitors to Shoalhaven can now access timely and authoritative information on local conditions through the NSW Resilience Disaster Dashboard of the Shoalhaven.

Upload photos and share your experiences from a recent flood, coastal erosion or storm event to the community Dashboard.

[Get Involved Shoalhaven](#)  
[Council Dashboard](#)  
[Community Dashboard](#)

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## 2.2 Experience Builder

The screenshot shows the Shoalhaven City Council website with a blue header containing the logo and navigation links: Home, Water Quality, Coasts, Floodplain Risk Management, and Biodiversity. Below the header are four content tiles:

- Aquadata:** A person in a grey shirt is shown sampling water from a metal railing at a lake.
- Beachwatch:** A scenic view of a sandy beach with turquoise water and a tree in the foreground.
- Shoalwater/Dams:** An aerial view of a large dam structure across a wide river.
- Groundwater:** A landscape view of a wetland area with water and reeds.

At the bottom of the content area, there is a link: "Details of water quality sampling and analyses can be found [here](#)." and a button labeled "Estuary Health Report Cards".

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## 2.2 Experience Builder

The screenshot shows the Shoalhaven City Council website with a blue header containing the logo and a search bar for "Biodiversity". The main content area features a map of the Shoalhaven region with various locations marked. A legend indicates "Shoalhaven Bushcare Group Worksites" (green dots) and "Shoalhaven LGA" (yellow outline). To the right of the map are two photos showing volunteers in high-visibility vests participating in bushcare activities, such as planting and weeding.

Below the photos, the text reads: "Council partners work with volunteers to help preserve and improve our local environment in areas of natural beauty, primarily on Council-managed land. The program includes other 'Care' groups, such as Dunecare. Our Bushcare program:"

- Promotes and carries out ecologically sustainable management of natural areas
- Restores and maintains ecosystem health by helping the natural regeneration of indigenous plants (this is typically done by reducing the effect of weeds and other threats)
- Encourages community ownership of natural areas in a hands-on way.

Below this, it lists "Bushcare activities include:"

- Bush and dune regeneration
- Weed control
- Revegetation
- Wetland and creek restoration
- Ongoing care and maintenance of sites
- Seed collection and propagation
- Training and education

At the bottom of the content area, there is a button labeled "Find a Bushcare Group".

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## 2.3 Drone modelling

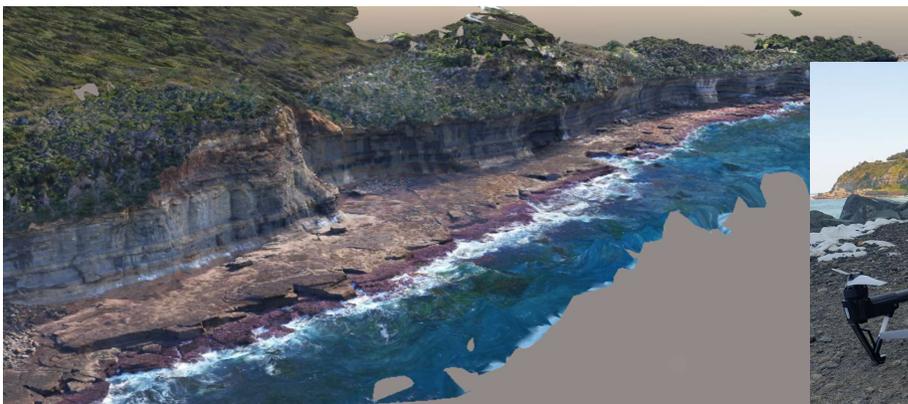
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### 2.3 Drone modelling

- > Photogrammetry modelling for existing conditions
- > <https://maps.au.cardno.com/murramarangdepotbeach/App/#%2F>



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# 2.4 3D visualisation

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Minnamurra River Boardwalk with commentary

Play (k) 0:08 / 4:33 Scroll for details

> <https://youtu.be/GO8Esh5WcTA>

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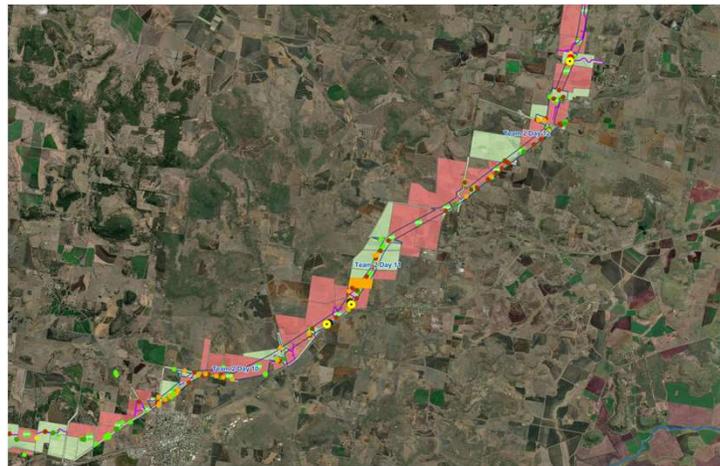
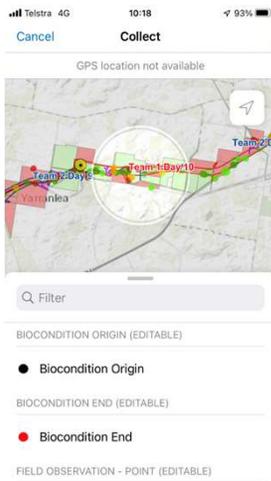
# 2.5 Field maps/portals

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## 2.5 Field maps



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## 2.6 Mapping Portals

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# 2.7 QR codes

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## 2.7 QR Codes

- > Your turn!
- > Scan this QR code for more details



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## Thank you

For more information

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Cassy Baxter  
*Technical Lead - Environment*

[www.stantec.com](http://www.stantec.com)  
[www.cardno.com](http://www.cardno.com)

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