NSW GOVERNMENT | Spatial Services

# Mapped Out – Administrative Spatial Programs

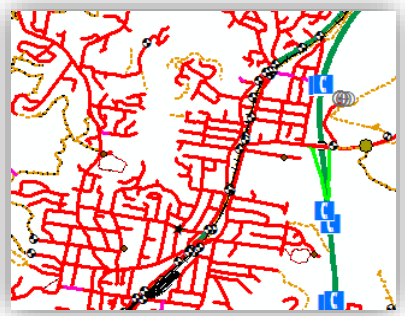
Dr Greg Windsor – Manager Administrative Spatial Data

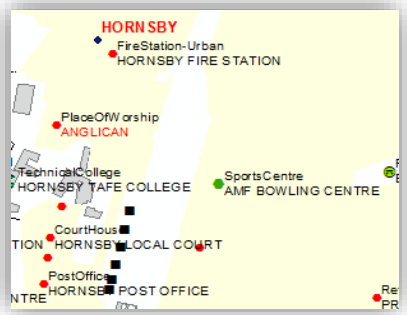
November 2018

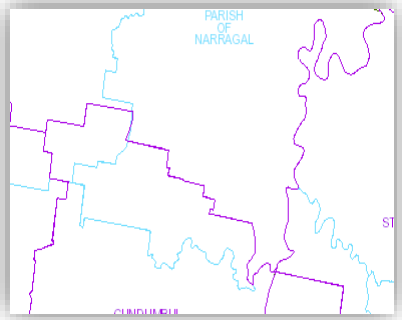
# Administrative Spatial Programs

**Program Activities:**

- Addressing – Standardise, update, upgrade and disseminate NSW geocoded addresses.
- TFOIP – Maintain and disseminate the transport and features of interest (FoI) themes of the DTDB.
- Administrative Boundaries– Maintain  and disseminate the spatial administrative boundary datasets of the Digital Cadastral Database (DCDB).






**Transformation Projects:**

- 4D Spatial Administrative Features
- NSWPoint – Develop and implement WofG transaction and bulk online geocoding tools.
- NSW Transaction Tracker – Capture and provide summary statistics on government transactions.

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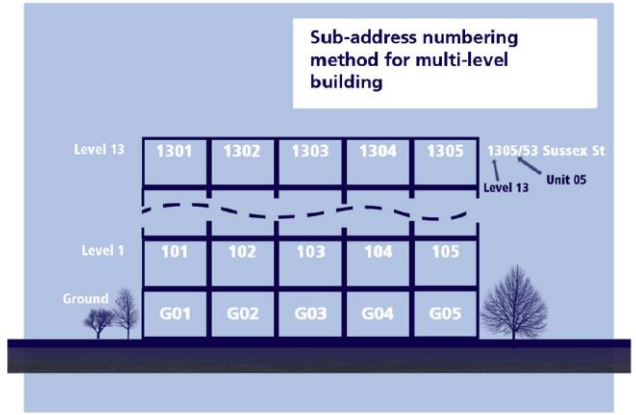
# 4 Dimensional Addresses & Features of Interest

**CURRENT SITUATION**

- Addresses and features of interest (FoI) are captured and stored as X Y two dimensional points (temporal control available through SS delivery).
- FoI are not real world constructs, they are attributes of real world constructs.
- In the real world an address has spatial and temporal dimensions and relates to more than just property.
- Z is not currently captured as part of the address geocode and is not easily derived from the address string.



# How do we easily move to 4D?

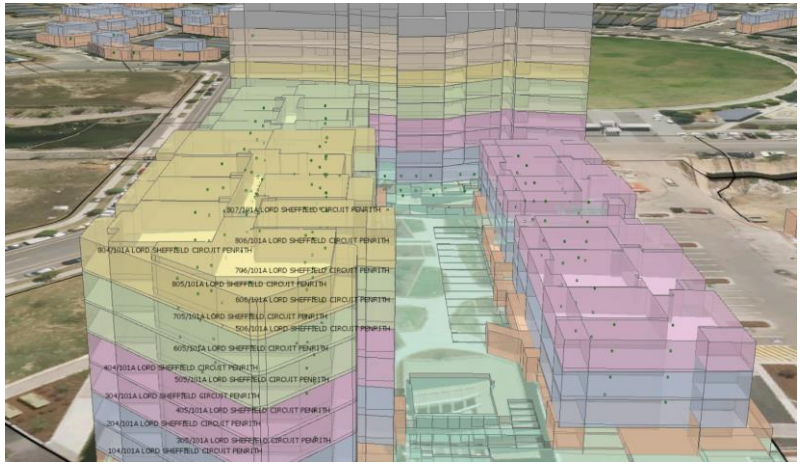
**What do we have?**

- Geocoded addresses and FoIs as part of the NFSDI.
- Building foot prints covering NSW (from PSMA Geoscape).
- LiDAR showing height and reform.
- Land XML of strata.
- Known relationships between address and strataplan.

# How do we easily move to 4D?

**The 4D Addressing and FoI P.O.C.**

- Create 3D building shell – Add height and roof form to foot print from LiDAR.
- Apply strata to building shell. Automated Z is derived by applying the number of levels to building heights.
- Derive 3D addresses and FoIs from known relationships from NXSW FSDI.
- 4D temporal control through delivery systems.



# Facts and Figures NSW Addressing

- 3,887,226 Addresses in NSW Addressing Database
- 9,575 new Addresses per month
- 17,511 Address modifications per month
- 325,032 Address changes per year!

