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CLIENT / PROJECT
Stevensons Aggregates Ltd.

Sutton Block Extent

Figure 1

31 October 2024 Map: MA

Legend

-  Sutton Block - Extended Pit Boundary
-  SAL Landholdings
-  AUP LOQ zone boundary

SOURCES
LINZ Basemap aerial

MAP PROJECTION
NZGD2000 / New Zealand Transverse
Mercator 2000

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Sutton Block - Staging

Figure 2

1 November 2024 Map: MA

Legend

Sutton Block -
Stages 1 to 5

SAL Landholdings

SOURCES
LINZ Basemap aerial

MAP PROJECTION
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Sutton Block Extent - AUP
overlays

Figure 8

1 November 2024 Map: MA

Legend

- Sutton Block - Extended Pit Boundary
- SPQZ boundary
- SEA Overlay
- SEA - Impacted Areas
- Outstanding natural landscape overlay

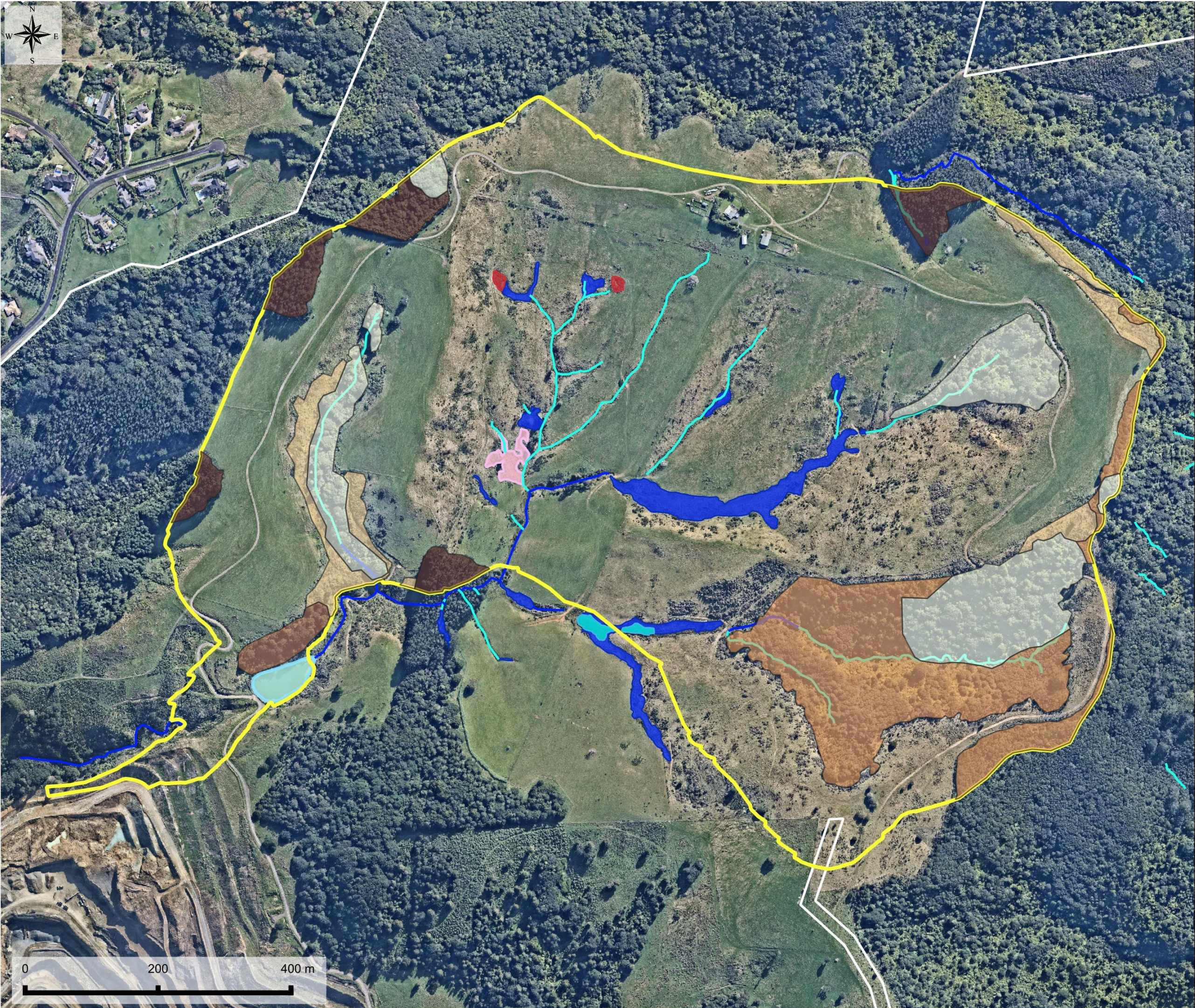
SOURCES
LINZ Basemap aerial

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Sutton Block - Terrestrial and
Freshwater Features

Figure 9

1 November 2024 Map: MA

Legend

Sutton Pit Boundary

SAL Landholdings

Natural Wetland

Exotic

Pond

Raupo

Watercourse

Intermittent

Permanent

Vegetation Type

Broadleaf Podocarp

Kanuka Scrub/Forest

Rock Forest

Exotic Trees

Exotic Scrub

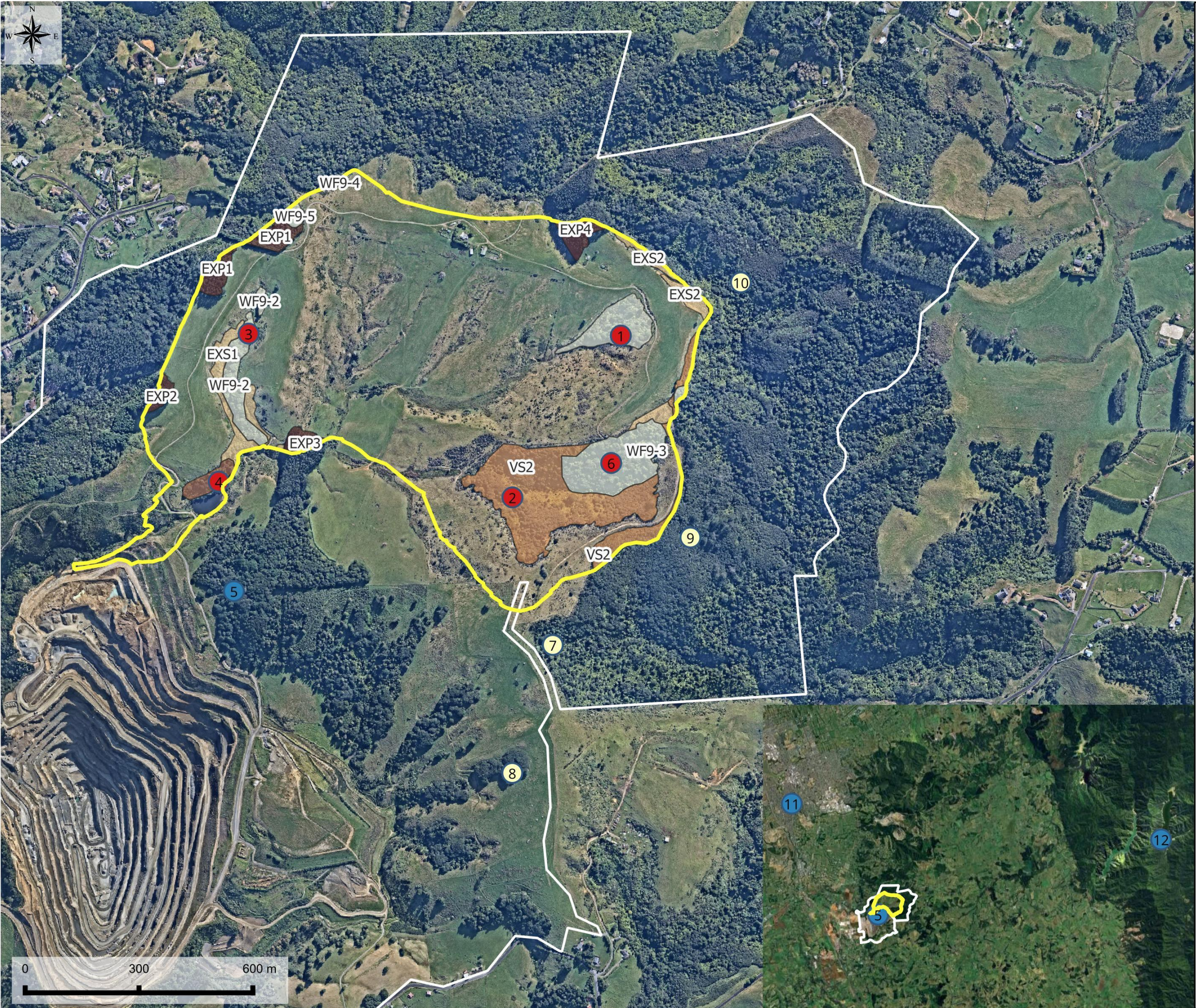
SOURCES
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Sutton Block - Recce plots

