

Shallow Heritage and Environmental Impact; Legacies of Dairying in the Waikato, New Zealand

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**IGU Conference Presentation; Commission on Sustainable Rural Systems
Session in Building B5, 9:00-10:45, Wednesday, 20 August, 2014**

Revealing the heritage detail

While Māori historical occupance of Waikato stretches back over perhaps 700 years, European (or Pakeha) history is limited to perhaps 150 years. It is the history of dairying in New Zealand that we explore.

Types of 'evidence'

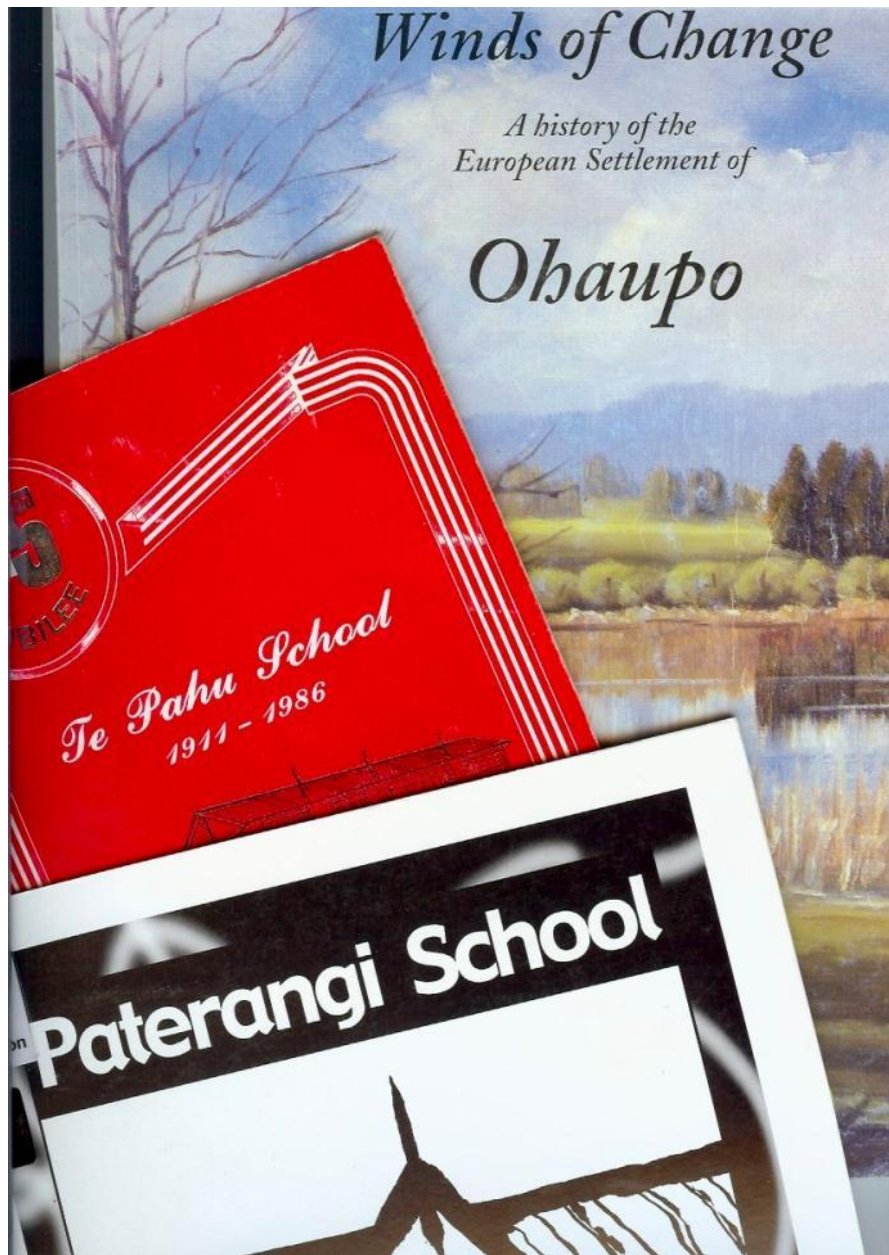
Text, Map, Image, Video, Oral, Performance

