

Disclaimer:  
 1. Dams were assumed full of water at the start of the event.  
 2. Filtering Criteria: Extent has been kept when:  
 - Depth > 0.10 m; OR  
 - Depth > 0.05 m AND (Velocity \* Depth) > 0.025 m<sup>2</sup>/s; OR  
 - Velocity > 2 m/s.  
 Further to these criteria, "puddles" of less than 100 m<sup>2</sup> were removed from the extent.

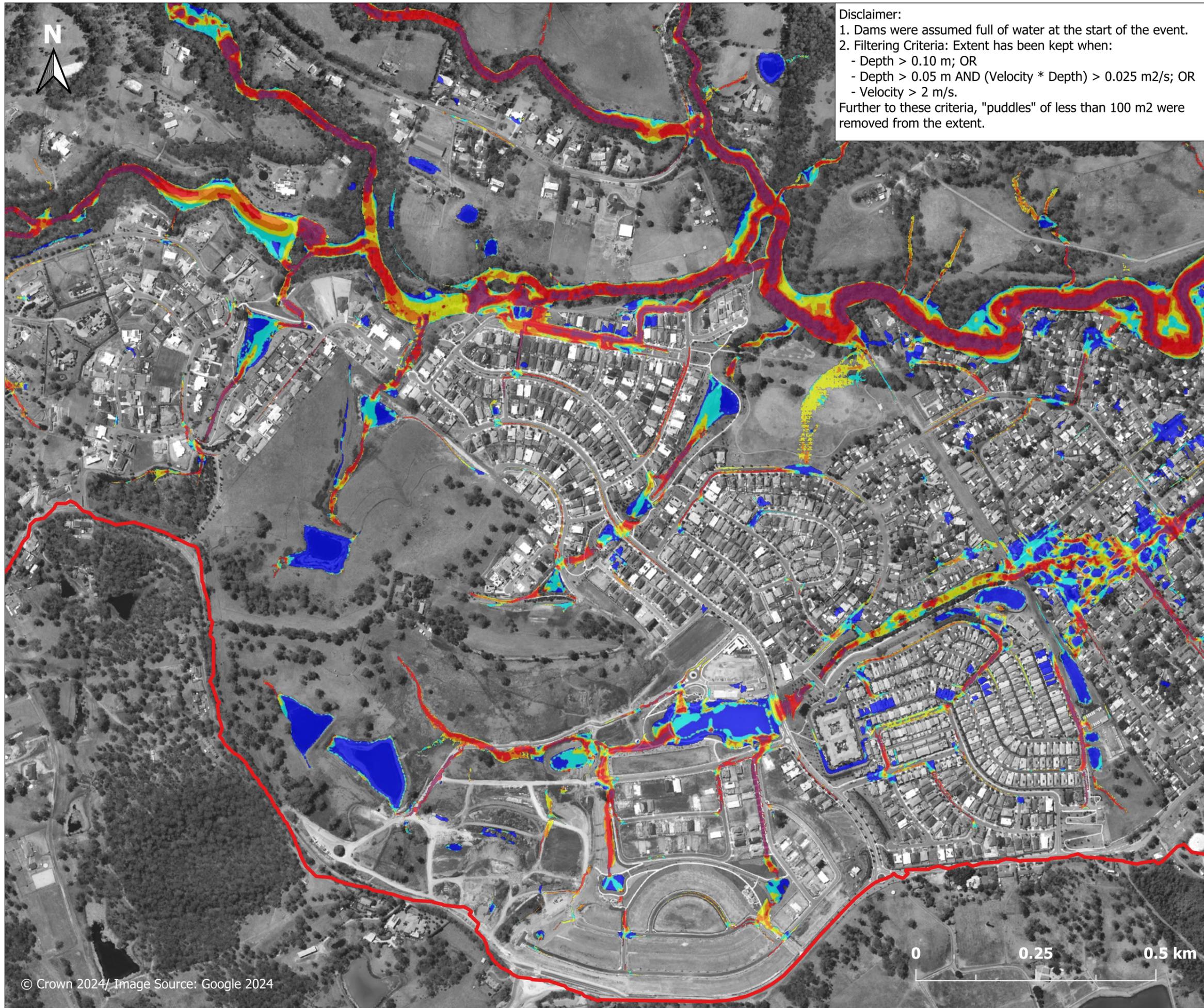
**Figure E.3.8.2**  
**Peak flow velocity**  
**1 in 1000 AEP event**  
**East of North**  
**Richmond**

- Legend**
- Study area
  - Flow velocity (m/s)**
  - 0.00-0.25
  - 0.25-0.50
  - 0.50-0.75
  - 0.75-1.00
  - 1.00-1.50
  - >1.50



**Report MHL3008**  
**Redbank Creek Flood**  
**Study**





Disclaimer:  
 1. Dams were assumed full of water at the start of the event.  
 2. Filtering Criteria: Extent has been kept when:  
 - Depth > 0.10 m; OR  
 - Depth > 0.05 m AND (Velocity \* Depth) > 0.025 m<sup>2</sup>/s; OR  
 - Velocity > 2 m/s.  
 Further to these criteria, "puddles" of less than 100 m<sup>2</sup> were removed from the extent.

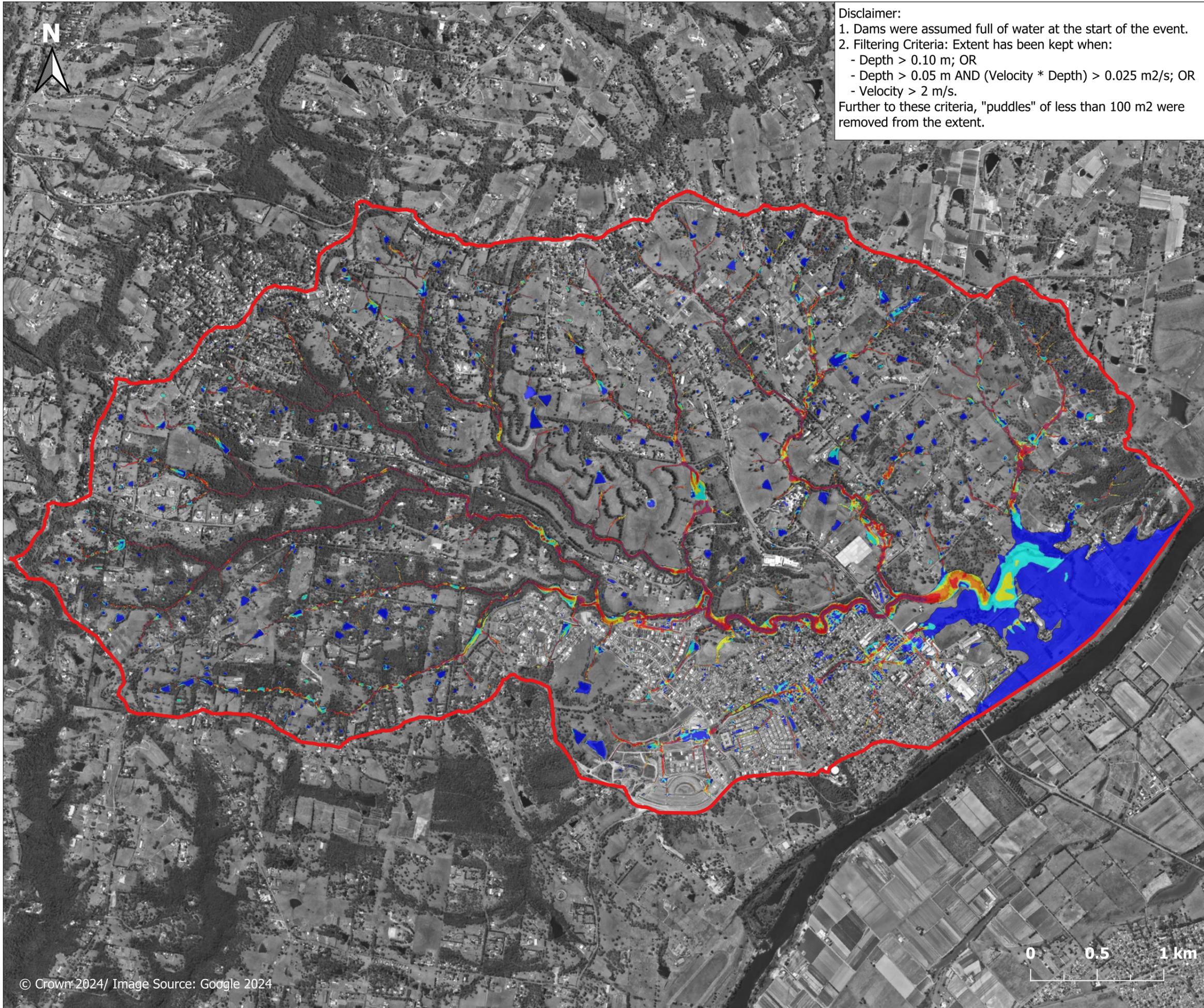
**Figure E.3.8.3**  
**Peak flow velocity**  
**1 in 1000 AEP event**  
**West of North**  
**Richmond**