Figure 10

26 November 2024 Map: MA

Legend

Sutton Pit Boundary

SAL Landholdings

Vegetation Type

- Broadleaf Podocarp
- Kanuka Scrub/Forest
- Rock Forest
- Exotic Trees
- Exotic Scrub

ReccePlots_All

- Impact
- Offset
- Ref

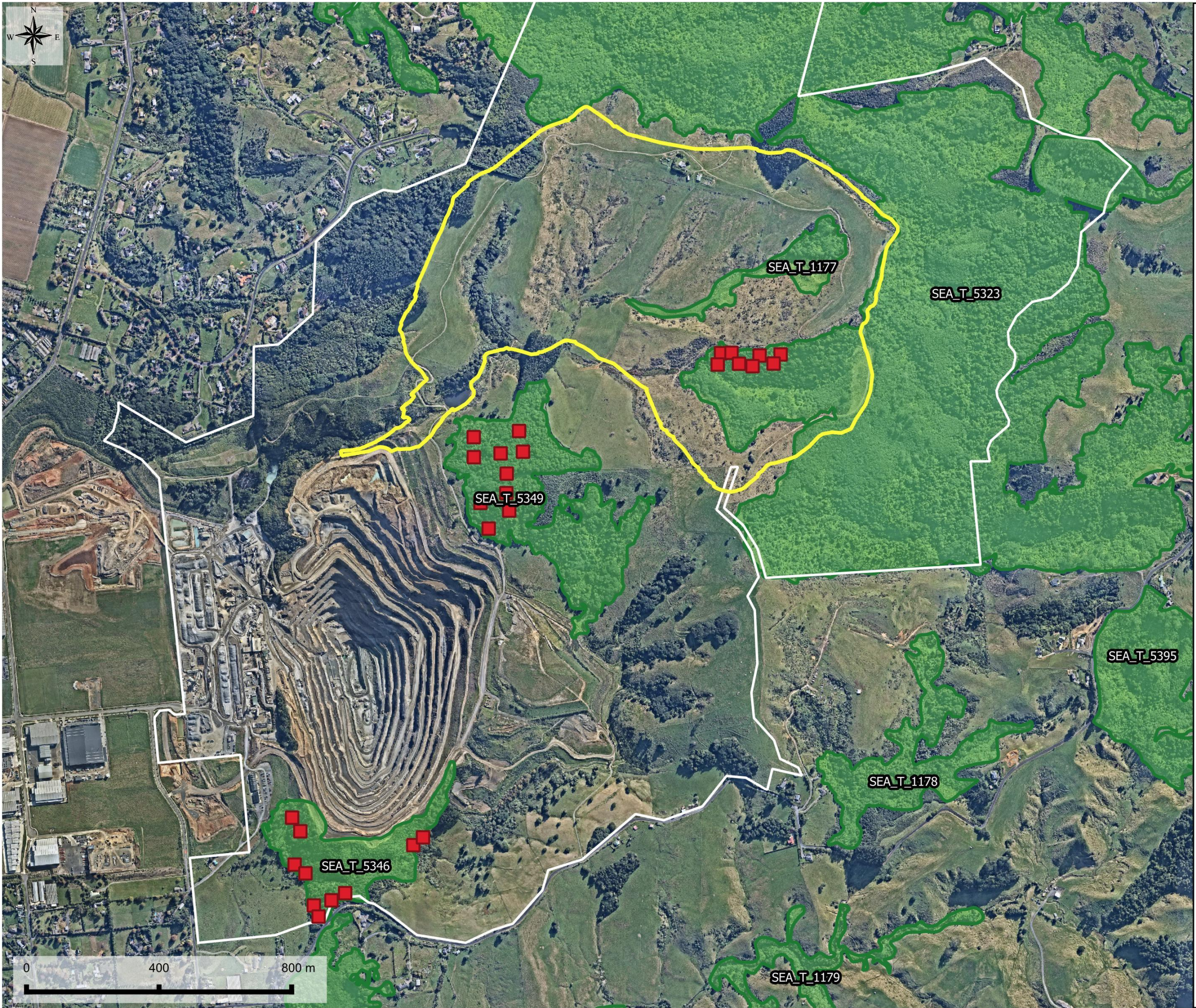
SOURCES
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Sutton Block -Invertebrate sampling

Figure 11

1 November 2024 Map: MA

Legend

- Sutton Pit Boundary
- SAL Landholdings
- SEA Overlay
- Invertebrate quadrats

SOURCES
LINZ Basemap aerial

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Sutton Block -Lizard Surveys

Figure 12

1 November 2024 Map: MA

Legend



Sutton Pit Boundary



SAL Landholdings



SEA Overlay



ACO 2021



ACO 2020

SOURCES
LINZ Basemap aerial

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Sutton Block - Nocturnal Lizard
Surveys

Figure 13

1 November 2024 Map: MA

Legend



Sutton Pit Boundary



SAL Landholdings



Nocturnal search (2020)



Nocturnal search (2021)

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Sutton Block - Wetland Bird Surveys

Figure 14

1 November 2024 Map: MA

Legend

Sutton Pit Boundary

SAL Landholdings

Wetland bird playback locations (2021)

Wetland bird playback locations (2024)

Bittern recorders (2024)

SOURCES
LINZ Basemap aerial

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Sutton Block - Terrestrial Bird Surveys

Figure 15

1 November 2024 Map: MA

Legend

Sutton Pit Boundary

SAL Landholdings

Five-minute bird Count locations (2023)