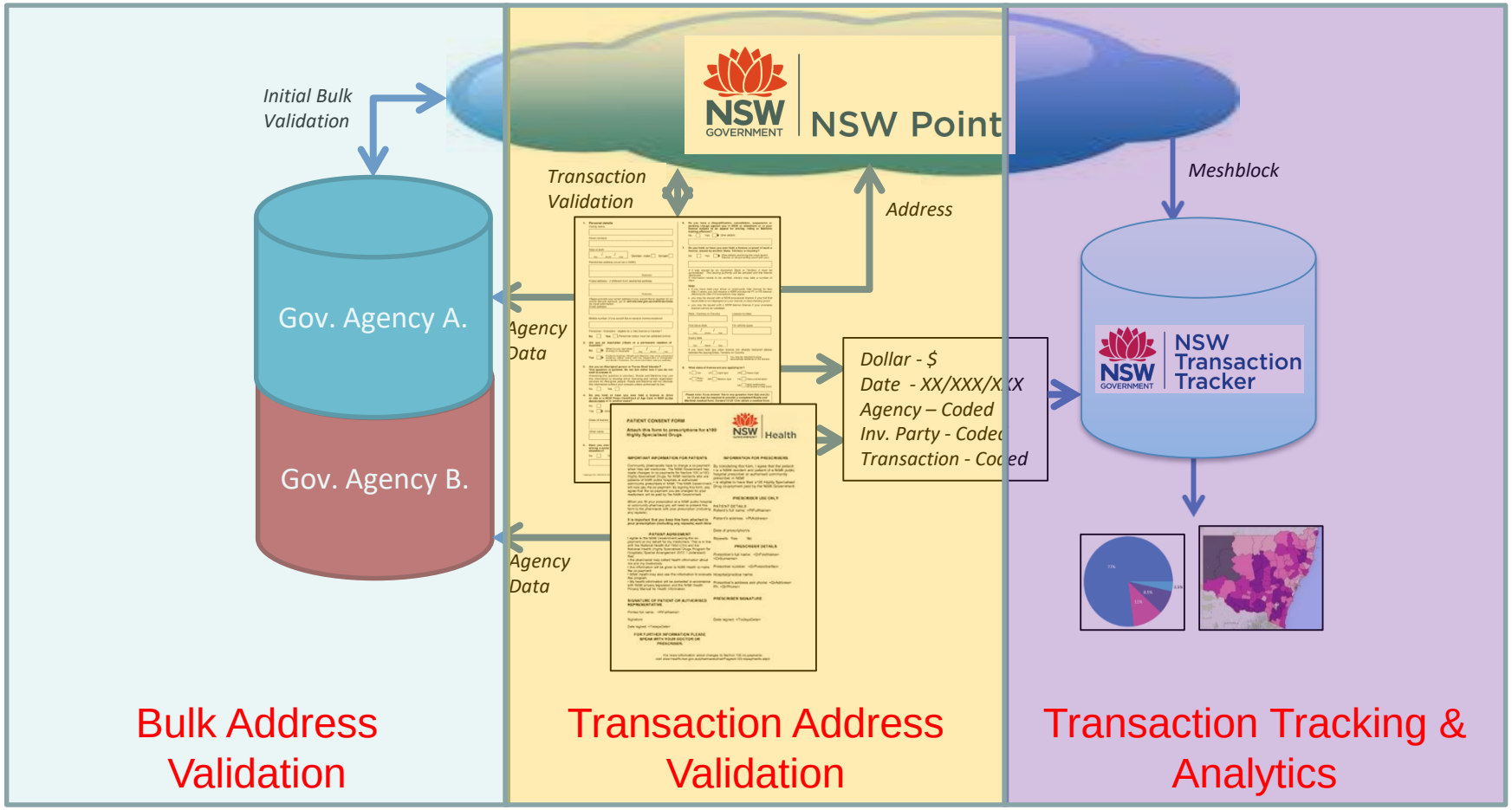
# Address Validation & Geocoding Services

Validates an address against an authoritative source

Locates the address on the Earth’s surface by Lat/Long (geocoding)

Provides related geographical information for location based reporting and analytics