- Legend**
- Study area
  - Flow velocity (m/s)**
  - 0.00-0.25
  - 0.25-0.50
  - 0.50-0.75
  - 0.75-1.00
  - 1.00-1.50
  - >1.50



**Report MHL3008**  
**Redbank Creek Flood**  
**Study**





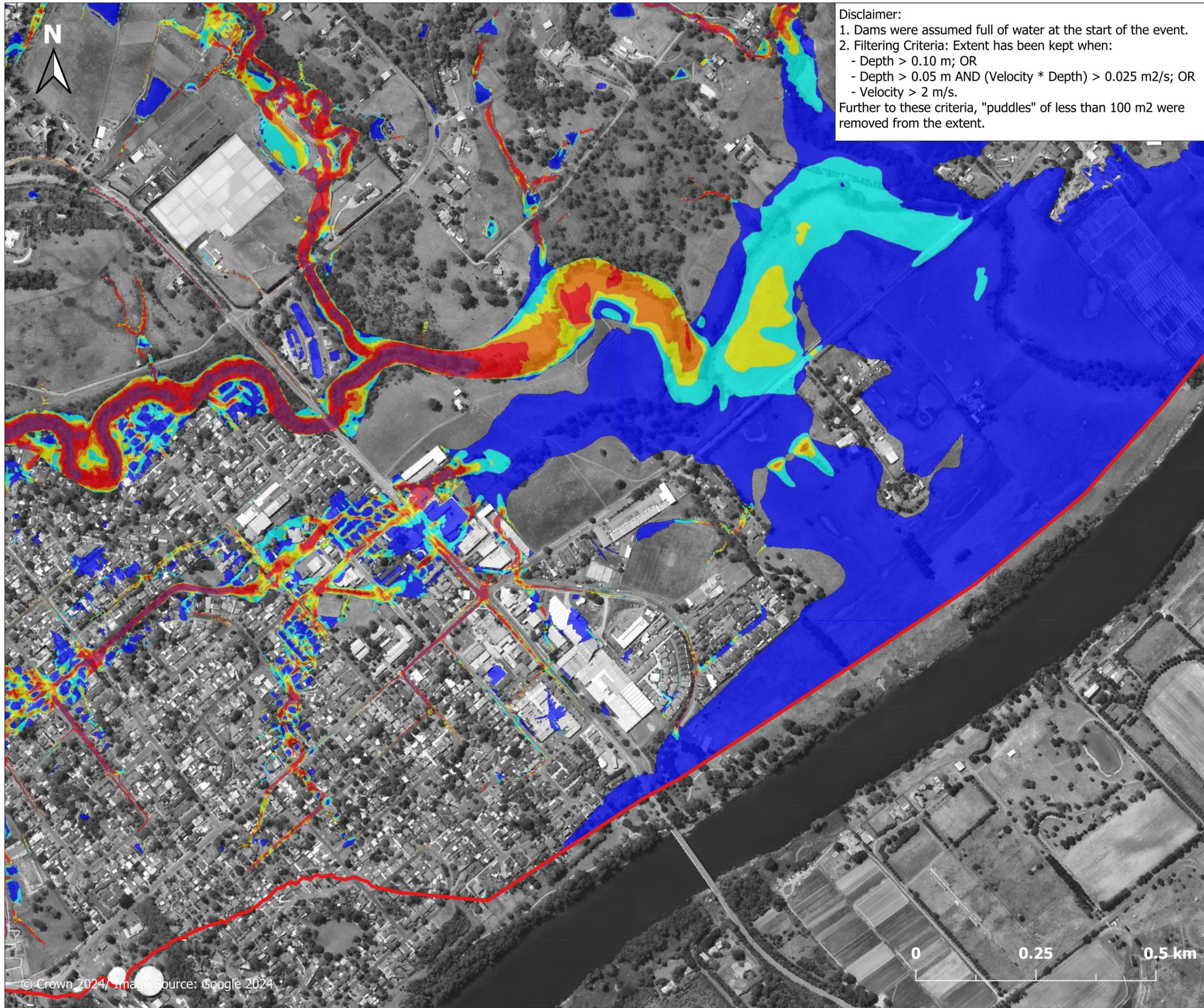
Disclaimer:  
 1. Dams were assumed full of water at the start of the event.  
 2. Filtering Criteria: Extent has been kept when:  
 - Depth > 0.10 m; OR  
 - Depth > 0.05 m AND (Velocity \* Depth) > 0.025 m<sup>2</sup>/s; OR  
 - Velocity > 2 m/s.  
 Further to these criteria, "puddles" of less than 100 m<sup>2</sup> were removed from the extent.

**Figure E.3.9.1**  
**Peak flow velocity**  
**1 in 2000 AEP event**  
**North Richmond**  
**Overview**

- Legend**
- Study area
  - Flow velocity (m/s)**
  - 0.00-0.25
  - 0.25-0.50
  - 0.50-0.75
  - 0.75-1.00
  - 1.00-1.50
  - >1.50

**Report MHL3008**  
**Redbank Creek Flood**  
**Study**





Disclaimer:  
 1. Dams were assumed full of water at the start of the event.  
 2. Filtering Criteria: Extent has been kept when:  
 - Depth > 0.10 m; OR  
 - Depth > 0.05 m AND (Velocity \* Depth) > 0.025 m<sup>2</sup>/s; OR  
 - Velocity > 2 m/s.  
 Further to these criteria, "puddles" of less than 100 m<sup>2</sup> were removed from the extent.