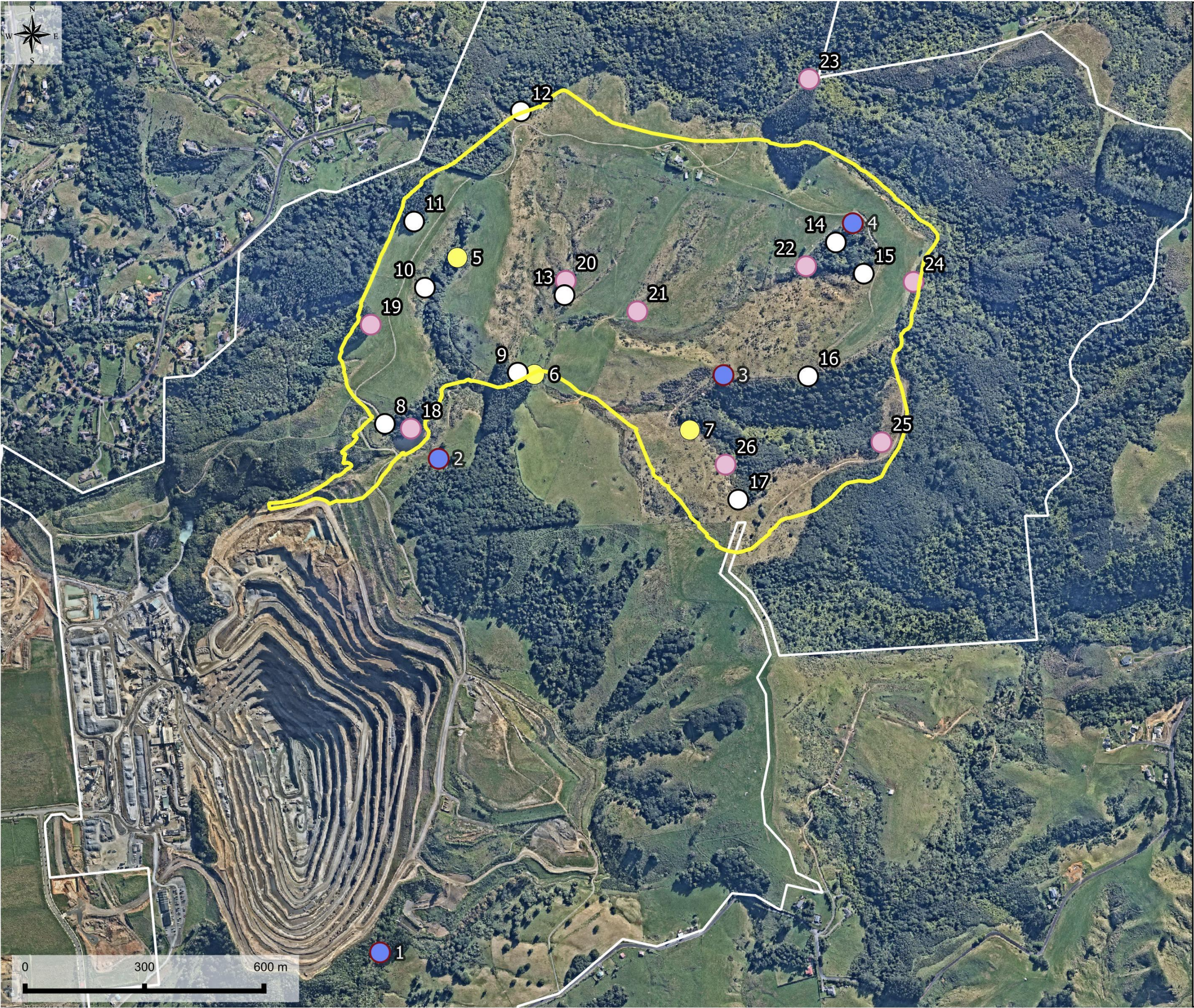
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LINZ Basemap aerial

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Sutton Block - Terrestrial Bird Surveys

Figure 16

4 November 2024 Map: MA

Legend

- Sutton Pit Boundary
- SAL Landholdings
- ABM (2020)
- ABM (2021)
- ABM (2024a)
- ABM (2024b)

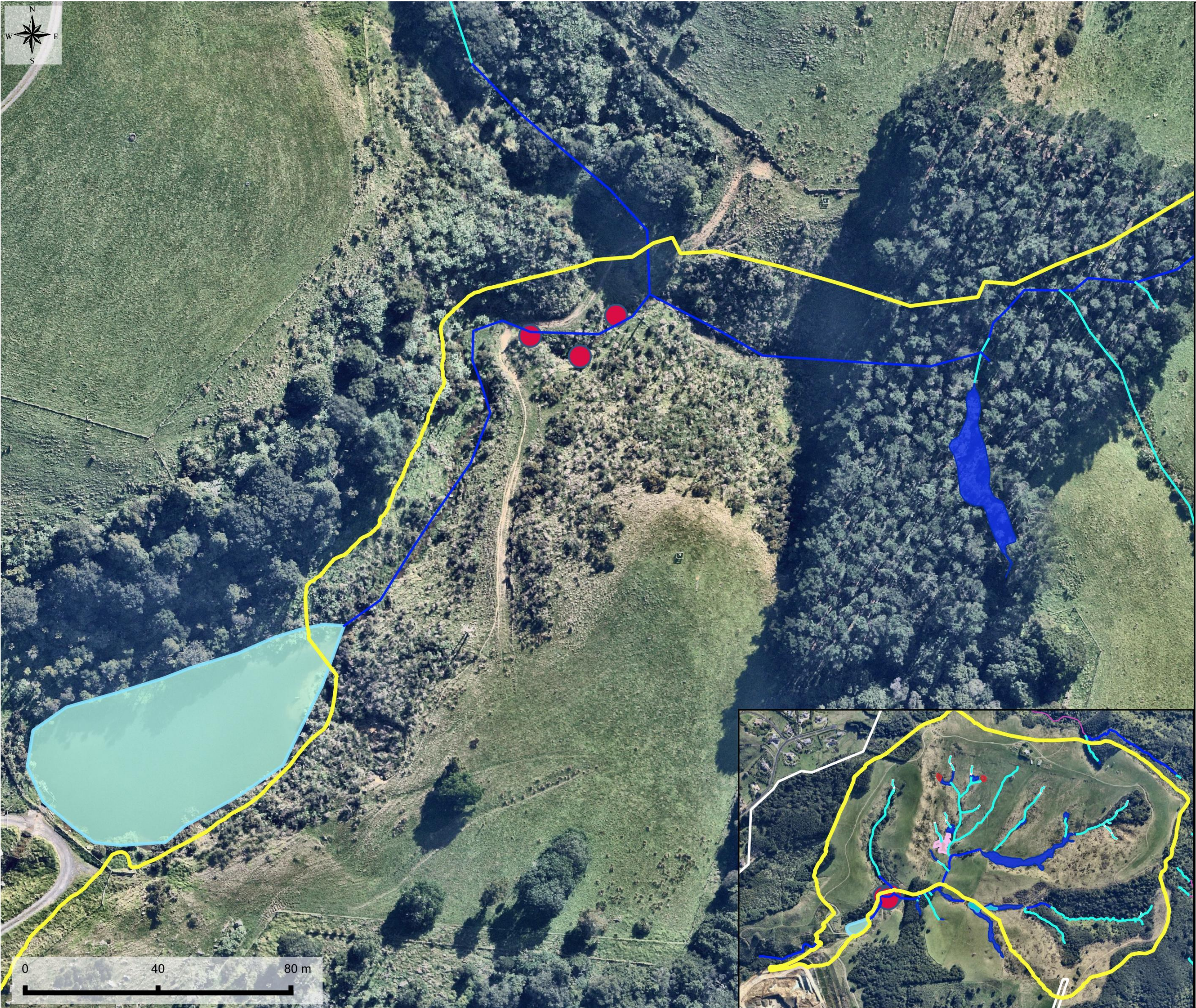
SOURCES
LINZ Basemap aerial

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Sutton Block - eDNA sampling
locations

