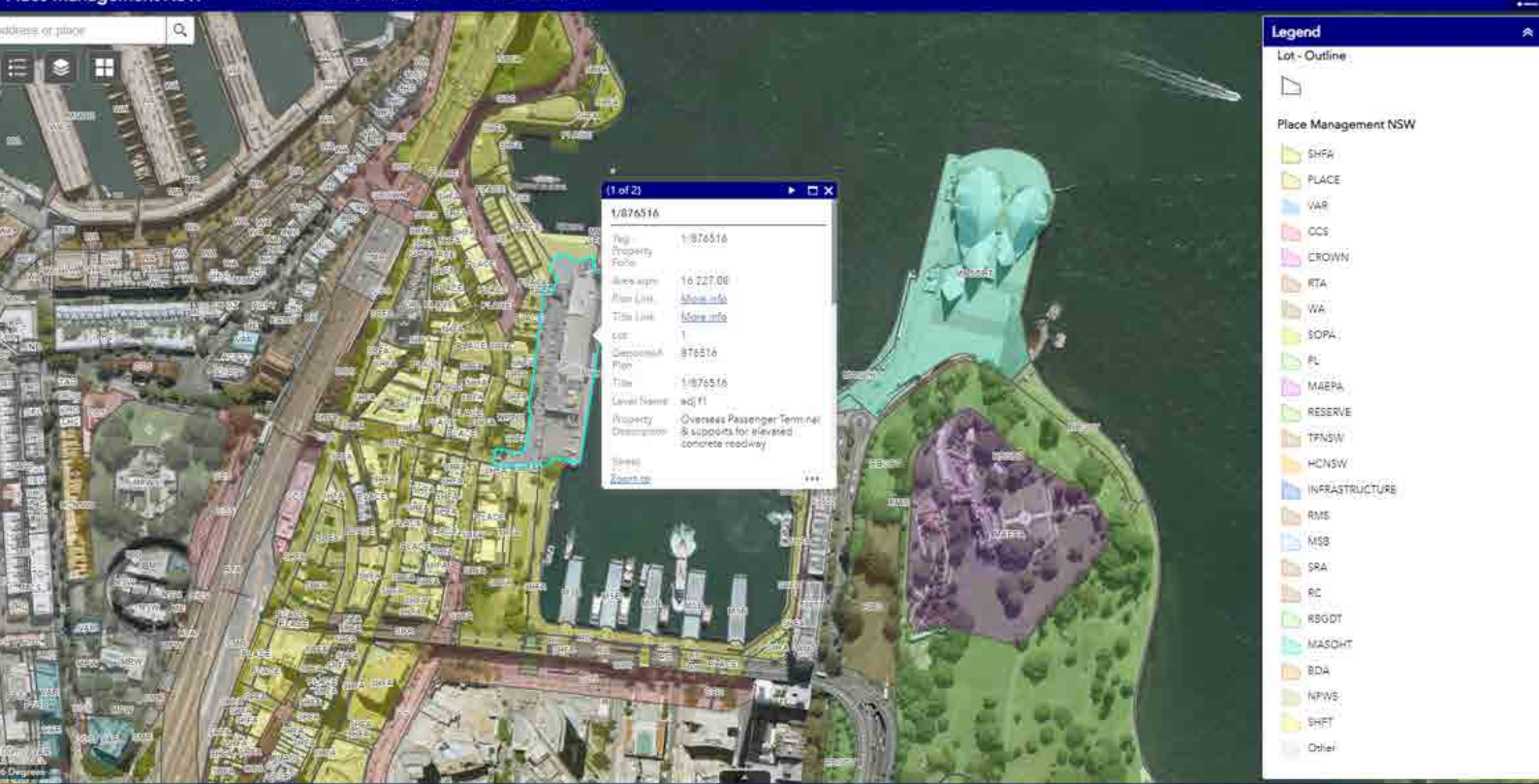


# Spatial Mapping





# Spatial Mapping

The NSW Public Works Spatial team consists of a multidisciplinary unit of Spatial, CAD and digital data specialists.