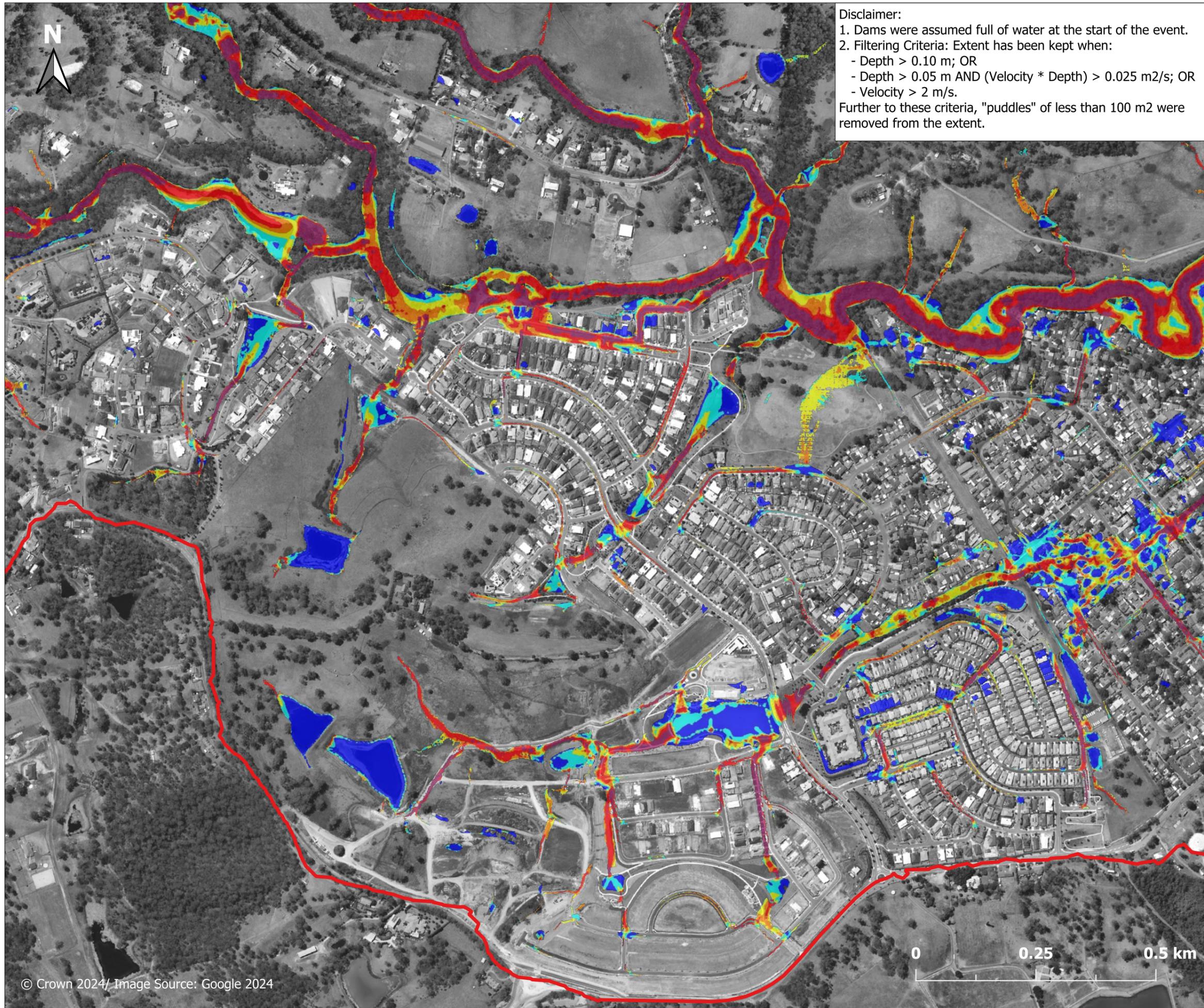
**Figure E.3.9.2**  
**Peak flow velocity**  
**1 in 2000 AEP event**  
**East of North**  
**Richmond**

- Legend**
- Study area
  - Flow velocity (m/s)**
  - 0.00-0.25
  - 0.25-0.50
  - 0.50-0.75
  - 0.75-1.00
  - 1.00-1.50
  - >1.50



**Report MHL3008**  
**Redbank Creek Flood**  
**Study**





Disclaimer:  
 1. Dams were assumed full of water at the start of the event.  
 2. Filtering Criteria: Extent has been kept when:  
 - Depth > 0.10 m; OR  
 - Depth > 0.05 m AND (Velocity \* Depth) > 0.025 m<sup>2</sup>/s; OR  
 - Velocity > 2 m/s.  
 Further to these criteria, "puddles" of less than 100 m<sup>2</sup> were removed from the extent.