Figure 17

1 November 2024 Map: MA

Legend

Sutton Pit Boundary

SAL Landholdings

Streams

Ephemeral

Intermittent

Permanent

Retained

Natural Wetland

Exotic

Pond

Raupo

Constructed

Herb field

eDNA sample locations

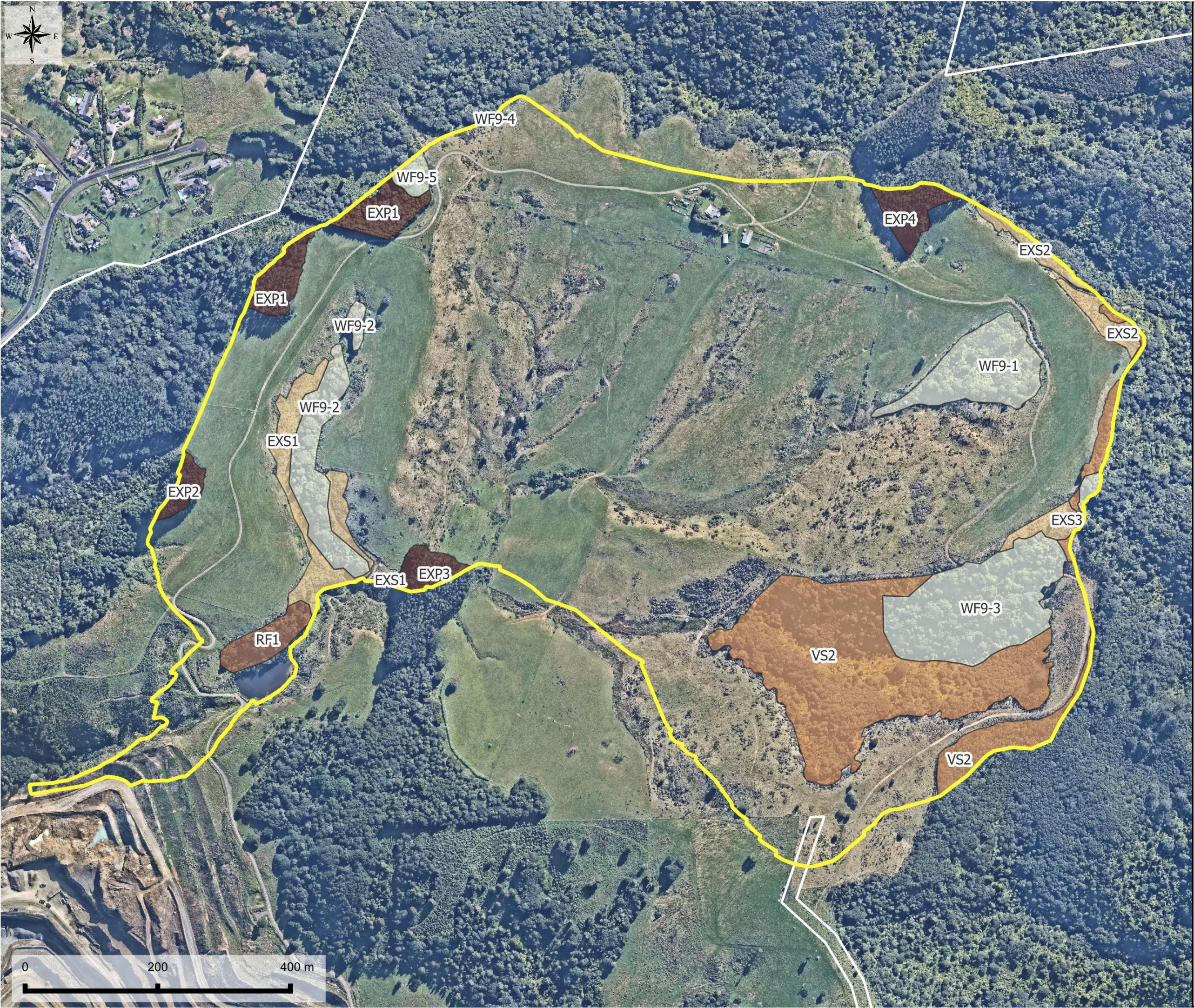
SOURCES
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Sutton Block - Terrestrial Vegetation

Figure 19

4 November 2024 Map: MA

Legend

Sutton Pit Boundary

SAL Landholdings

Vegetation Loss

- Broadleaf Podocarp
- Exotic Scrub
- Kanuka Scrub/Forest
- Exotic Trees
- Rock Forest

SOURCES
LINZ Basemap aerial

MAP PROJECTION
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Sutton Block - Copper Skinks
detections

Figure 20

4 November 2024 Map: MA

Legend



Sutton Pit Boundary



Copper skink 2021



Copper skink 2020

SAL Landholdings

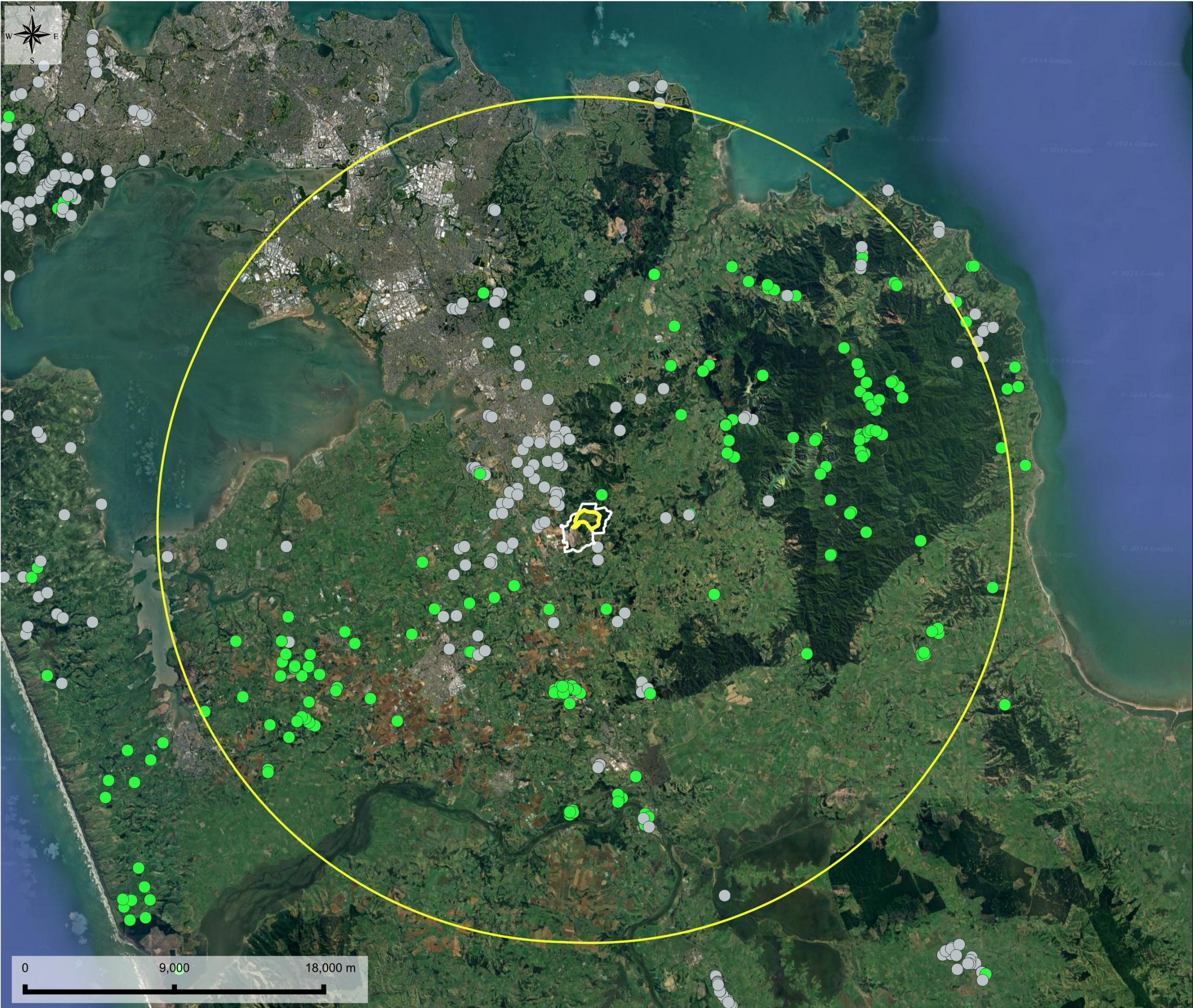
SOURCES
LINZ Basemap aerial

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Sutton Block - Long-tailed Bat records
in the surrounding landscape.