# NSW Point Web Services – Address Validation Services



# NSW Point – Bulk Address Validation

**Loose Fill Asbestos**

5,851 Incorrect Addresses

**Aluminium Cladding**

740 Incorrect addresses

**Liquor Licensing Applications**

4,984 Incorrect Addresses

**NSW Swimming Pool Register**

422,322 Records Updated

**Data Analytics Centre**

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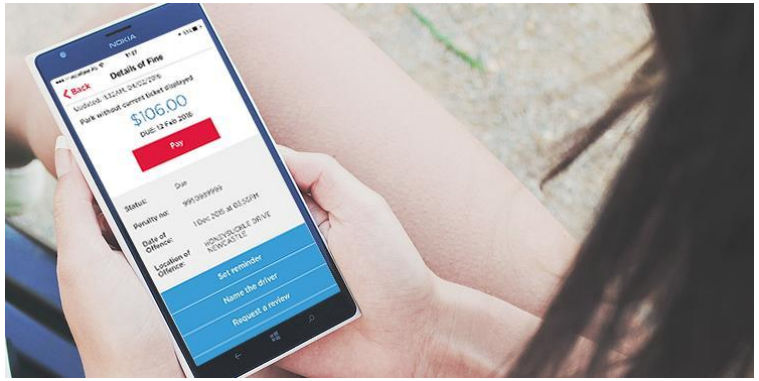
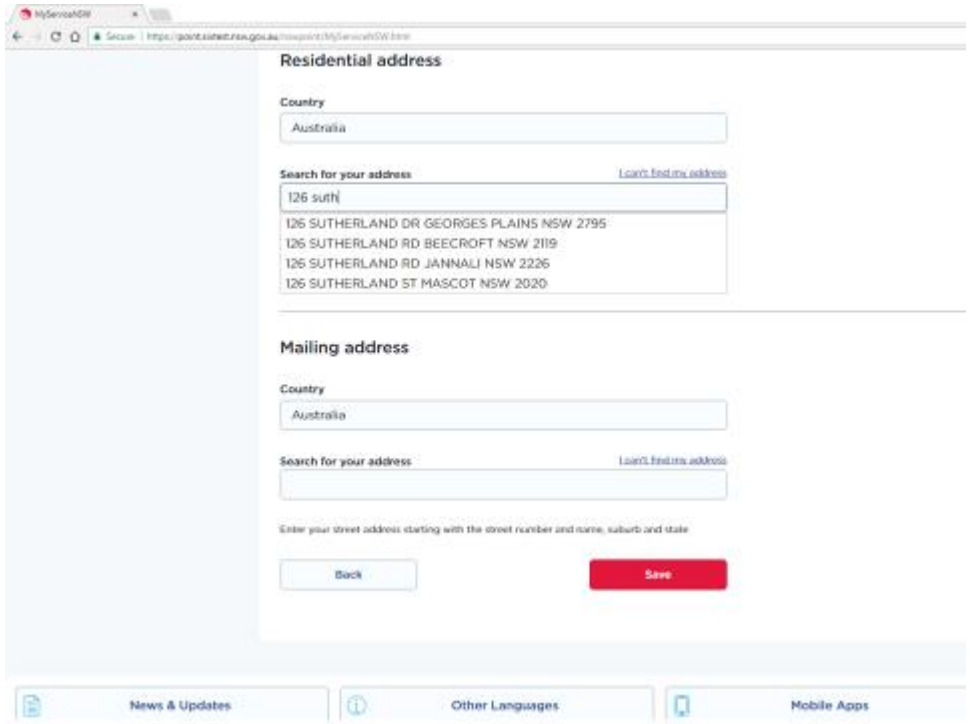
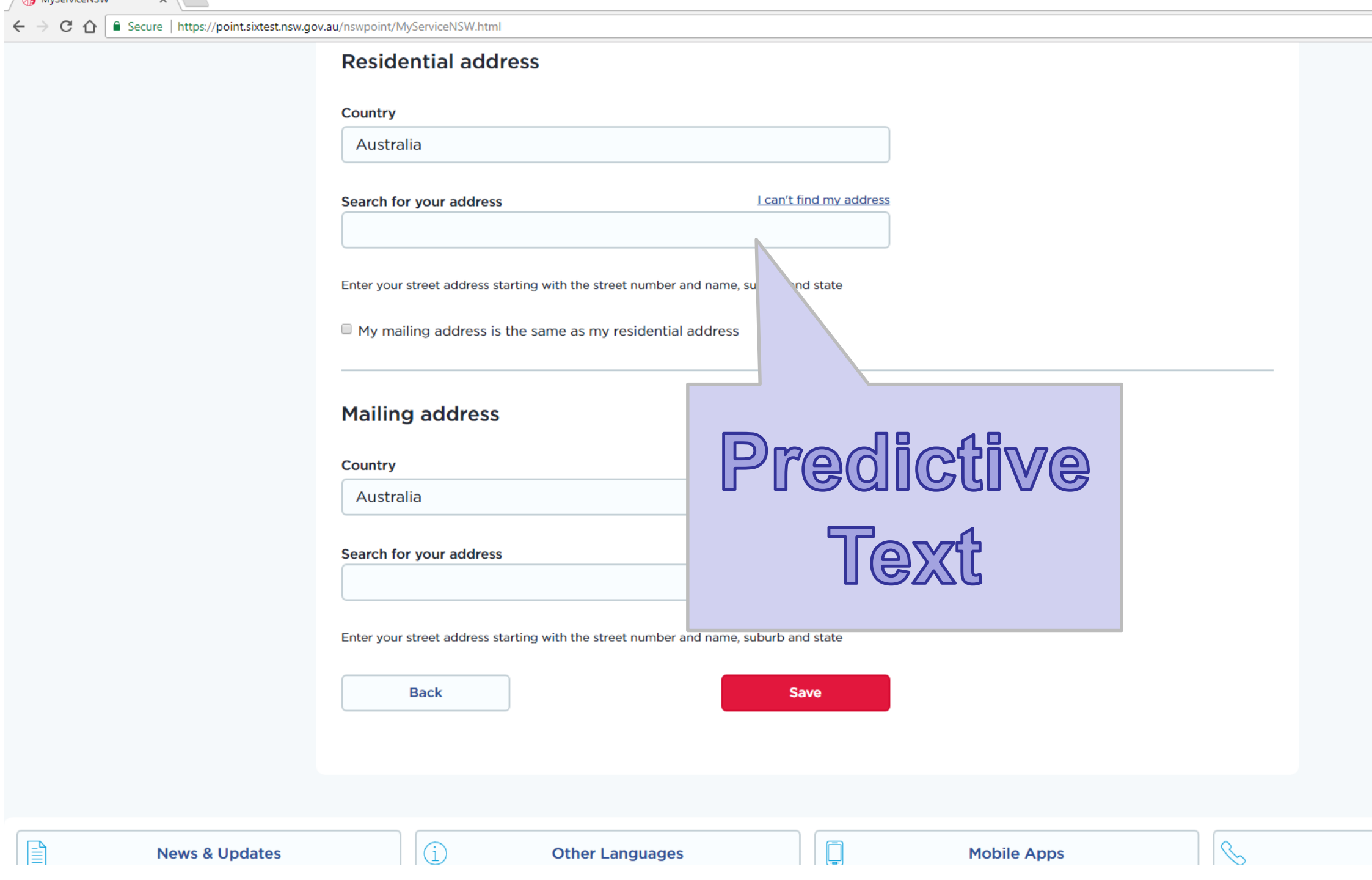
7.5 million Records Validating