**Figure E.3.9.3**  
**Peak flow velocity**  
**1 in 2000 AEP event**  
**West of North**  
**Richmond**

**Legend**

Study area

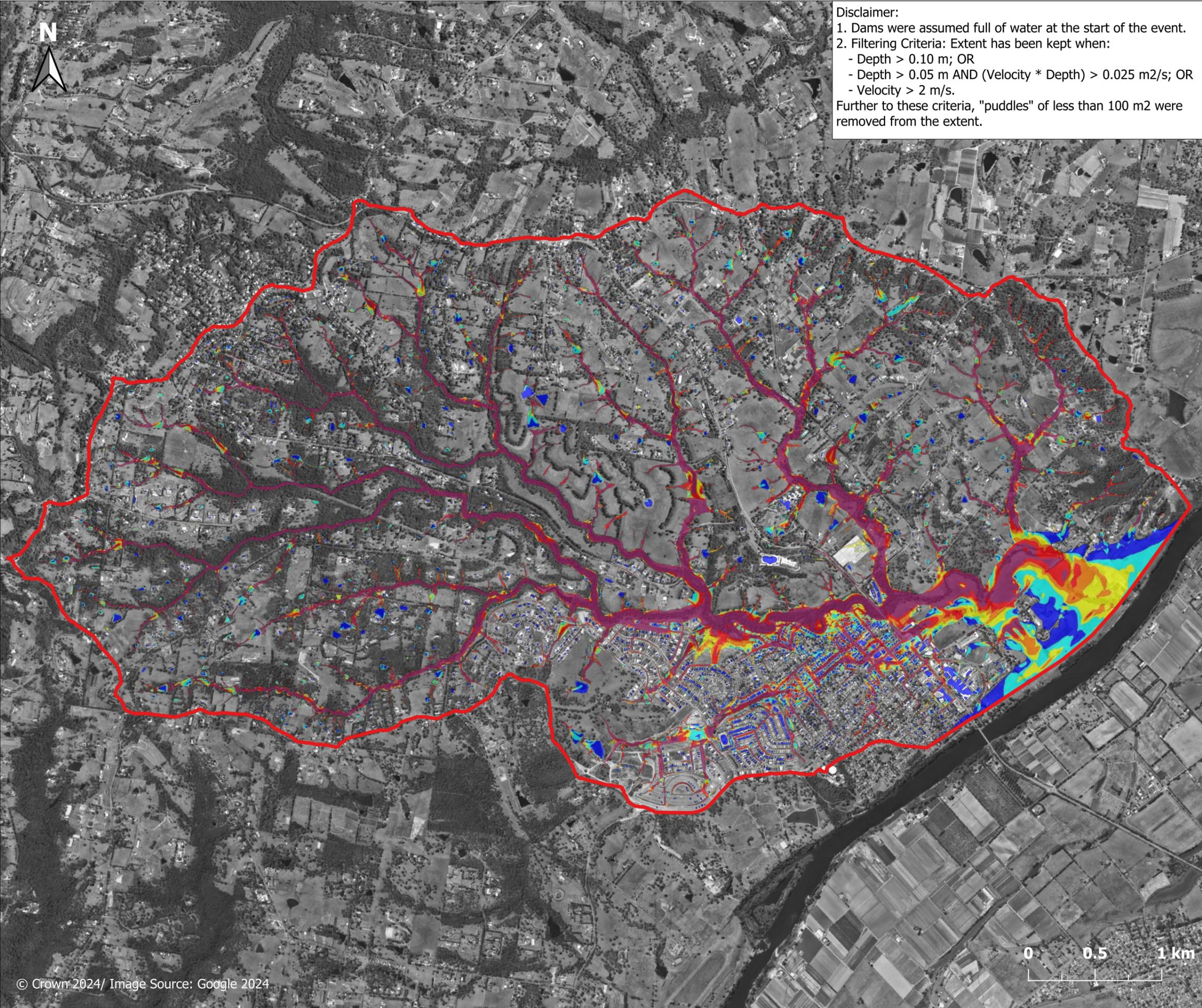
**Flow velocity (m/s)**

- 0.00-0.25
- 0.25-0.50
- 0.50-0.75
- 0.75-1.00
- 1.00-1.50
- >1.50



**Report MHL3008**  
**Redbank Creek Flood**  
**Study**





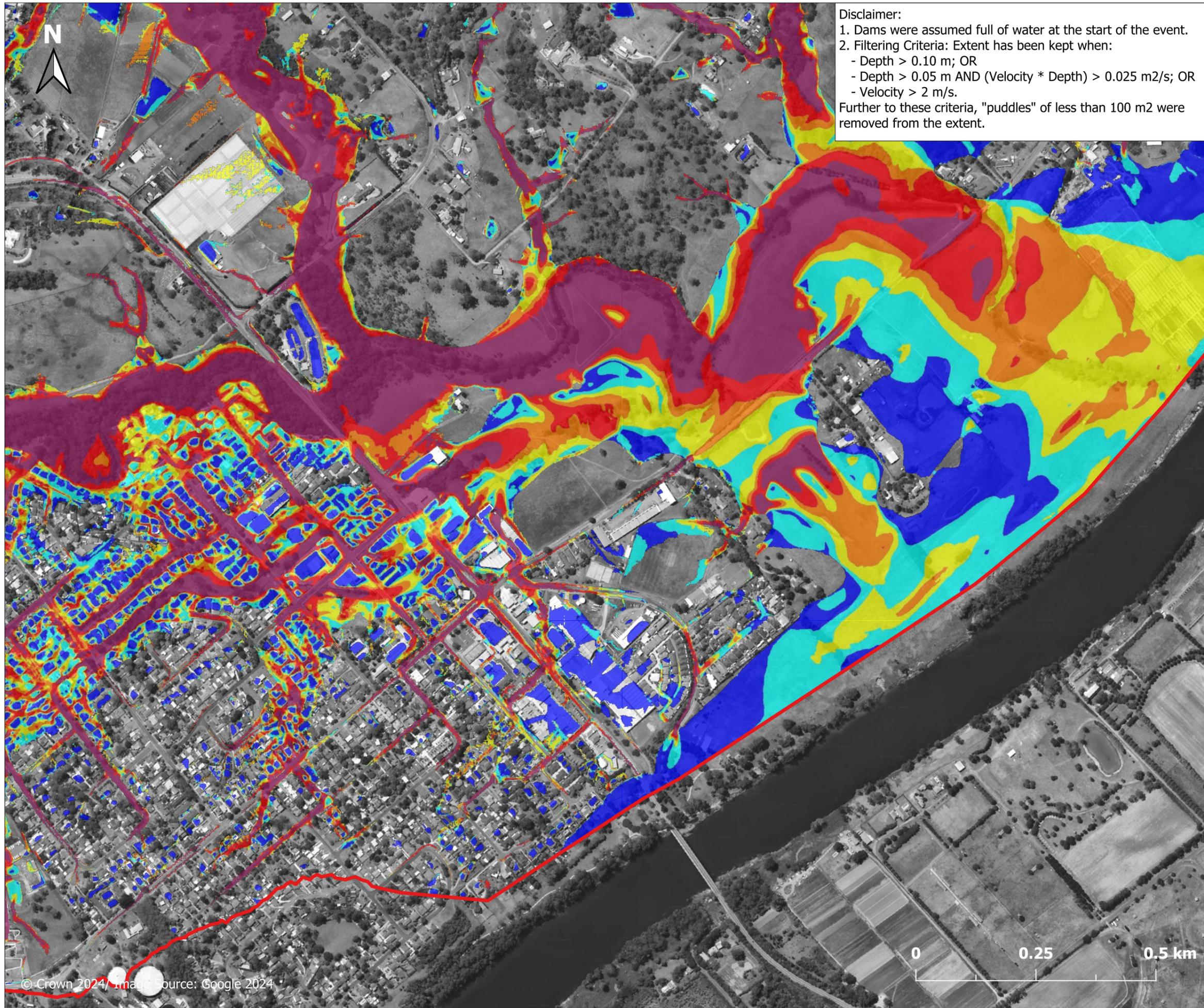
Disclaimer:  
 1. Dams were assumed full of water at the start of the event.  
 2. Filtering Criteria: Extent has been kept when:  
 - Depth > 0.10 m; OR  
 - Depth > 0.05 m AND (Velocity \* Depth) > 0.025 m<sup>2</sup>/s; OR  
 - Velocity > 2 m/s.  
 Further to these criteria, "puddles" of less than 100 m<sup>2</sup> were removed from the extent.

**Figure E.3.10.1**  
**Peak flow velocity**  
**1 in 5000 AEP event**  
**North Richmond**  
**Overview**

- Legend**
- Study area
  - Flow velocity (m/s)**
  - 0.00-0.25
  - 0.25-0.50
  - 0.50-0.75
  - 0.75-1.00
  - 1.00-1.50
  - >1.50

**Report MHL3008**  
**Redbank Creek Flood**  
**Study**





Disclaimer:  
 1. Dams were assumed full of water at the start of the event.  
 2. Filtering Criteria: Extent has been kept when:  
 - Depth > 0.10 m; OR  
 - Depth > 0.05 m AND (Velocity \* Depth) > 0.025 m<sup>2</sup>/s; OR  
 - Velocity > 2 m/s.  
 Further to these criteria, "puddles" of less than 100 m<sup>2</sup> were removed from the extent.