Figure 21

4 November 2024 Map: MA

Legend

Sutton Pit Boundary

SAL Landholdings

DOC Bat Records February 2024

Long-tailed Bat
(Chalinolobus
tuberculatus)

No bat species detected

Long-tailed Bat flight
range (25 km)

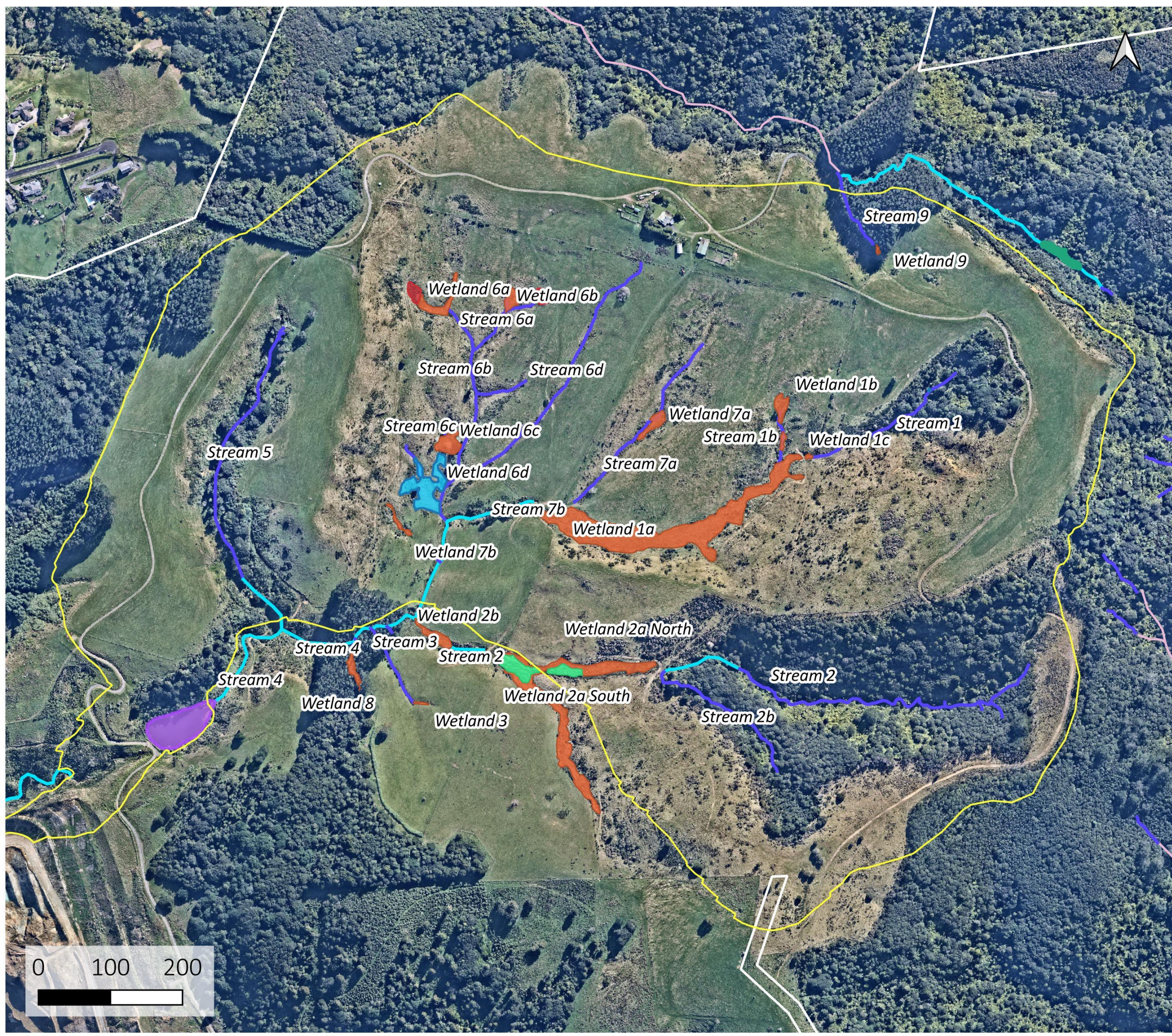
SOURCES
LINZ Basemap aerial

MAP PROJECTION
NZGD2000 / New Zealand Transverse
Mercator 2000

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NOTES
Aerial Images from Nearmaps (2024).

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Legend

- Exotic wetland
- Constructed pond
- Raupo wetland
- Constructed wetland
- Herbacous wetland
- Forest swamp
- Ephemeral overland flow path
- Intermittent stream
- Permanent stream
- Modelled overland flow path
- Sutton Block Pit
- SAL Landholdings

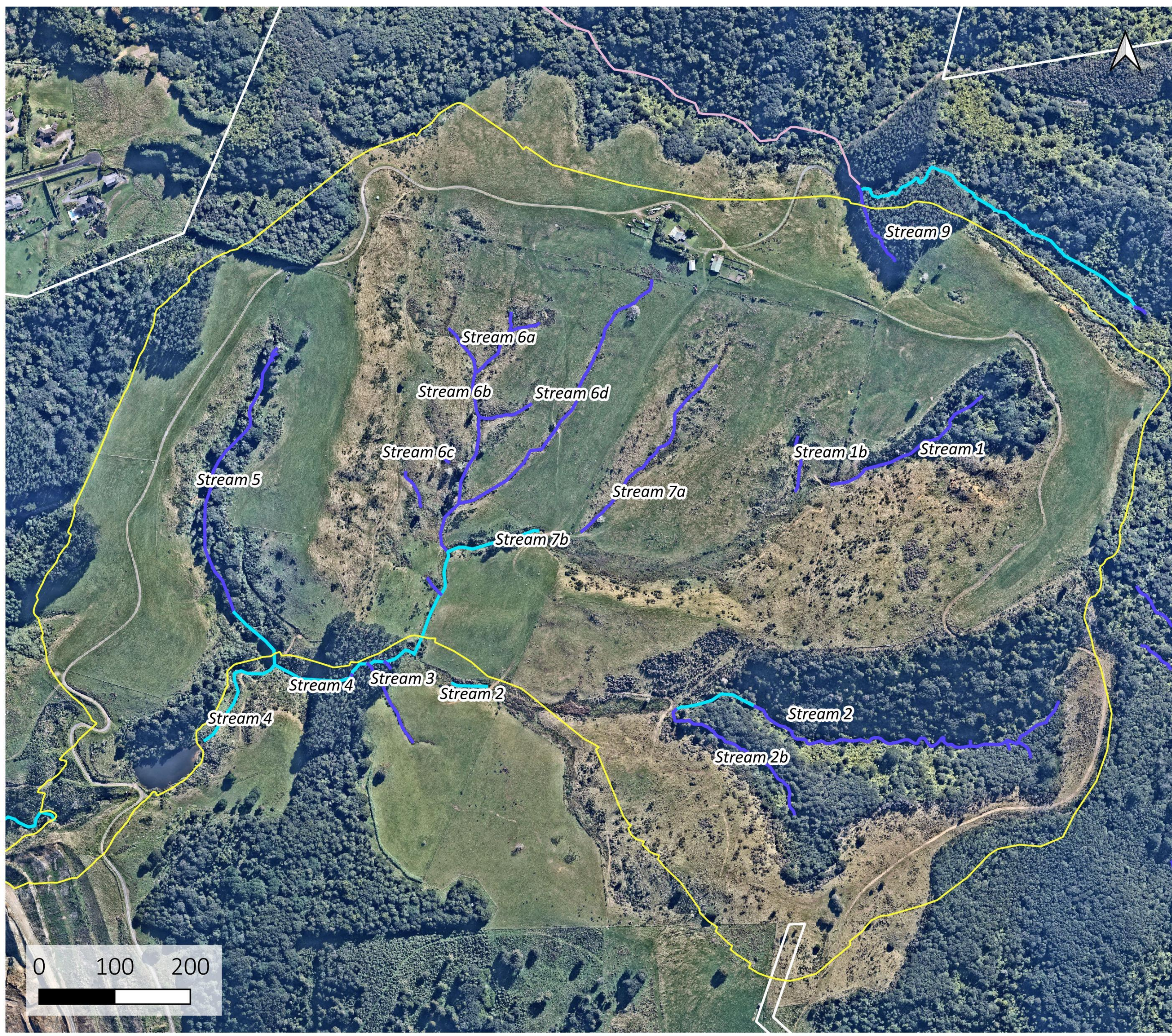
Map Title

Freshwater features for the Sutton pit extent at Drury Quarry

Figure 22

Date	Drawn by
01/05/2024	Initial version by LD

SOURCES
Aerial Photography: Nearmaps
Sutton Pit Extent: Fulton Hogan
Stream Classification: Bioresearches
Wetland delineations: Bioresearches



NOTES
Aerial Images from Nearmaps (2024).