# NSW Point – Transaction Address Validation

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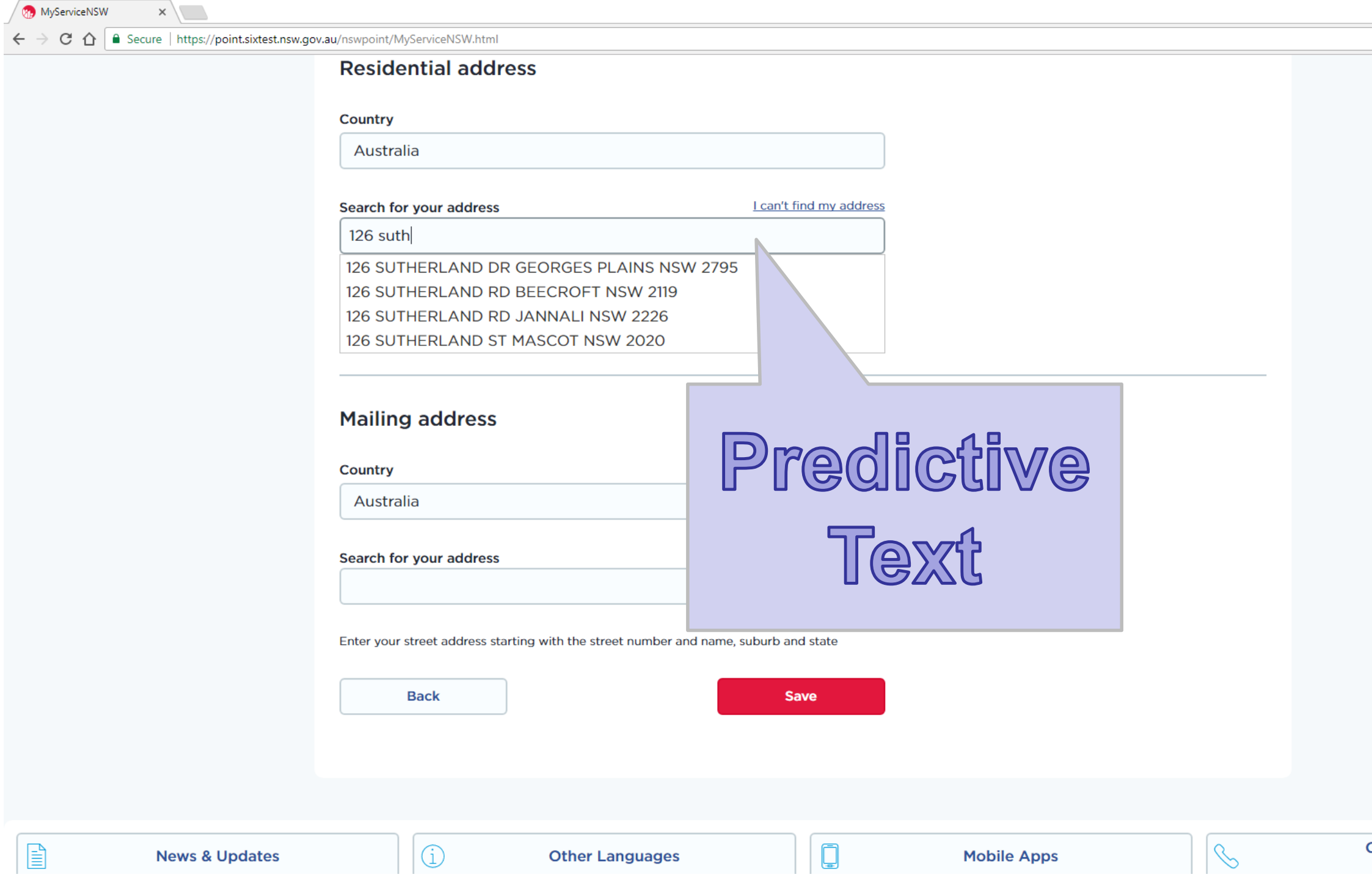
Residential address
Country
Australia
Search for your address
I can't find my address
Enter your street address starting with the street number and name, su nd state
My mailing address is the same as my residential address
Mailing address
Country
Australia
Search for your address
Enter your street address starting with the street number and name, suburb and state
Back
Save
Predictive Text
News & Updates
Other Languages