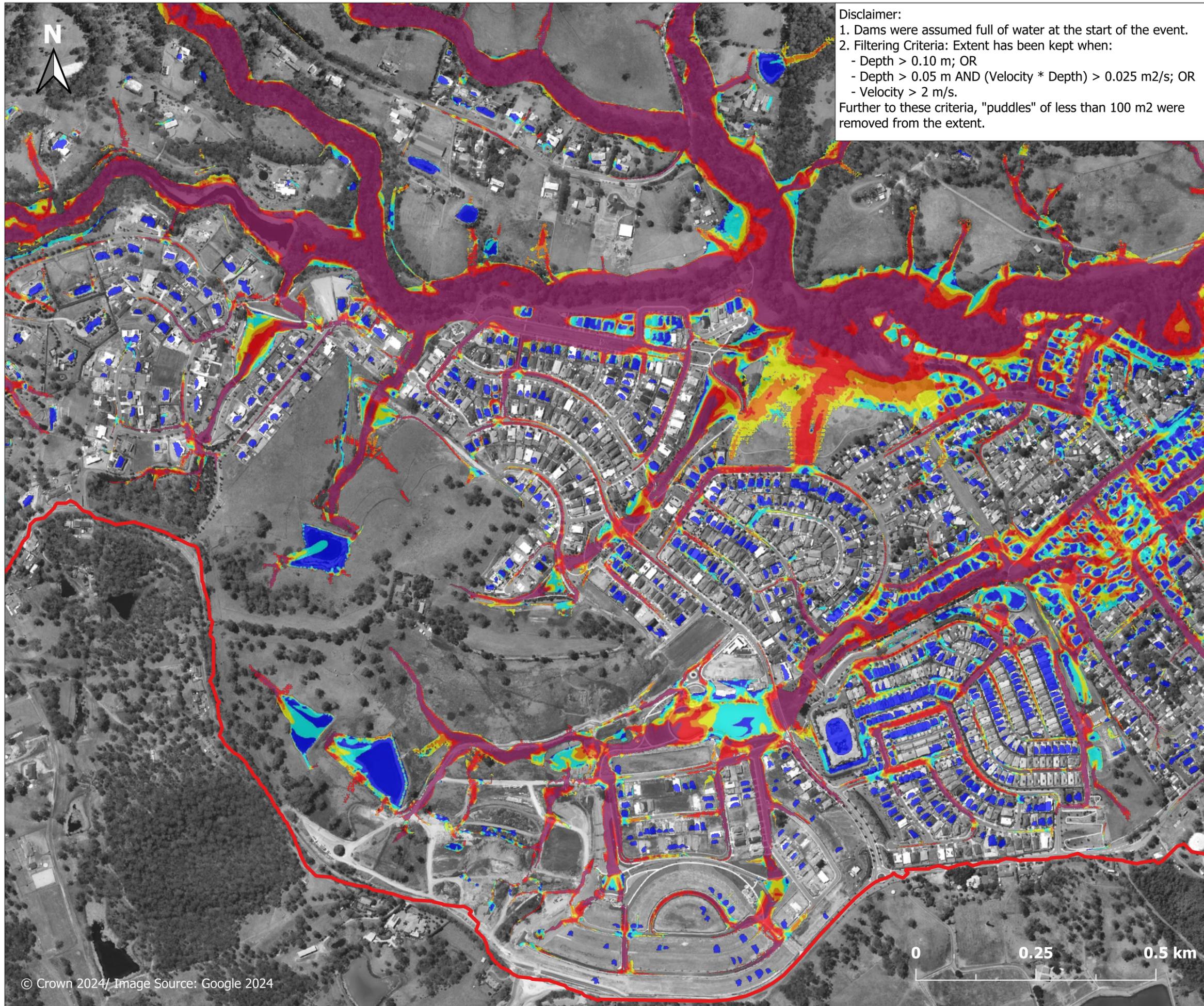
**Figure E.3.10.2**  
**Peak flow velocity**  
**1 in 5000 AEP event**  
**East of North**  
**Richmond**

- Legend**
- Study area
  - Flow velocity (m/s)**
  - 0.00-0.25
  - 0.25-0.50
  - 0.50-0.75
  - 0.75-1.00
  - 1.00-1.50
  - >1.50



**Report MHL3008**  
**Redbank Creek Flood**  
**Study**





Disclaimer:  
 1. Dams were assumed full of water at the start of the event.  
 2. Filtering Criteria: Extent has been kept when:  
 - Depth > 0.10 m; OR  
 - Depth > 0.05 m AND (Velocity \* Depth) > 0.025 m<sup>2</sup>/s; OR  
 - Velocity > 2 m/s.  
 Further to these criteria, "puddles" of less than 100 m<sup>2</sup> were removed from the extent.

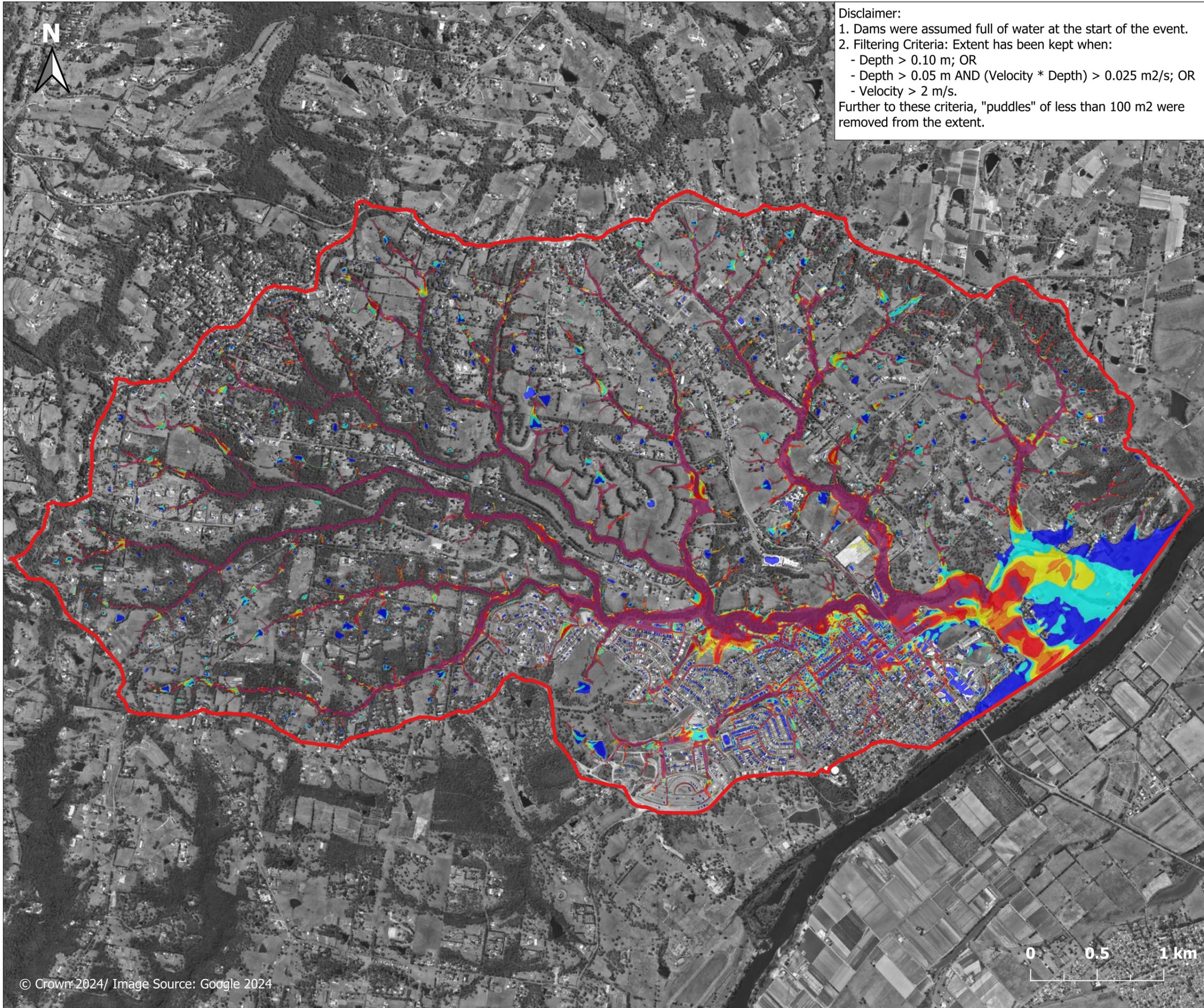
**Figure E.3.10.3**  
**Peak flow velocity**  
**1 in 5000 AEP event**  
**West of North**  
**Richmond**