DISCLAIMER:
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Legend

- Ephemeral overland flow path
- Intermittent stream
- Permanent stream
- Modelled overland flow path
- Sutton Block Pit
- SAL Landholdings

Map Title

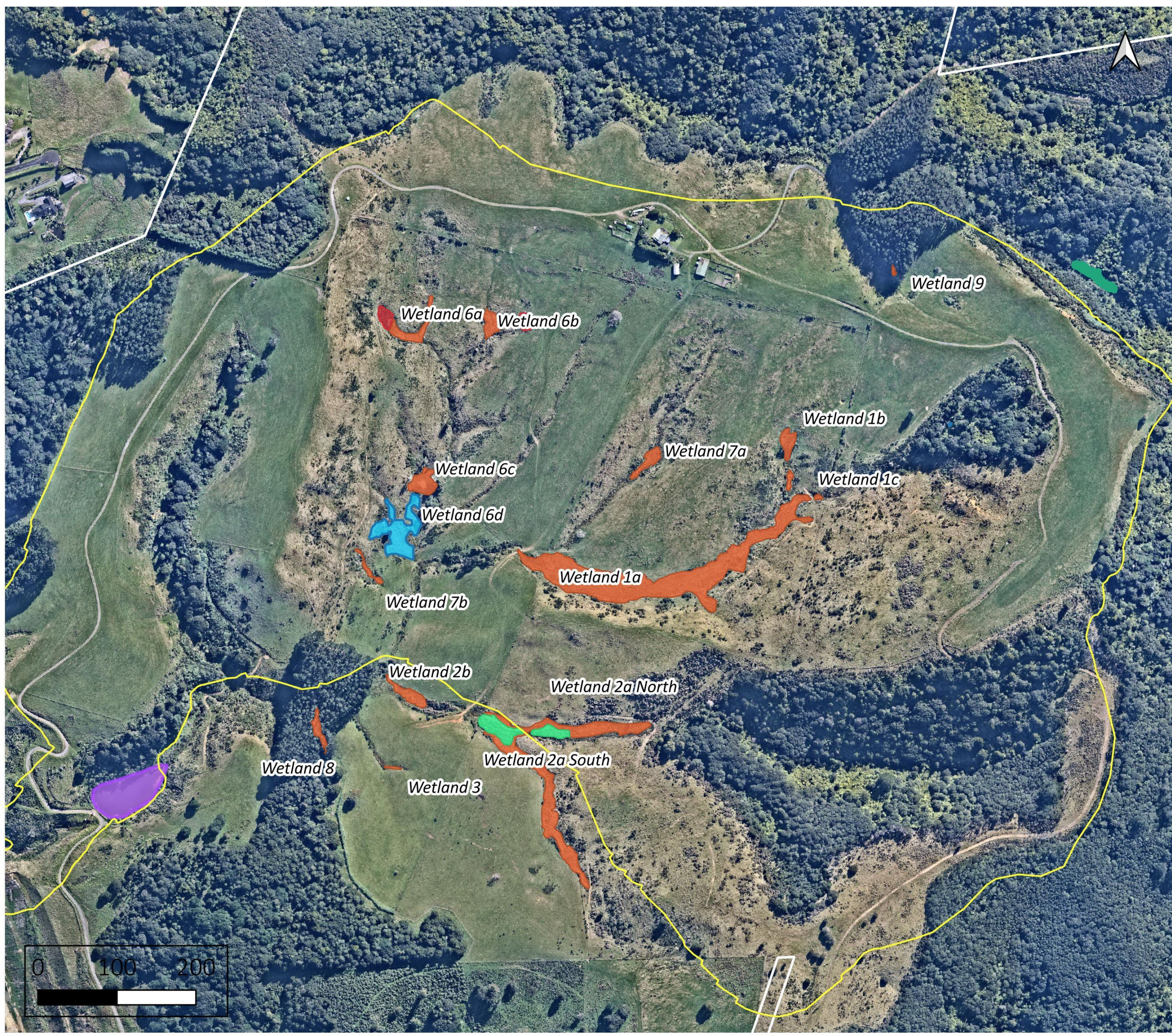
Freshwater stream features for the Sutton pit extent at Drury Quarry

Figure 23

Note: wetland features excluded for clarity

Date	Drawn by
01/10/2024	Initial version by LD

SOURCES
Aerial Photography: Nearmaps
Sutton Pit Extent: Fulton Hogan
Stream Classification: Biosearches



NOTES
Aerial Images from Nearmaps (2024).

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Legend

- Exotic wetland
- Constructed pond
- Raupo wetland
- Constructed wetland
- Herbaceous wetland
- Forest swamp
- Sutton Block Pit
- SAL Landholdings

Map Title

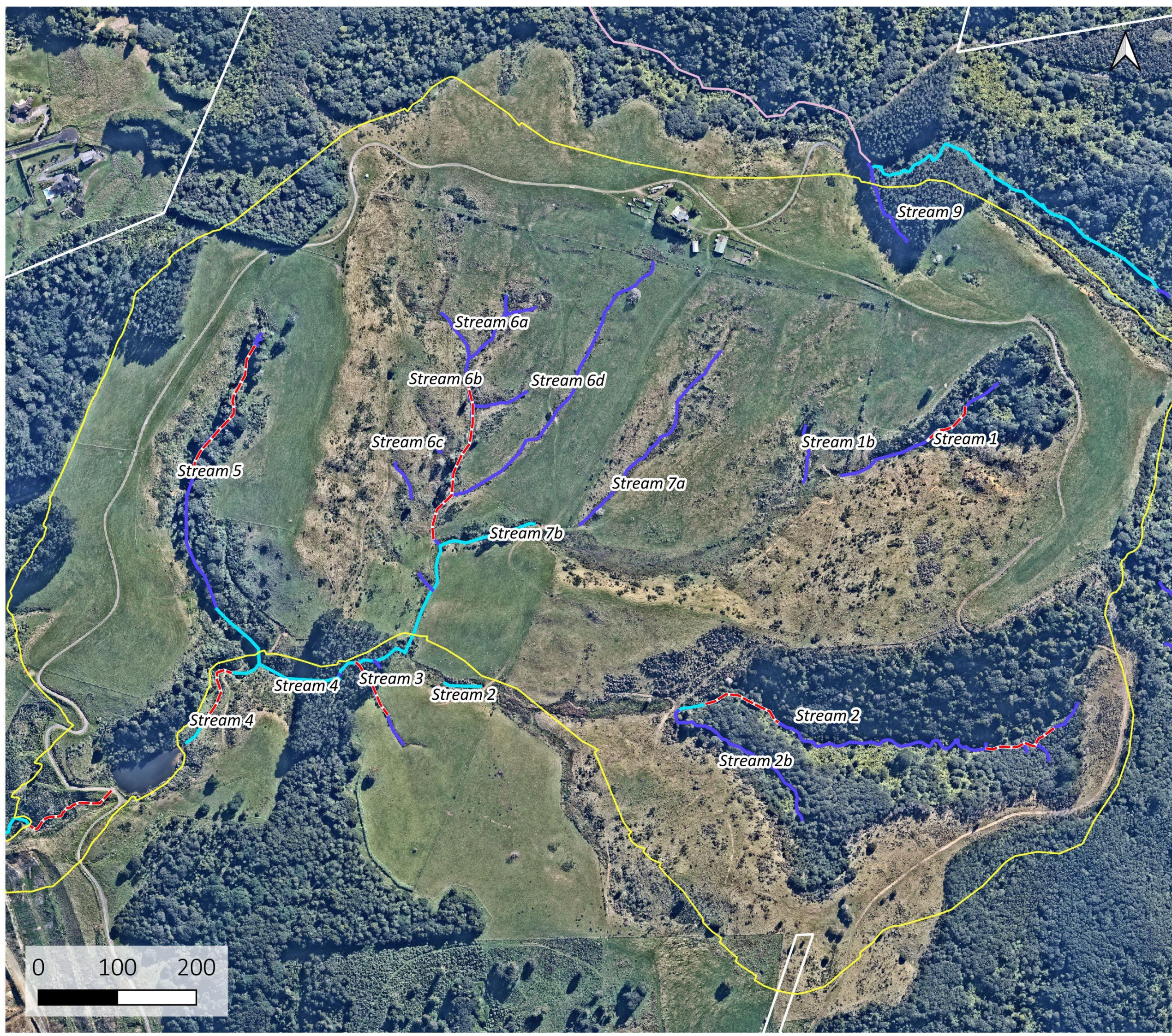
Freshwater wetland features for the Sutton pit extent at Drury Quarry