We provide spatial mapping support and digital CAD services to our inhouse infrastructure teams and external clients to create innovative digital solutions across a wide spectrum of NSW Government projects.

We ensure our web mapping products incorporate the most up to date information from external agencies including; best available imagery, emergency services information and other critical government spatial datasets allowing our clients to make better decisions.

Our interactive project reporting converts plain excel spreadsheets and field data into visually appealing dashboards complete with traffic light symbolisation of data, heatmap style mapping and dynamic charts. This reporting type allows the user to rapidly drill down on critical aspects of a project during presentations as an alternative to data heavy spreadsheets and tables.

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**Jarad Cannings**  
0418 208 985  
[jarad.cannings@pwa.nsw.gov.au](mailto:jarad.cannings@pwa.nsw.gov.au)

# Our Expertise

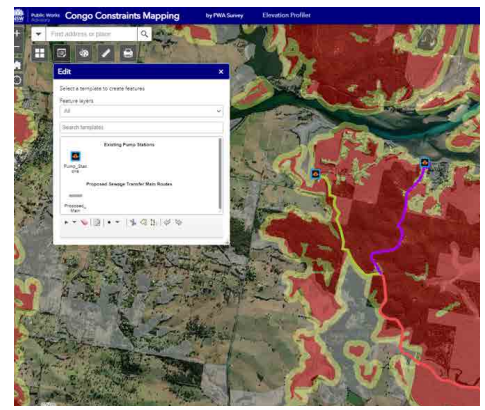
**NSW Public Works' Spatial** ensures the correct **digital mapping solution** is chosen for each and every project.

- Spatial asset data capture & analysis
- Web Mapping Applications
- GIS Dashboards
- Field Data Collection
- Site selection and constraint analysis
- Cartography
- Other GIS Services



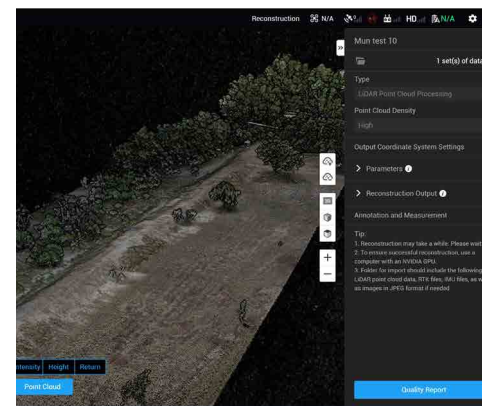
# Web Mapping Applications

By moving away from paper-based maps we can create practical interactive web-mapping applications. Utilising ArcGIS Online we can create WebApps to allow superior visualisation of data across a project team and with clients. Custom tools within the WebApp allow interaction with the data, editing capabilities, routing, filtering and more analysis. The WebApps can display data from a variety of different sources including “live” streams of data from government agencies such as Dept. of Planning, Industry and Environment. Keep track of asset locations, a property portfolio and other features. We can control security settings of individual datasets to restrict access depending on a users role and there is also the potential to create WebApps for use on Public-facing websites.



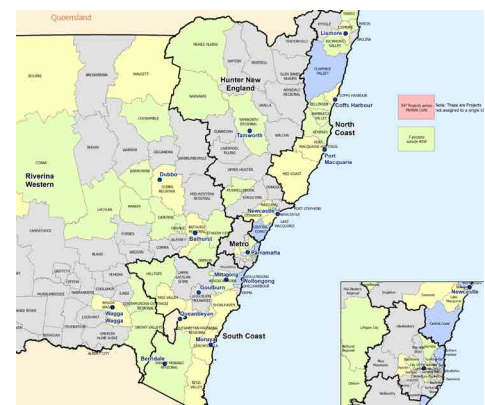
# Field Data Collection

Field data collection is a critical part of infrastructure projects, our team can develop field data collection apps that work on Android and iOS devices utilising ESRI ArcGIS Field Maps. We can tailor the solution depending on what the task is, add fields, ability to capture photos and add documents or videos to a collected feature. Data can be collected live online and viewed back in the office in a WebApp or dashboard or can be collected offline if the data is being collected in an area with limited mobile signal. Data collected in offline mode can be “checked in” as soon as mobile signal returns.