Mobile Apps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126 SUTHERLAND RD BEECROFT NSW 2119
126 SUTHERLAND RD JANNALI NSW 2226
126 SUTHERLAND ST MASCOT NSW 2020
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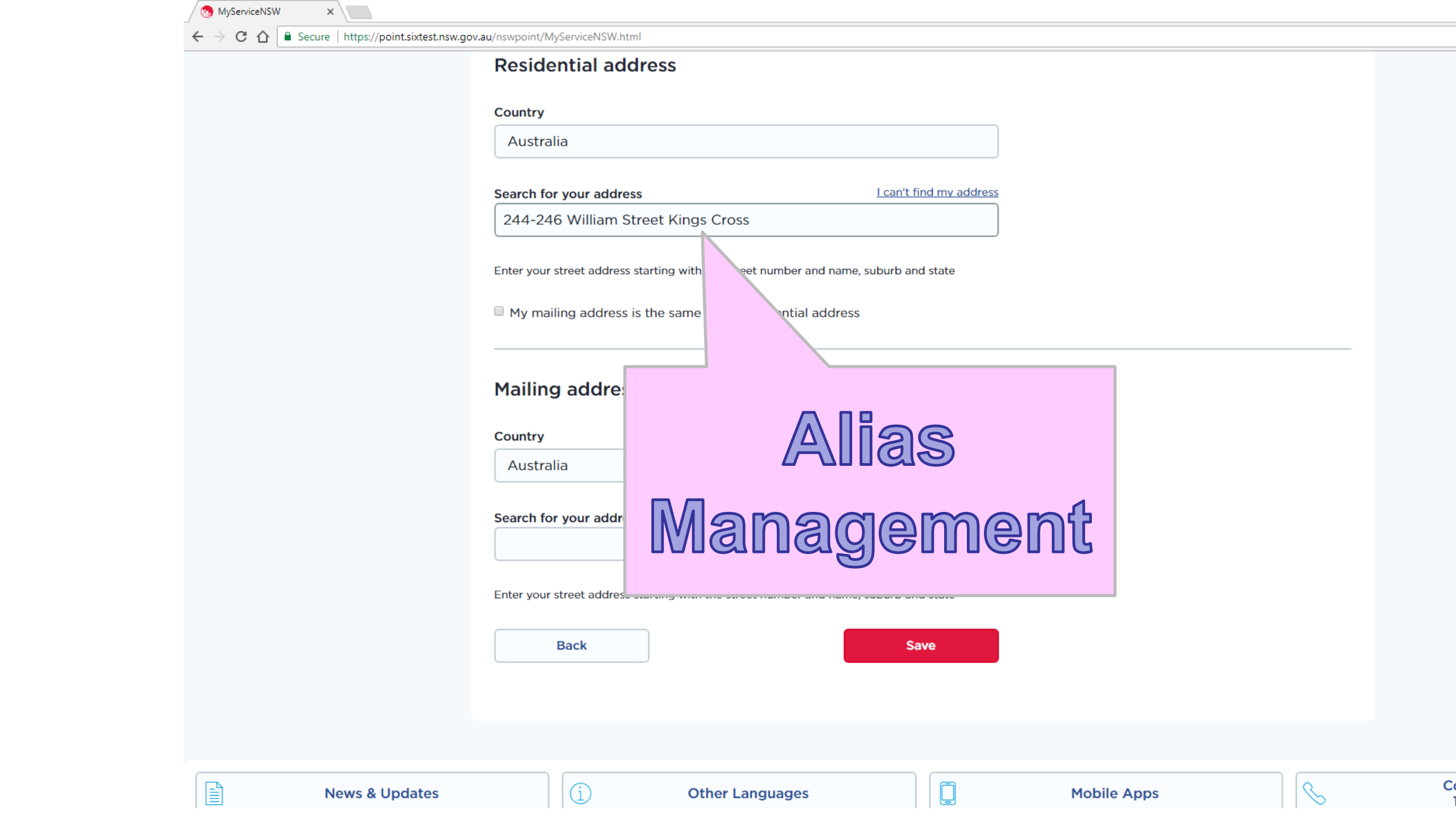
Predictive Text
News & Updates
Other Languages
Mobile Apps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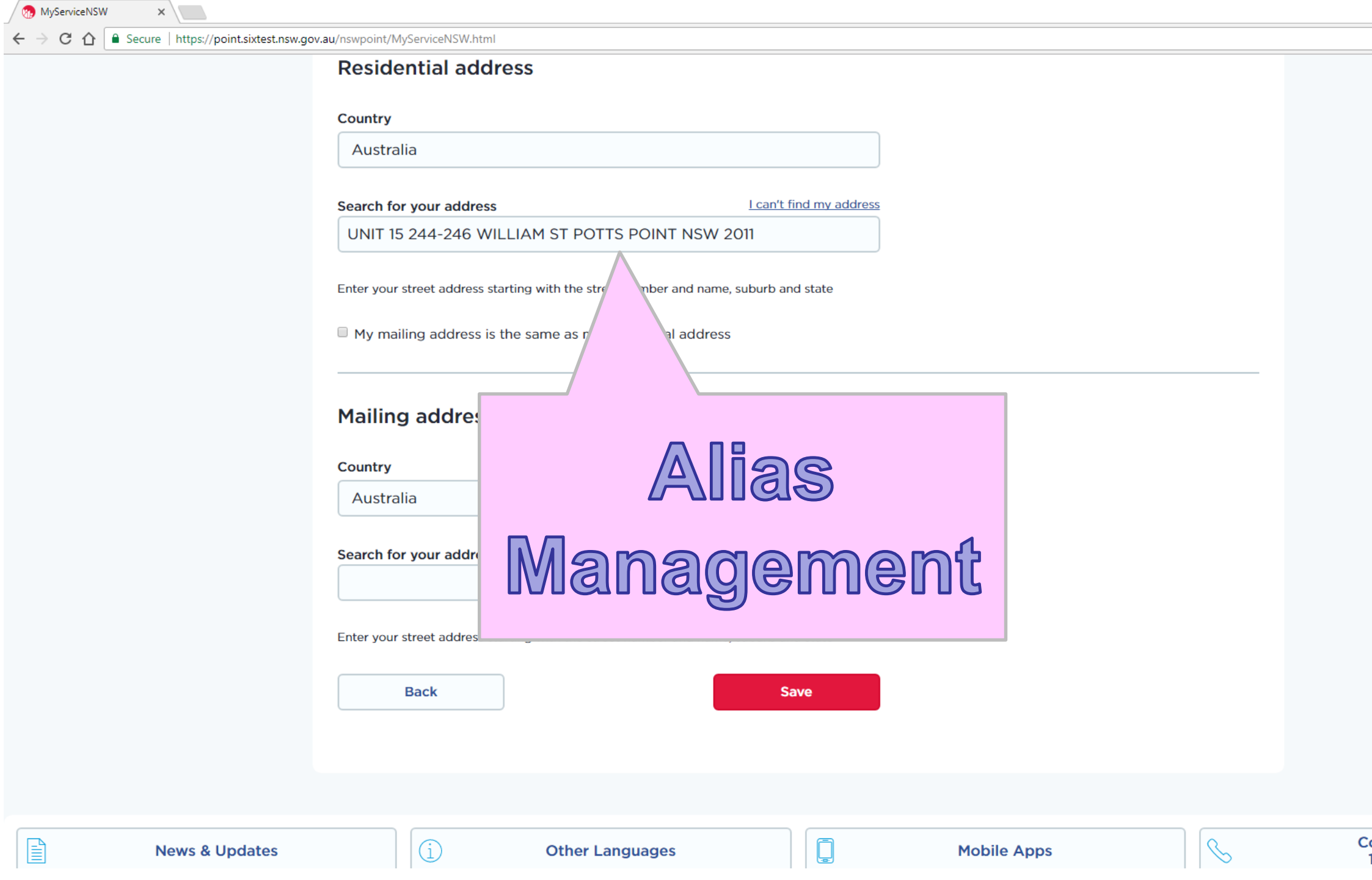
News & Updates
Other Languages
Mobile Apps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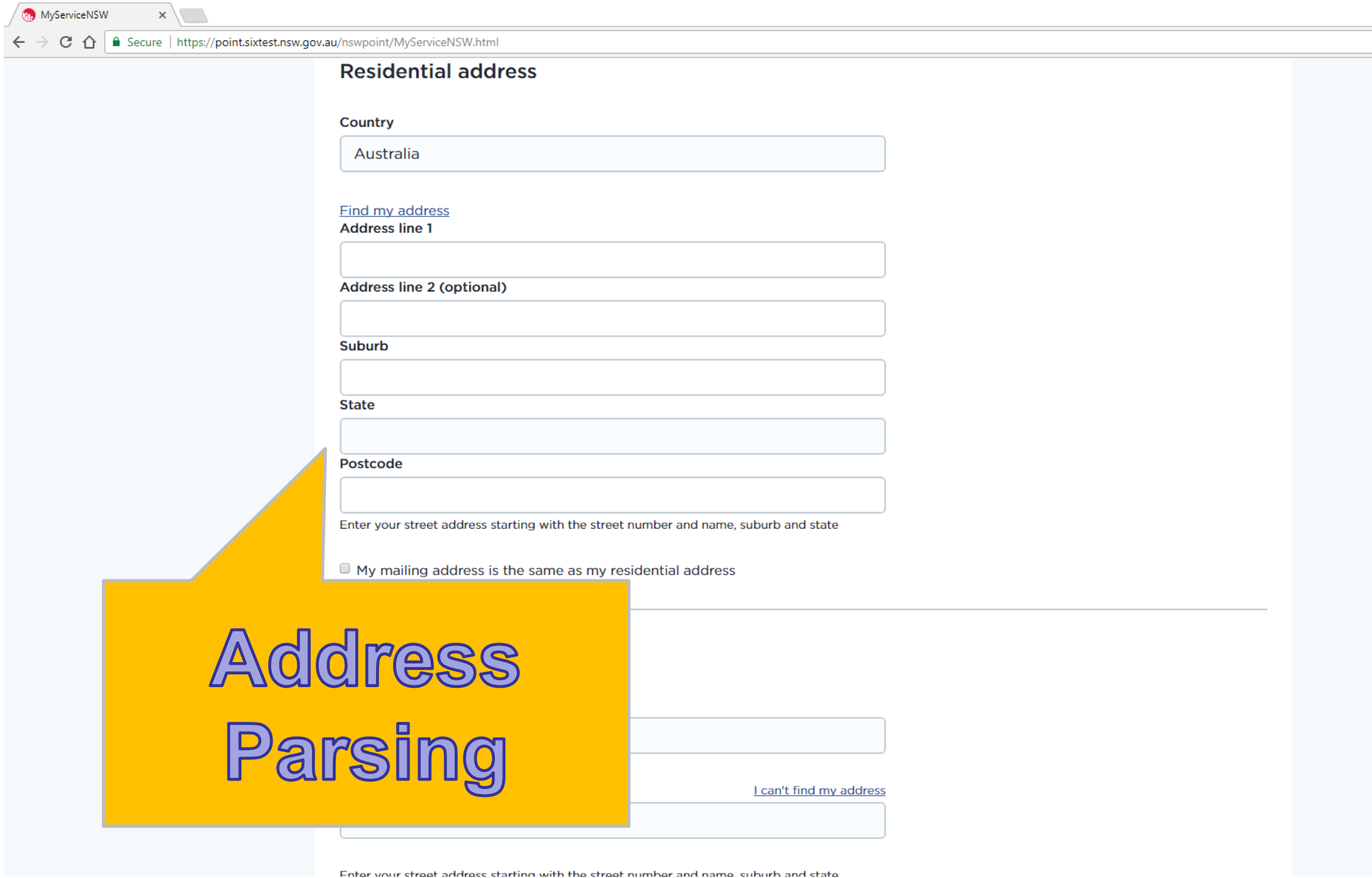
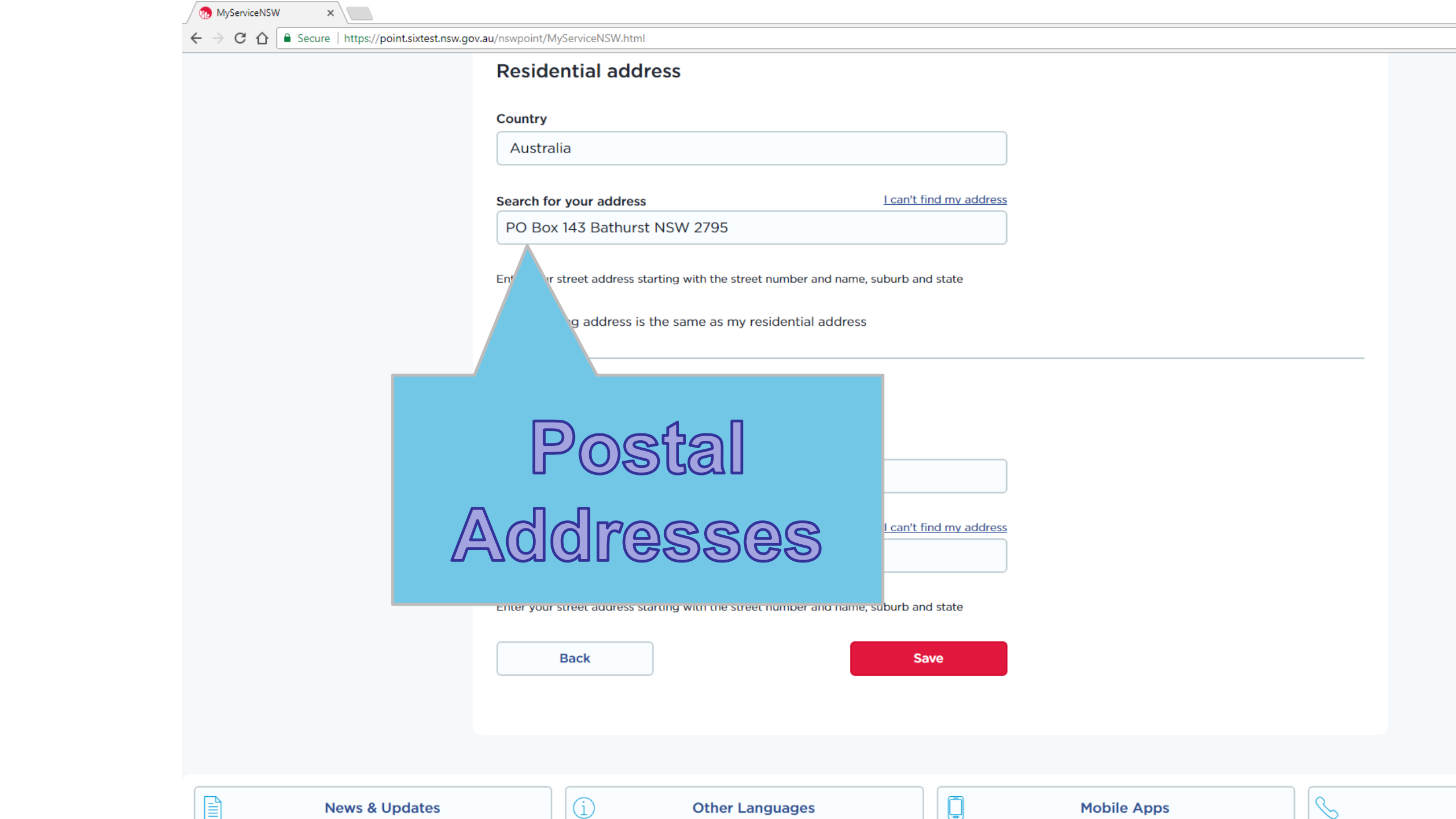