Figure 24

Note: stream features excluded for clarity

Date	Drawn by
01/10/2024	Initial version by LD

SOURCES
Aerial Photography: Nearmaps
Sutton Pit Extent: Fulton Hogan
Wetland delineations: Bioresearches



NOTES
Aerial Images from Nearmaps (2024).

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Legend

- Ephemeral overland flow path
- Intermittent stream
- Permanent stream
- SEV reach
- Sutton Block Pit
- SAL Landholdings

Map Title

Freshwater stream features for the Sutton pit extent at Drury Quarry

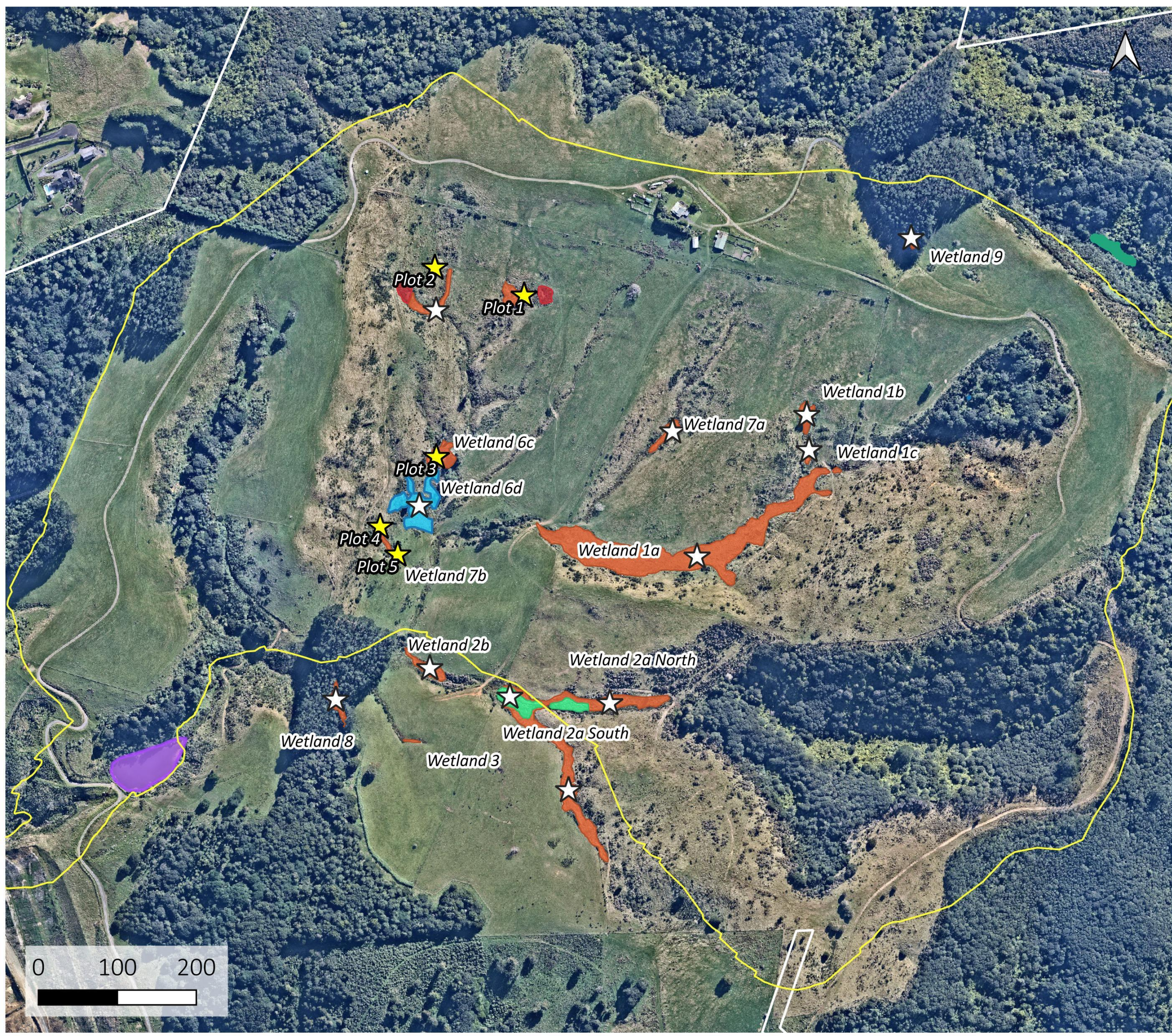
Figure 25

Note: wetland features excluded for clarity

Date	Drawn by
01/10/2024	Initial version by LD

SOURCES
Aerial Photography: Nearmaps
Sutton Pit Extent: Fulton Hogan
Stream Classification: Bioresearches

Bioresearches
A Babbage Company



NOTES
Aerial Images from Nearmaps (20242).

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Legend

- Exotic wetland
- Constructed pond
- Raupo wetland
- Constructed wetland
- Herbaceous wetland
- Forest swamp
- Sutton Block Pit
- SAL Landholdings
- Wetland delineation
- Vegetation plot
- Rapid test