- Legend**
- Study area
  - Flow velocity (m/s)**
  - 0.00-0.25
  - 0.25-0.50
  - 0.50-0.75
  - 0.75-1.00
  - 1.00-1.50
  - >1.50



**Report MHL3008**  
**Redbank Creek Flood**  
**Study**





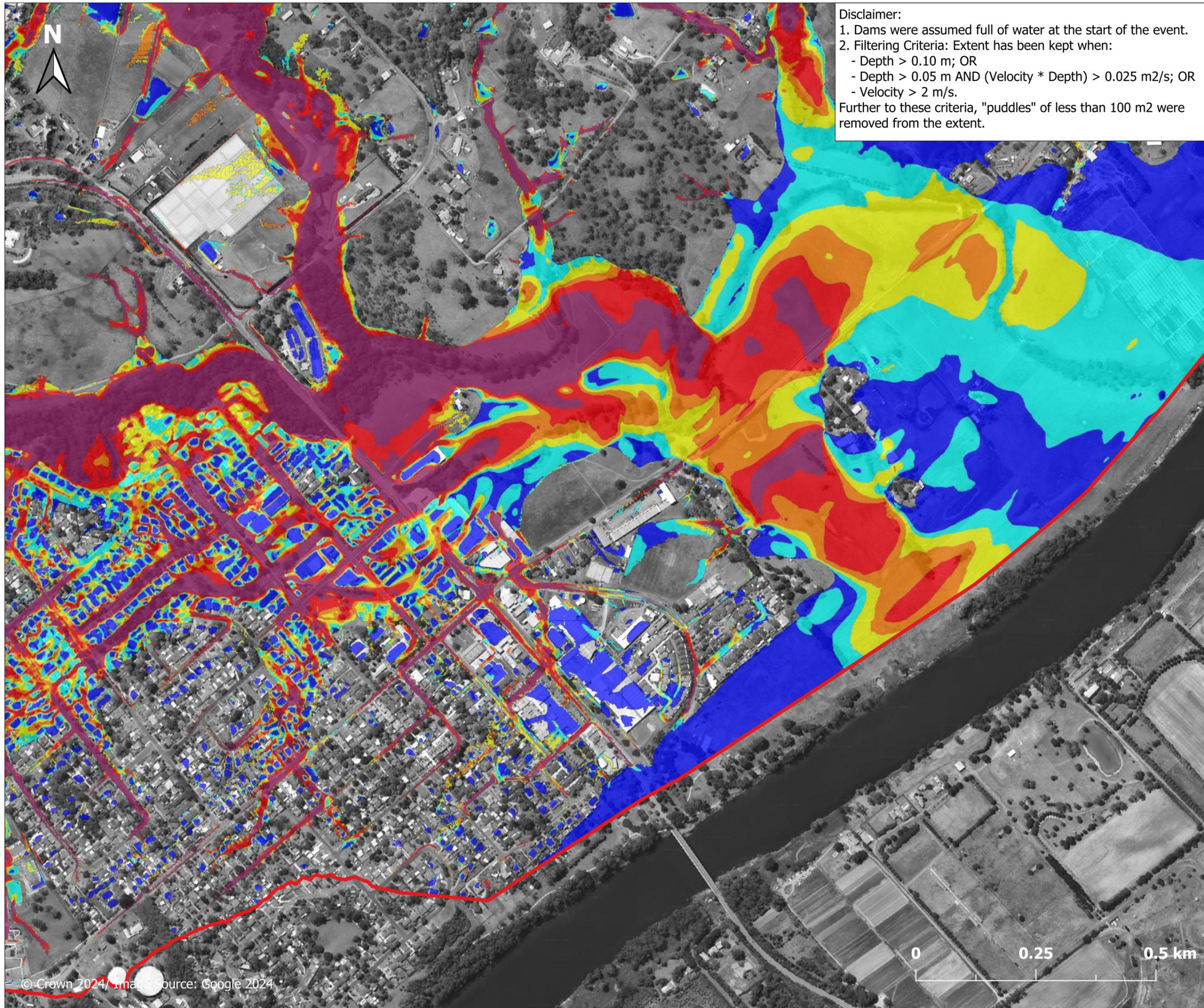
Disclaimer:  
 1. Dams were assumed full of water at the start of the event.  
 2. Filtering Criteria: Extent has been kept when:  
 - Depth > 0.10 m; OR  
 - Depth > 0.05 m AND (Velocity \* Depth) > 0.025 m<sup>2</sup>/s; OR  
 - Velocity > 2 m/s.  
 Further to these criteria, "puddles" of less than 100 m<sup>2</sup> were removed from the extent.

**Figure E.3.11.1**  
**Peak flow velocity**  
**PMF event**  
**North Richmond**  
**Overview**

- Legend**
- Study area
  - Flow velocity (m/s)**
  - 0.00-0.25
  - 0.25-0.50
  - 0.50-0.75
  - 0.75-1.00
  - 1.00-1.50
  - >1.50

**Report MHL3008**  
**Redbank Creek Flood**  
**Study**





Disclaimer:  
 1. Dams were assumed full of water at the start of the event.  
 2. Filtering Criteria: Extent has been kept when:  
 - Depth > 0.10 m; OR  
 - Depth > 0.05 m AND (Velocity \* Depth) > 0.025 m<sup>2</sup>/s; OR  
 - Velocity > 2 m/s.  
 Further to these criteria, "puddles" of less than 100 m<sup>2</sup> were removed from the extent.

**Figure E.3.11.2**

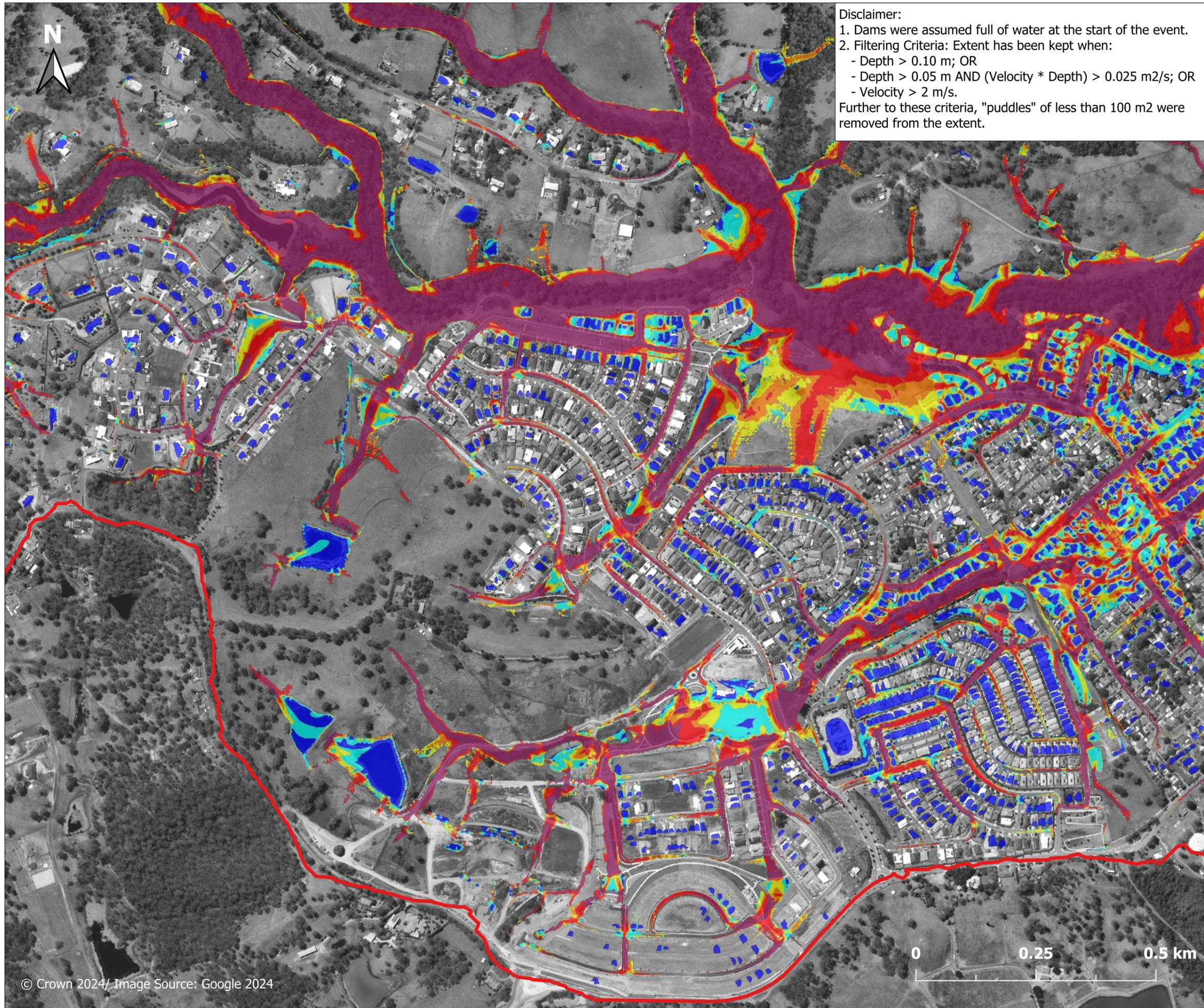
**Peak flow velocity  
 PMF event  
 East of North  
 Richmond**