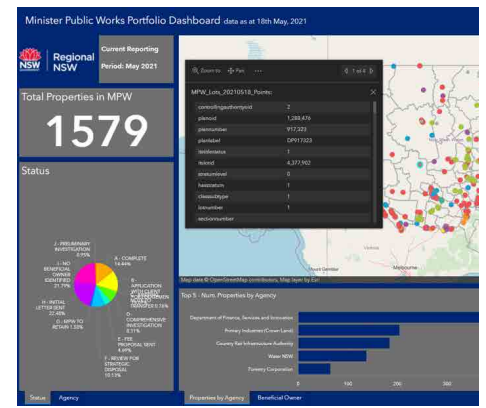
# Cartography

Spatial maps are a valuable tool to visualise data, display project locations or evaluate site constraints. We can prepare maps for multiple uses including project briefings, presentations, briefing notes or large format wall maps up to AO size.



# GIS Dashboards

Dashboards are increasing in popularity and by utilising ArcGIS Online Dashboards you can move away from spreadsheets and MS Access type databases and visualise your data with this exciting and viewer friendly innovation. Obtain a snapshot of stats, graphs, charts, interact with an in-built map and filter by map feature to give you project or feature specific data. From map features, link to documents, project plans or other websites direct from the dashboard. Control access to dashboards based on user roles, have your own customised view of a project or budget. Data updates can be automated so your dashboard updates at set times.



# Spatial Asset Data Capture and Analysis

Our Survey & CAD team work together to deliver an Asset Capture and Management solution utilising modern survey technology and contemporary CAD software packages. Room dimensions and asset information are collected in the field, drafted in the office and then disseminated to clients quickly and efficiently for use in Asset Management Systems.



# Other GIS Services

GIS is a powerful tool and can perform many analysis functions such as site suitability, create heat maps, density mapping, view and convert to/from different types of datasets, imagery from planes, drones and satellites, CAD data, KML data and more. We utilise ESRI ArcGIS, ArcGIS Pro, ArcGIS Online, Microsoft Access Feature Manipulation Engine (FME) and Bentley products.



# Why Choose NSW Public Works?



## Accredited for planning and delivery of capital works

NSW Public Works is accredited under the NSW Government Agency Accreditation Scheme for Construction to manage the planning and delivery phases of construction and capital works procurement. NSW State and Local Government entities can directly engage the services of NSW Public Works under the provision of NSW Government Procurement Board Direction PBD 2020-04 and Section 55 of the Local Government Act 1993, providing efficiencies and cost savings.



## Strong focus on quality, environmental and safety management

NSW Public Works operates under triple certification for quality, occupational health and safety (WHS) and environmental (QSE) management systems. These systems and processes provide the foundation for delivering quality projects and a continuous improvement culture, that embraces QSE leadership at all levels and integrates QSE into all activities. NSW Public Works' Project Management Framework is the backbone of our quality system and is used to manage our projects and ensure we deliver to agreed requirements.



## State-wide resources

Regional clients benefit from our state-wide network of offices enabling them to source expert project management personnel familiar with the conditions and construction industry issues in their area. This proximity reduces servicing costs, facilitates improved stakeholder communications and enables us to respond quickly to your needs, providing a single point of contact for all services.



## Government relationships and knowledge

Successful delivery of complex infrastructure projects relies on effective interaction with stakeholders and regulatory government agencies. NSW Public Works' unique position within NSW Government enables us to bridge the gap between our clients and Government stakeholders to ensure necessary consultations and approvals are undertaken efficiently and effectively.



## Managed risks

We place considerable emphasis on advising clients of their risks on projects, including the options and costs to manage these risks. Wherever possible, risks are identified early and inform our planning and procurement strategy development processes. Risks are continuously monitored and updated as projects progress and discussed and managed with clients and contractors.