MyServiceNSW
Secure | https://point.sixtest.nsw.gov.au/nswpoint/MyServiceNSW.html
Residential address
Country
Australia
Find my address
Address line 1
Address line 2 (optional)
Suburb
State
Postcode
Enter your street address starting with the street number and name, suburb and state
My mailing address is the same as my residential address
I can't find my address
Enter your street address starting with the street number and name, suburb and state
Address Parsing


MyServiceNSW
Secure | https://point.sixtest.nsw.gov.au/nswpoint/MyServiceNSW.html
Residential address
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Search for your address
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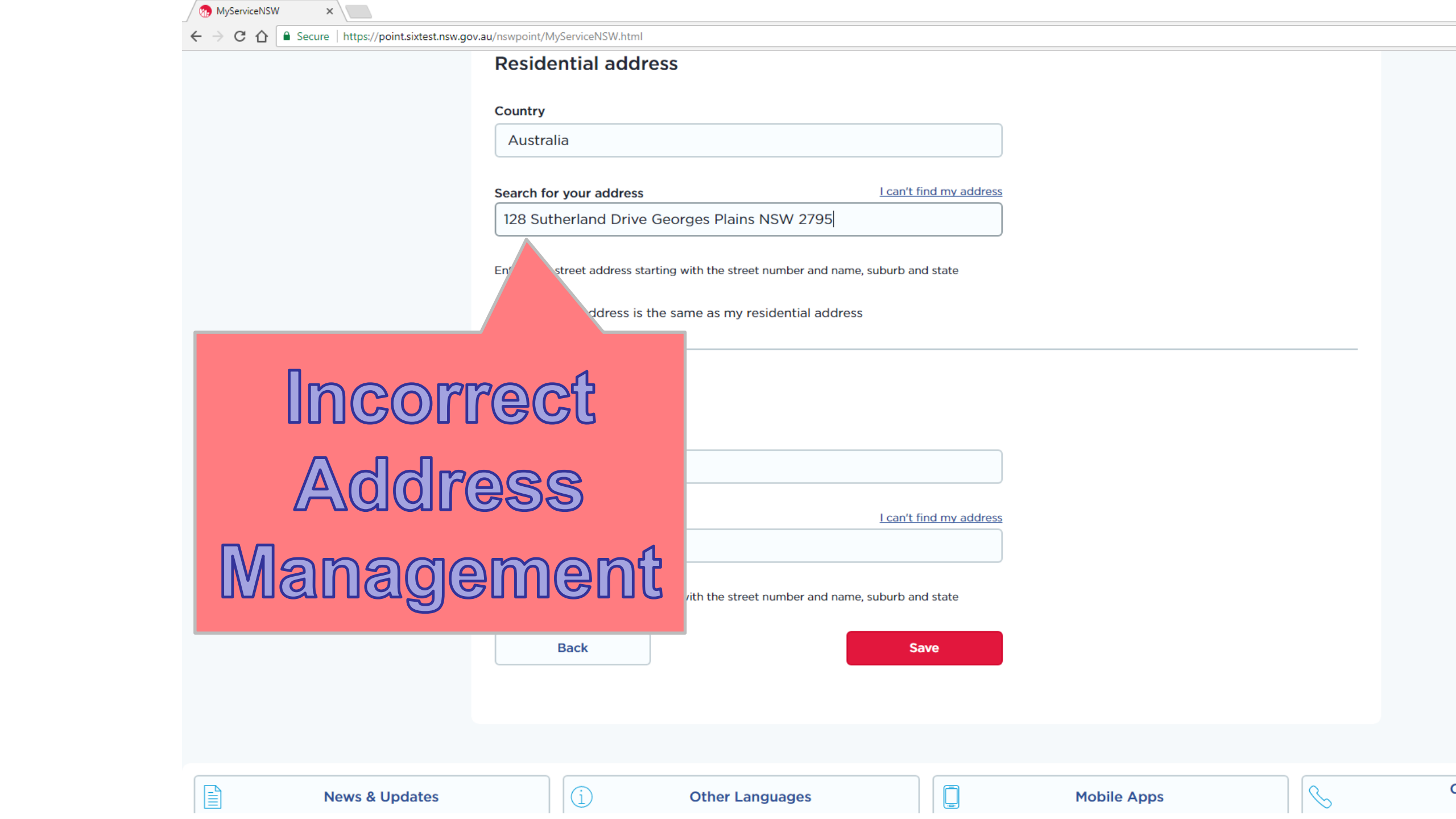
PO Box 143 Bathurst NSW 2795
r street address starting with the street number and name, suburb and state
g address is the same as my residential address
I can't find my address
Enter your street address starting with the street number and name, suburb and state
Back
Save
Postal Addresses
News & Updates
Other Languages
Mobile Apps