- Legend**
- Study area
  - Flow velocity (m/s)**
  - 0.00-0.25
  - 0.25-0.50
  - 0.50-0.75
  - 0.75-1.00
  - 1.00-1.50
  - >1.50



**Report MHL3008**  
**Redbank Creek Flood  
 Study**





Disclaimer:  
 1. Dams were assumed full of water at the start of the event.  
 2. Filtering Criteria: Extent has been kept when:  
 - Depth > 0.10 m; OR  
 - Depth > 0.05 m AND (Velocity \* Depth) > 0.025 m<sup>2</sup>/s; OR  
 - Velocity > 2 m/s.  
 Further to these criteria, "puddles" of less than 100 m<sup>2</sup> were removed from the extent.

**Figure E.3.11.3**

**Peak flow velocity  
 PMF event  
 West of North  
 Richmond**

- Legend**
- Study area
  - Flow velocity (m/s)**
  - 0.00-0.25
  - 0.25-0.50
  - 0.50-0.75
  - 0.75-1.00
  - 1.00-1.50
  - >1.50



**Report MHL3008**  
**Redbank Creek Flood  
 Study**



## Appendix F Flood damage

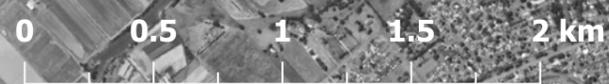
---



**Figure F.1**  
**Flood damage**  
**North Richmond**  
**Overview**

- Legend**
- Study area
  - Annual Average Damage (\$)**
  - No damage
  - < 1000
  - 1000 - 2500
  - 2500 - 5000
  - 5000 - 10000
  - 10000 - 20000
  - 20000 - 50000
  - 50000 - 100000
  - > 100000

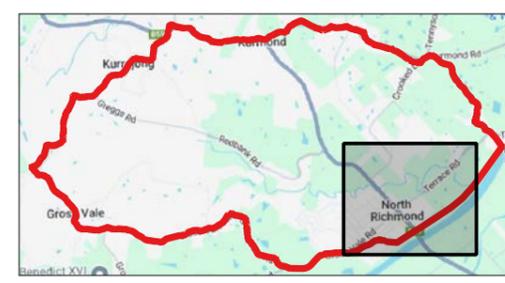
**Report MHL3008**  
**Redbank Creek Flood**  
**Study**





**Figure F.2**  
**Flood damage**  
**East of North**  
**Richmond**

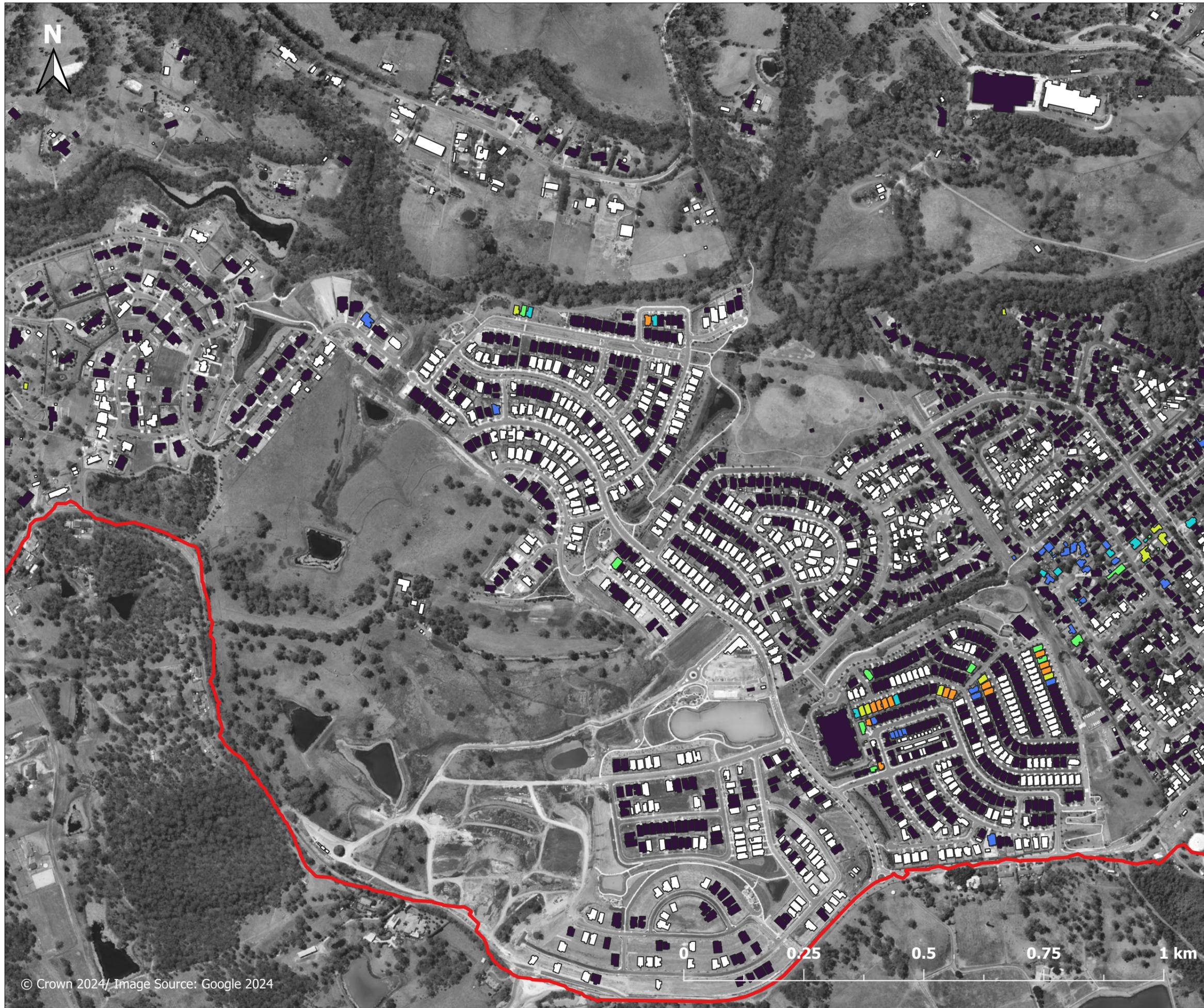
- Legend**
- Study area
  - Annual Average Damage (\$)**
  - No damage
  - < 1000
  - 1000 - 2500
  - 2500 - 5000
  - 5000 - 10000
  - 10000 - 20000
  - 20000 - 50000
  - 50000 - 100000
  - > 100000