Map Title

Freshwater wetland features for the Sutton pit extent at Drury Quarry

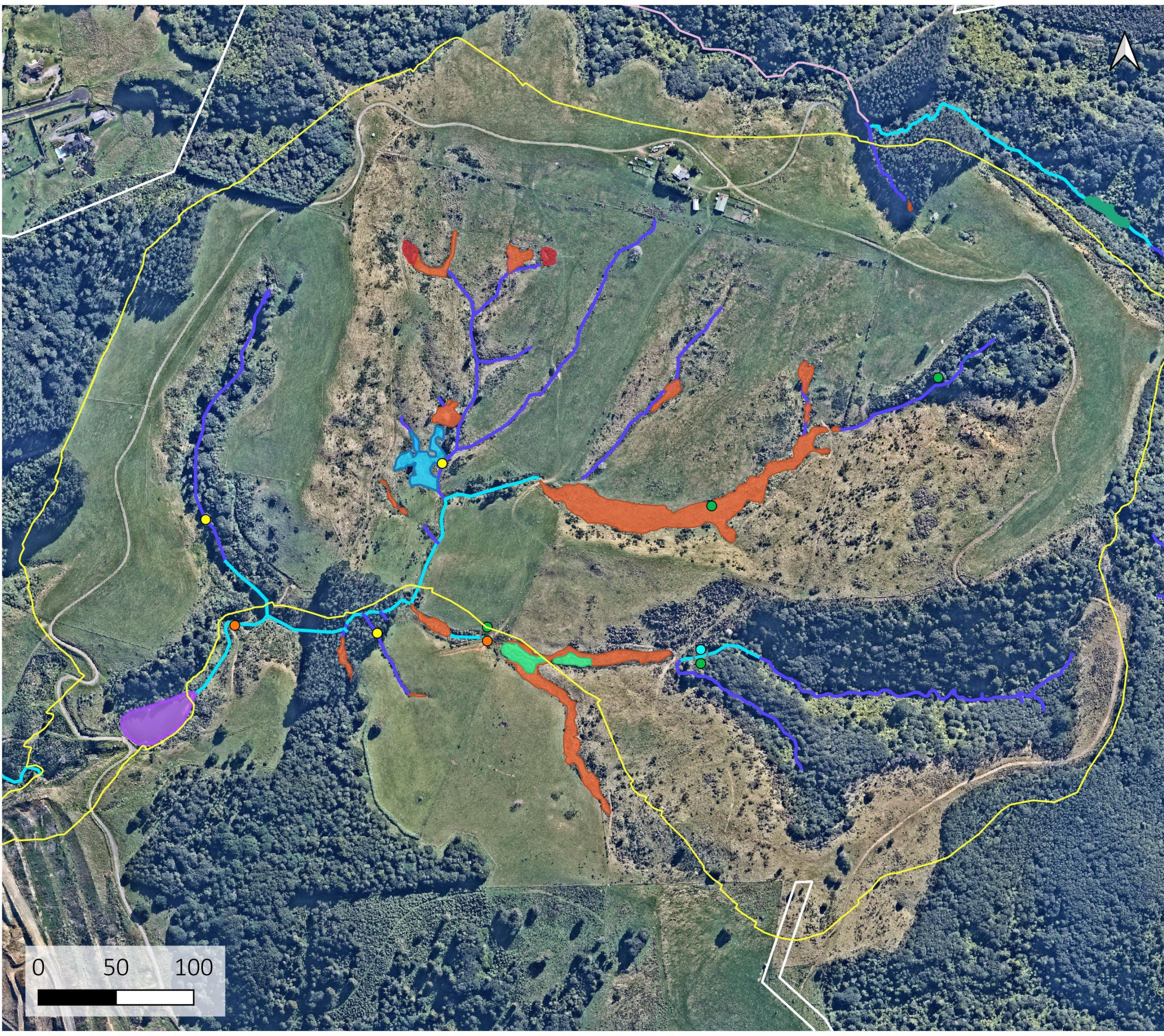
Figure 26

Note: stream features excluded for clarity

Date	Drawn by
01/10/2024	Initial version by LD

SOURCES
Aerial Photography: Nearmaps
Sutton Pit Extent: Fulton Hogan
Wetland delineation: Biosearches

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NOTES
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Legend

Native fish observed

- Kōura
- Longfin eel
- Shortfin eel
- No fish observed

Exotic wetland

Pond

Raupo wetland

Constructed wetland

Herbaceous wetland

Forest swamp

Ephemeral overland flow path

Intermittent stream

Permanent stream

Sutton Block Pit

SAL Landholdings

Map Title

Ecological Assessments -
Freshwater Fish

Figure 27

Note: stream and wetland names excluded for clarity

Date	Drawn by
01/05/2024	Initial version by LD

SOURCES

Aerial Photography: Nearmaps

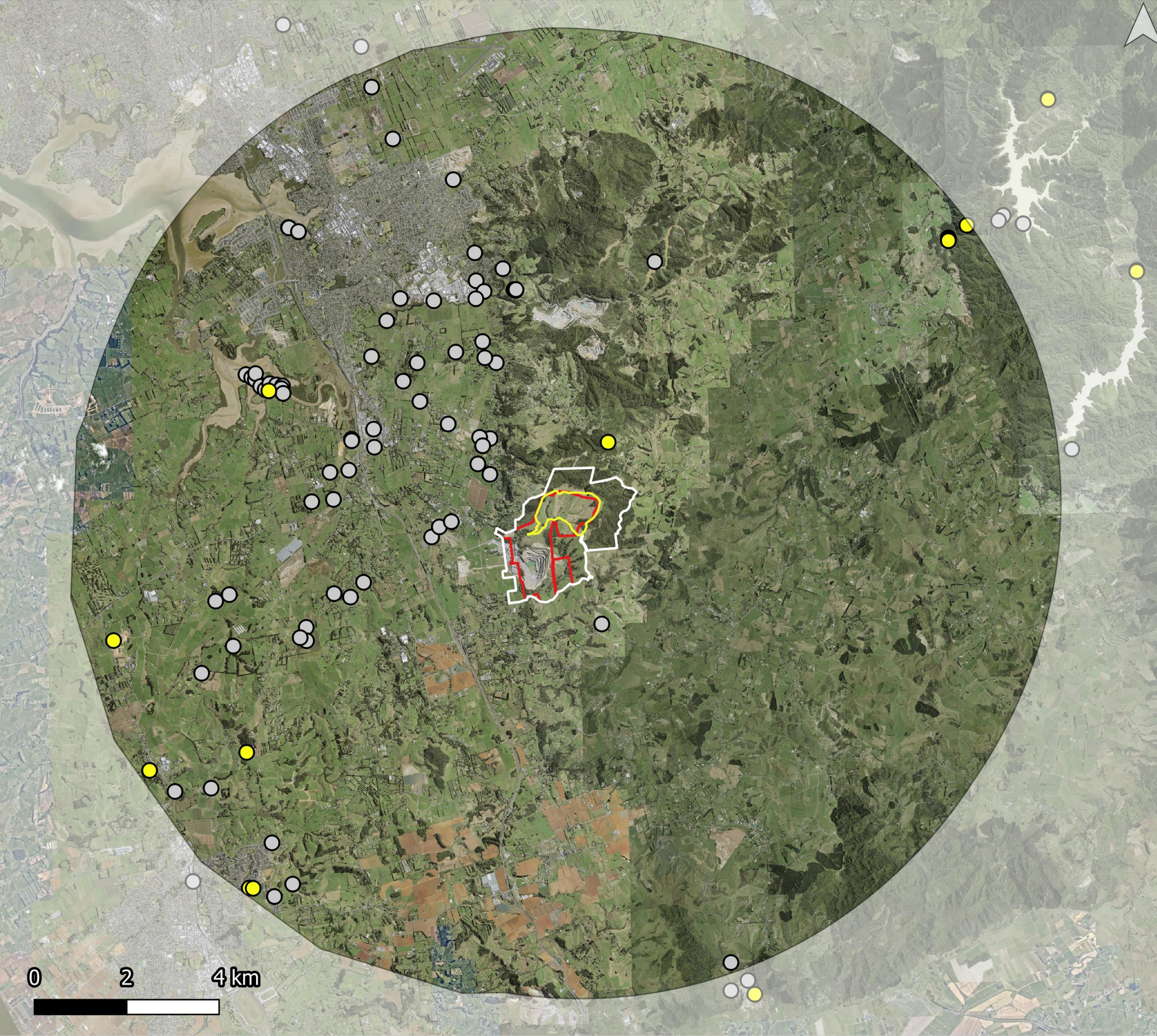
Sutton Pit Extent: Fulton Hogan

Stream Classification: Bioresearches

Wetland deineation: Bioresearches

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Legend

Quarry Boundary

Sutton Pit Design 2023

SPQZ

DOC Bat Database Records

- Both species detected
- Long-tailed Bat
(*Chalinolobus tuberculatus*)
- Short-tailed Bat
(*Mystacina tuberculata*)
- No bat species detected

10 km buffer around Sutton Pit

Figure 28

Map Title

Bat records in the surrounding
landscape of the Drury Quarry.

Date/Drawn by

21/02/2024
Map: Michael Anderson

SOURCES
Aerial Photography: Nearmaps
Sutton Pit Extent: Fulton Hogan
AUP Overlays: Auckland Council

Bioresearches 
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