MyServiceNSW
Secure | https://point.sixtest.nsw.gov.au/nswpoint/MyServiceNSW.html
Residential address
Country
Australia
Search for your address
I can't find my address
128 Sutherland Drive Georges Plains NSW 2795
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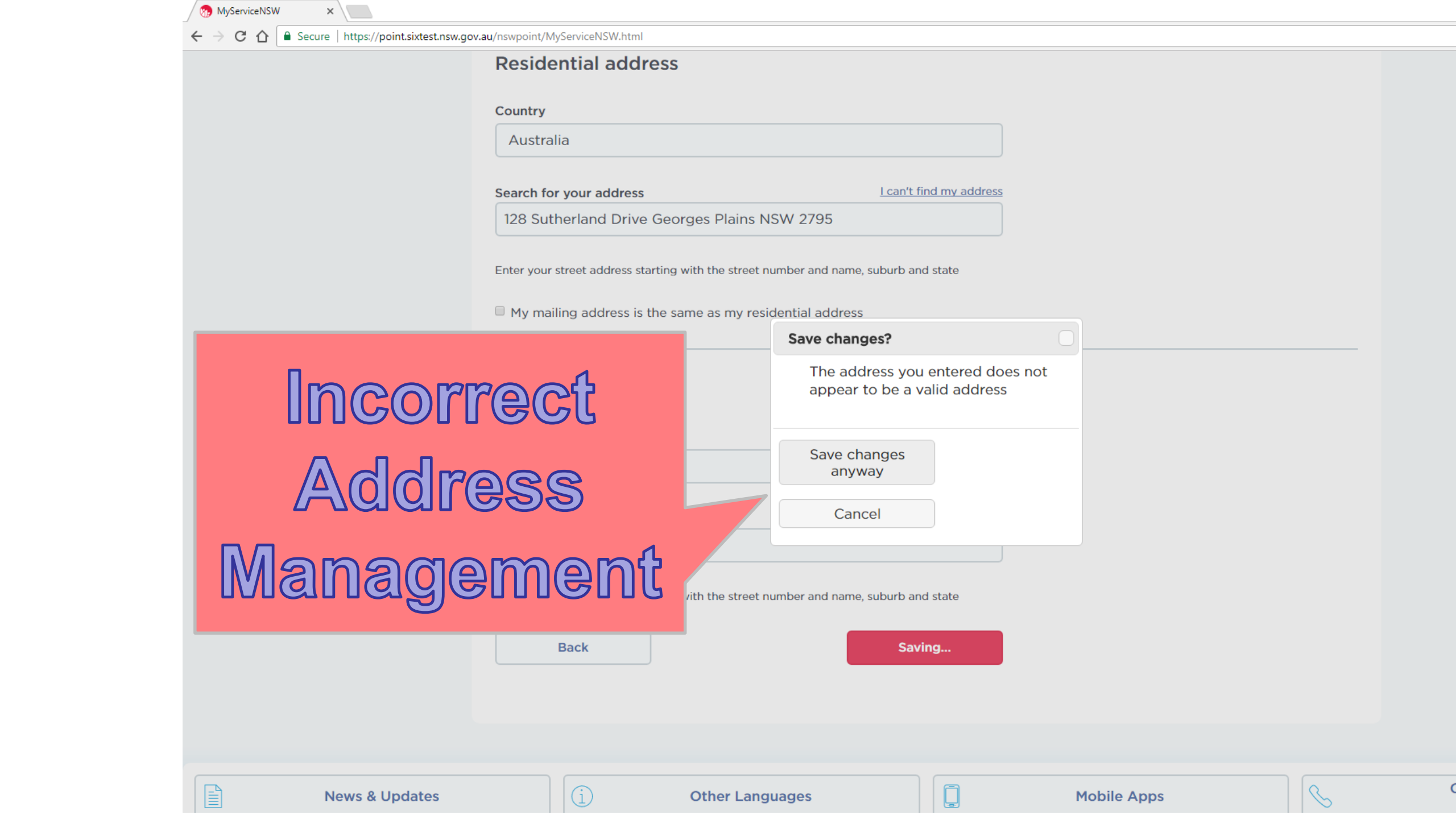
I can't find my address
Back
Save
News & Updates
Other Languages
Mobile Apps


MyServiceNSW
Secure | https://point.sixtest.nsw.gov.au/nswpoint/MyServiceNSW.html
Residential address
Country
Australia
Search for your address
I can't find my address
128 Sutherland Drive Georges Plains NSW 2795
Enter your street address starting with the street number and name, suburb and state
My mailing address is the same as my residential address
Save changes?
The address you entered does not appear to be a valid address
Save changes anyway
Cancel
Incorrect Address Management
ith the street number and name, suburb and state
Back
Saving...
News & Updates
Other Languages
Mobile Apps