**Report MHL3008**  
**Redbank Creek Flood**  
**Study**

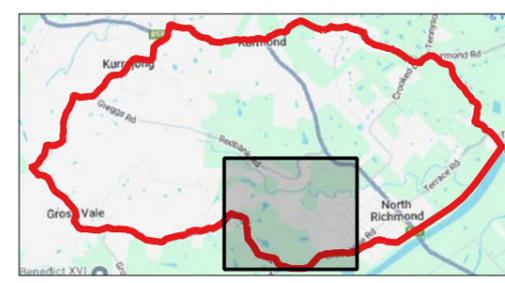


© Crown 2024. Image source: Google 2024



**Figure F.3**  
**Flood damage**  
**West of North**  
**Richmond**

- Legend**
- Study area
  - Annual Average Damage (\$)**
  - No damage
  - < 1000
  - 1000 - 2500
  - 2500 - 5000
  - 5000 - 10000
  - 10000 - 20000
  - 20000 - 50000
  - 50000 - 100000
  - > 100000

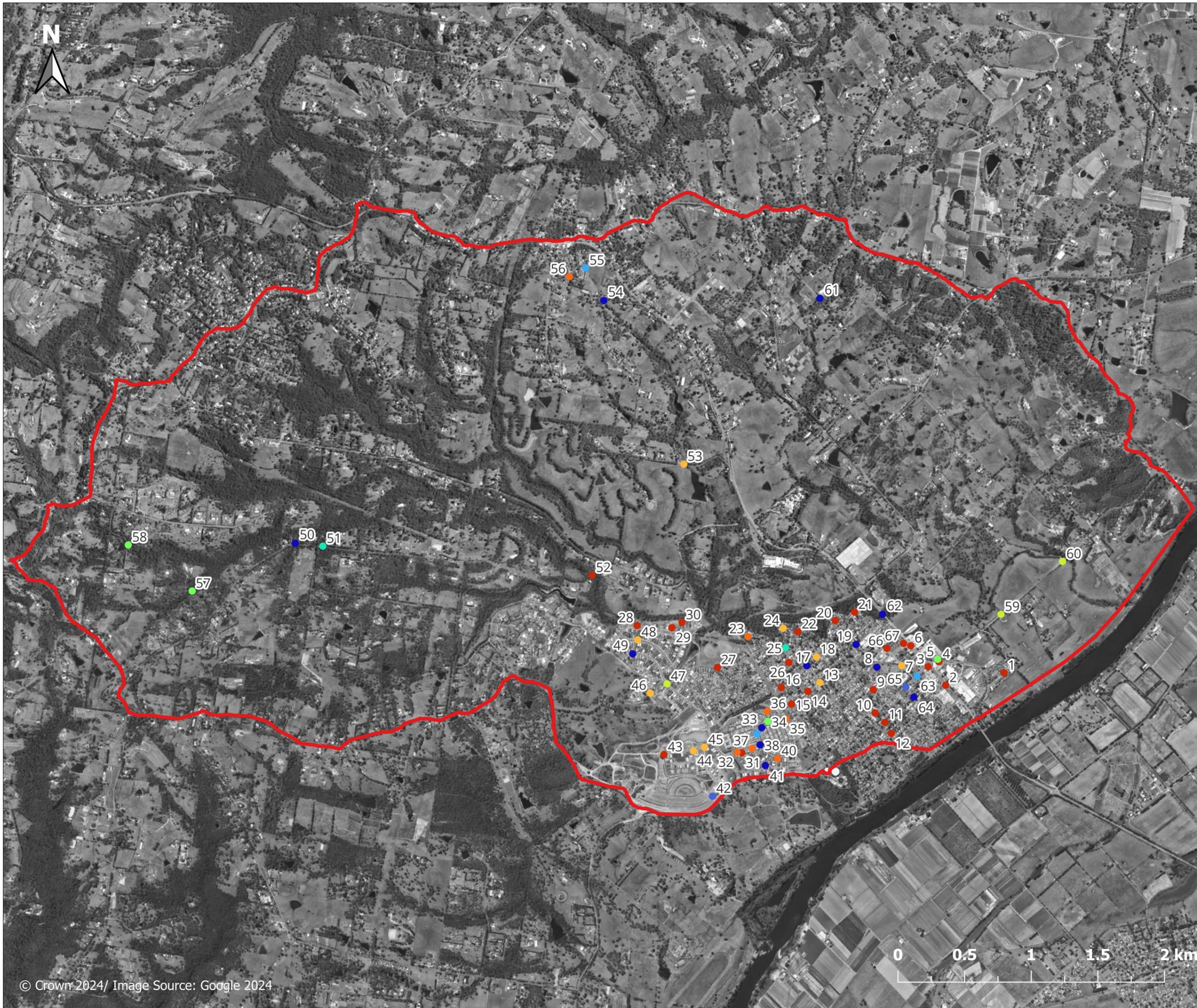


**Report MHL3008**  
**Redbank Creek Flood**  
**Study**



## Appendix G Road closure

---



**Figure G.1**  
**Road closure**  
**locations**  
**North Richmond**  
**Overview**

**Legend**

Study area

**Road closure from:**

- PMF
- 1 in 5000 AEP
- 1 in 1000 AEP
- 1 in 500 AEP
- 1 in 200 AEP
- 1% AEP
- 2% AEP
- 5% AEP
- 10% AEP
- 20% AEP

**Report MHL3008**  
**Redbank Creek Flood**  
**Study**



**Manly**  
**Hydraulics**  
**Laboratory**



**Figure G.2**

**Road closure locations East of North Richmond**

**Legend**

Study area

**Road closure from:**

- PMF
- 1 in 5000 AEP
- 1 in 1000 AEP
- 1 in 500 AEP
- 1 in 200 AEP
- 1% AEP
- 2% AEP
- 5% AEP
- 10% AEP
- 20% AEP



**Report MHL3008**

**Redbank Creek Flood Study**



**Manly Hydraulics Laboratory**

© Crown 2024. Image source: Google 2024



**Figure G.3**

**Road closure locations  
West of North Richmond**

**Legend**

Study area

**Road closure from:**

- PMF
- 1 in 5000 AEP
- 1 in 1000 AEP
- 1 in 500 AEP
- 1 in 200 AEP
- 1% AEP
- 2% AEP
- 5% AEP
- 10% AEP
- 20% AEP



**Report MHL3008**

**Redbank Creek Flood Study**



**Manly  
Hydraulics  
Laboratory**

## Appendix H Flood hazard and flood function maps

---