# Working Across NSW

## HUNTER NEW ENGLAND REGION

**Newcastle**  
117 Bull Street  
Newcastle West NSW 2302

**Tamworth**  
155-157 Marius Street  
Tamworth NSW 2340

## NORTH COAST REGION

**Lismore**  
120 Dally Street  
Lismore NSW 2480

**Coffs Harbour**  
359 Harbour Drive  
Coffs Harbour NSW 2450

**Port Macquarie**  
Level 2, 41-47 Horton Street  
Port Macquarie NSW 2444

## RIVERINA/WESTERN

**Bathurst**  
Level 1, 346 Panorama Avenue  
Bathurst NSW 2795

**Dubbo**  
34 White Street  
Dubbo NSW 2830

**Broken Hill**  
Level 1, 32 Sulphide Street  
Broken Hill NSW 2880

**Wagga Wagga**  
2-6 Coleman Street  
Wagga Wagga NSW 2650

**Dareton**  
1998 Silver City Highway  
Dareton NSW 2717

## SYDNEY METRO

4 Parramatta Square  
12 Darcy Street,  
Parramatta NSW 2150

## SOUTH COAST REGION

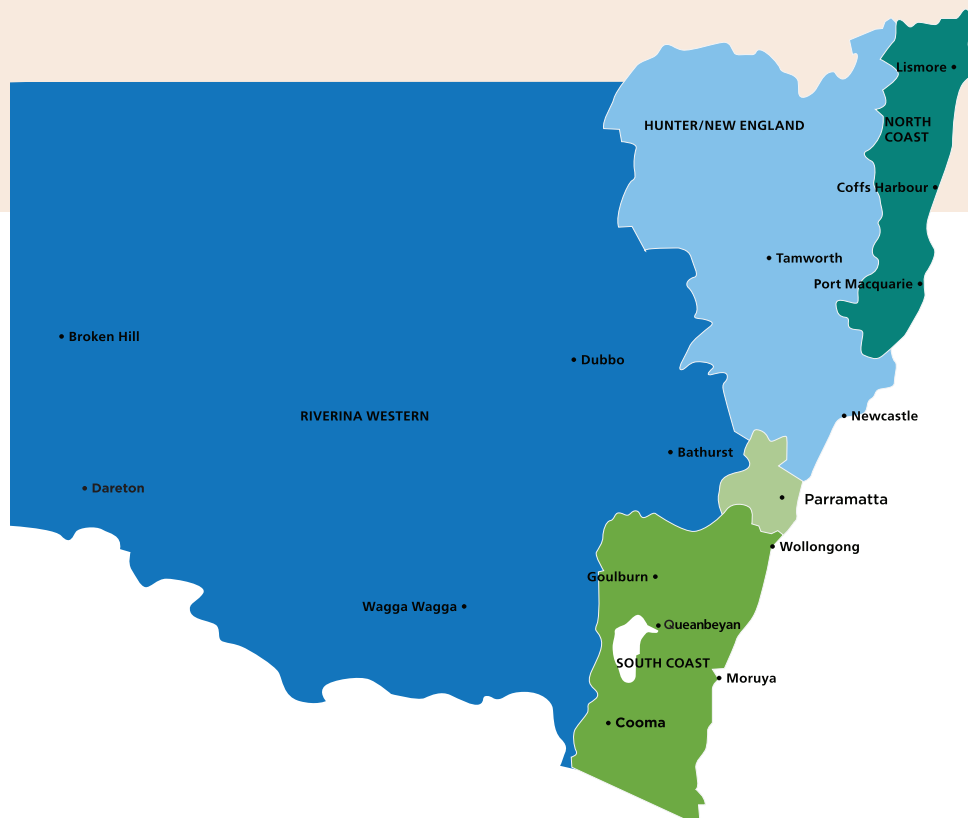
**Wollongong**  
Level 3, Block E  
84 Crown Street  
Wollongong NSW 2500

**Goulburn**  
Suite 5, 167 Auburn Street  
Goulburn NSW 2580

**Moruya**  
66 Campbell Street  
Moruya NSW 2537

**Cooma**  
State Government Office,  
1 Sharp Street,  
Cooma NSW 2630

**Queanbeyan**  
Ground Floor East,  
11 Farrer Place,  
Queanbeyan 2620



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