# Documentation & Demonstration

NSW GOVERNMENT Spatial Services

**NSW Point**

**Documentation Roadmap**

https://point.sixtest.nsw.gov.au/index.html

# NSW Point Customers

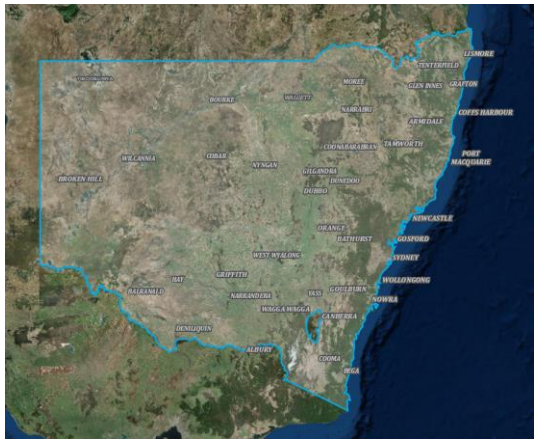
## *PRODUCTION SERVICE USERS*

NSW Pet Companion Register

NSW Falcon Firearms Project

NSW Easy to do Business

NSW Live Address Search



# NSW Point Customers

## *CURRENTLY EVALUATING OUR SERVICES*

NSW GOVERNMENT Planning & Environment

SCHOOL INFRASTRUCTURE NSW

The Royal Botanic Garden Sydney

NSW GOVERNMENT Office of Local Government

NSW GOVERNMENT Revenue

NSW GOVERNMENT Education & Communities

NSW GOVERNMENT Transport for NSW

# NSW Transaction Tracker

Report by value

Report by service

## NSWales Transaction Tracker Data

Refresh Table » start date end date

**Select dates to view. Leave blank for most recent entries. (End date exclusive)**

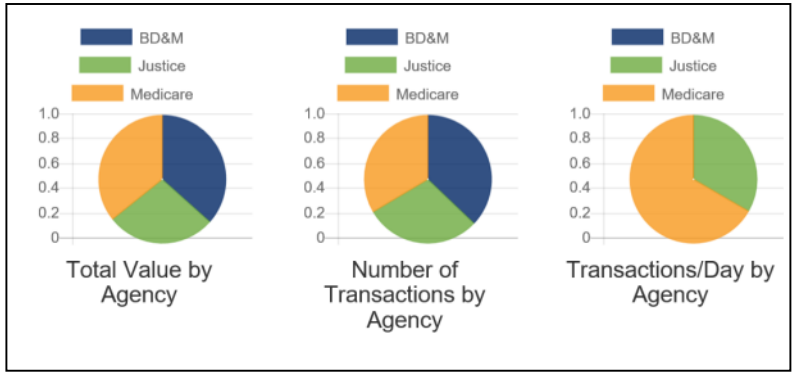
| # | Date | Meshblock | Agency | SA1 | Transaction | Value |
|---|---|---|---|---|---|---|
| 2465501 | 2017-08-16 | 10898790000 | Medicare | 10202104812 | 3.2.1 | 175.5 |
| 2465500 | 2017-08-16 | 10052891000 | Justice | 10301105913 | 2.1.2 | 0 |
| 2465499 | 2017-08-16 | 10051500000 | Medicare | 10301105848 | 3.3.3 | 150.25 |
| 2465498 | 2017-08-15 | 11205209100 | Birth Deaths and Marriages | 10301105848 | 1.1.1 | 15 |
| 2465497 | 2017-08-15 | 11205209100 | Birth Deaths and Marriages | 10301105848 | 1.1.1 | 23 |
| 2465496 | 2017-08-15 | 11205787000 | Birth Deaths and Marriages | 10301105848 | 1.1.2 | 34 |

Report by provider

Report by location

Report by date

Visualise by map or by dashboard



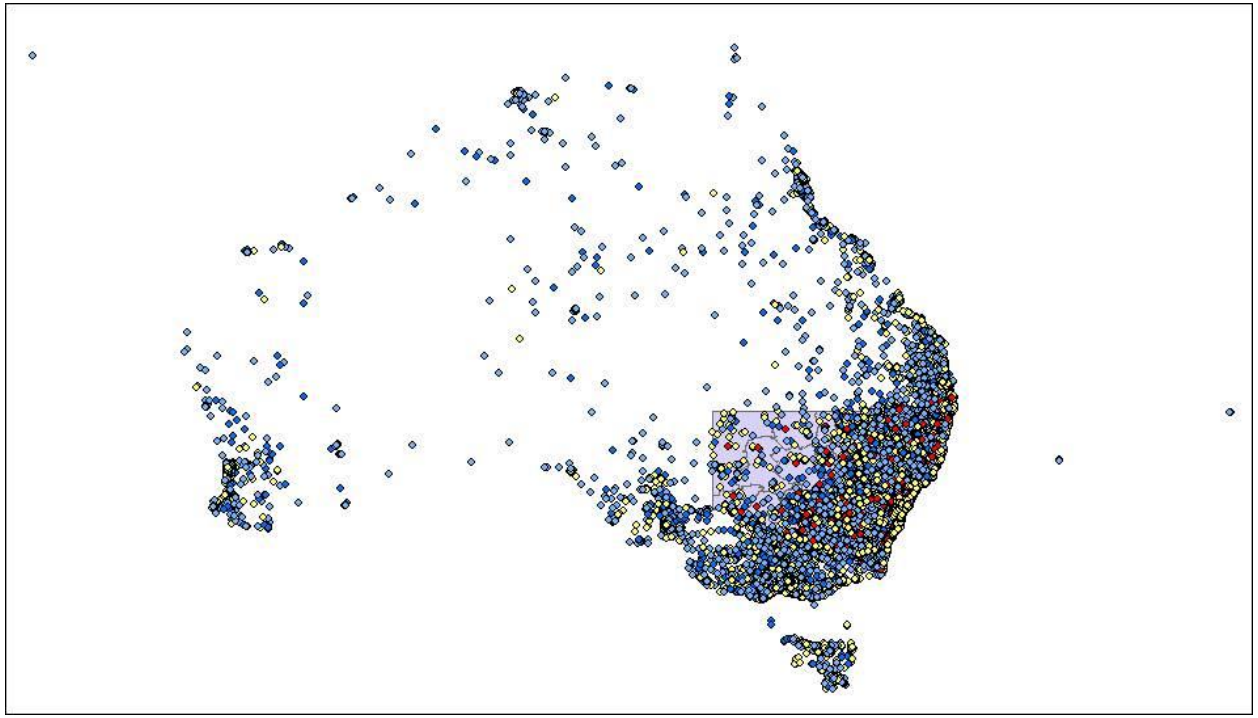
# NSW Point - Benefits

Up to Date

Geocoded

Comprehensive

Economical



Real time Government service reporting

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November 2018