**150 years of heritage
detail for Waipa
District**

Current	Future
<p>Text</p> <p>Flat and searchable, word-based evidence like Papers Past, Footprints, published local histories.</p>	<p>Text</p> <p>On-line and paper based</p>
	<p>Video</p> <p>Screen-based and hyper-linked</p>
	<p>Images</p>
<p>Images</p>	
<p>Maps</p>	
<p>Other</p>	<p>GIS</p>

**Revealing heritage to
contemporary and
future generations; the
next 150 years**

REPOSITORY



Heritage detail in text form

Flat files – tremendous volumes of hand-written or published materials with casual and formal purpose of recording heritage detail .

Value of national, region and local libraries and the knowledge staff who given willingly of their time.



Kaitiaki	Piriaka	435	501	656	-	-	-	181	48/2	42/6	41/11	Rail	31-7-33	
Ohura Valley	Ohura	196	219	250	-	-	-	174	48/2	30/6	40/11	Rail	-	305
Aria	Te Kuiti	178	178	154	-	-	-	126	41/8	35/-		Rail	-	
Pio Pio	"	430	485	589	-	-	-	126	41/8	35/-		Rail	31-5-33	
Oparau	Kawhia	108	107	110	-	-	-	-	-	-		Ship (Kawhia)	-	
Marakopa	Hangatiki	116	122	186	-	-	-	120	40/7	35/-	34/6	Rail	None	192
N.Z. Co-op.	Otorohanga	1557	1789	2280	-	-	-	114	39/7	35/-	33/8	Rail	1-9-33	2612
N.Z. Co-op.	Te Awamutu	2984	3069	3612	-	-	-	100	37/1	32/6	31/6	Rail	1-9-33	4065
N.Z. Co-op.	"	-	-	-	281	269	288	100	37/1	32/6	31/6	Rail	1-9-33	312
Heirini	"	-	-	-	-	-	-	-	-	-	-	-	-	-
Te Awamutu	"	1028	1096	1279	-	-	-	100	37/1	32/6	31/6	Rail	1-9-33	
Karepuku	"	-	-	-	176	152	148	100	37/1	32/6	31/6	Rail	-	
N.Z. Co-op.	Rukuhia	-	-	-	269	245	269	90	35/4	28/-		Rail	1-9-33	307

MILK POWDER


		<u>Actual output</u>	<u>Actual output</u>	
		1932	1933	
		<u>Tons</u>	<u>Tons</u>	
N.Z. Co-op.	Waitoa	2827	3087	21/1 $\frac{1}{2}$ Rail
N.Z. Co-op.	Waharua	1417	-	21/10 $\frac{1}{2}$ "
Nathan J.	Matangi	1292	1620	27/6 "
N.Z. Co-op.	Te Awamutu	1152	1373	20/3 "

CASEIN

N.Z. Co-op.	Frankton Jn.	724	725	25/-	Rail
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**The consolidation era – butter and cheese production figures from 1931-1933.
Waipa data extracted from records held in the National Archives in Wellington**

Papers Past Home Introduction Search Browse



Masthead of New Zealand Tablet
09 July 1853

Papers Past contains more than three million pages of digitised New Zealand newspapers and periodicals. The collection covers the years 1839 to 1945 and includes 90 publications from all regions of New Zealand.

Latest additions to Papers Past (June 2014):

- [Charleston Argus \(1867\)](#)
- [Lake Wakatip Mail \(1863-1920\)](#)
- [Lyell Times and Central Buller Gazette \(1885-1886\)](#)
- [Manawatu Standard \(1913-1915\)](#)
- [Manawatu Times \(1912-1915\)](#)
- [Mt Benzer Mail \(1881-1920\)](#)
- [Press \(1921-1928\)](#)
- [Pukekohe & Waiuku Times \(1912-1920\)](#)
- [Star \(1910-1914\)](#)
- [Sun \(1914-1915\)](#)
- [Waikato Times \(1902-1918\)](#)

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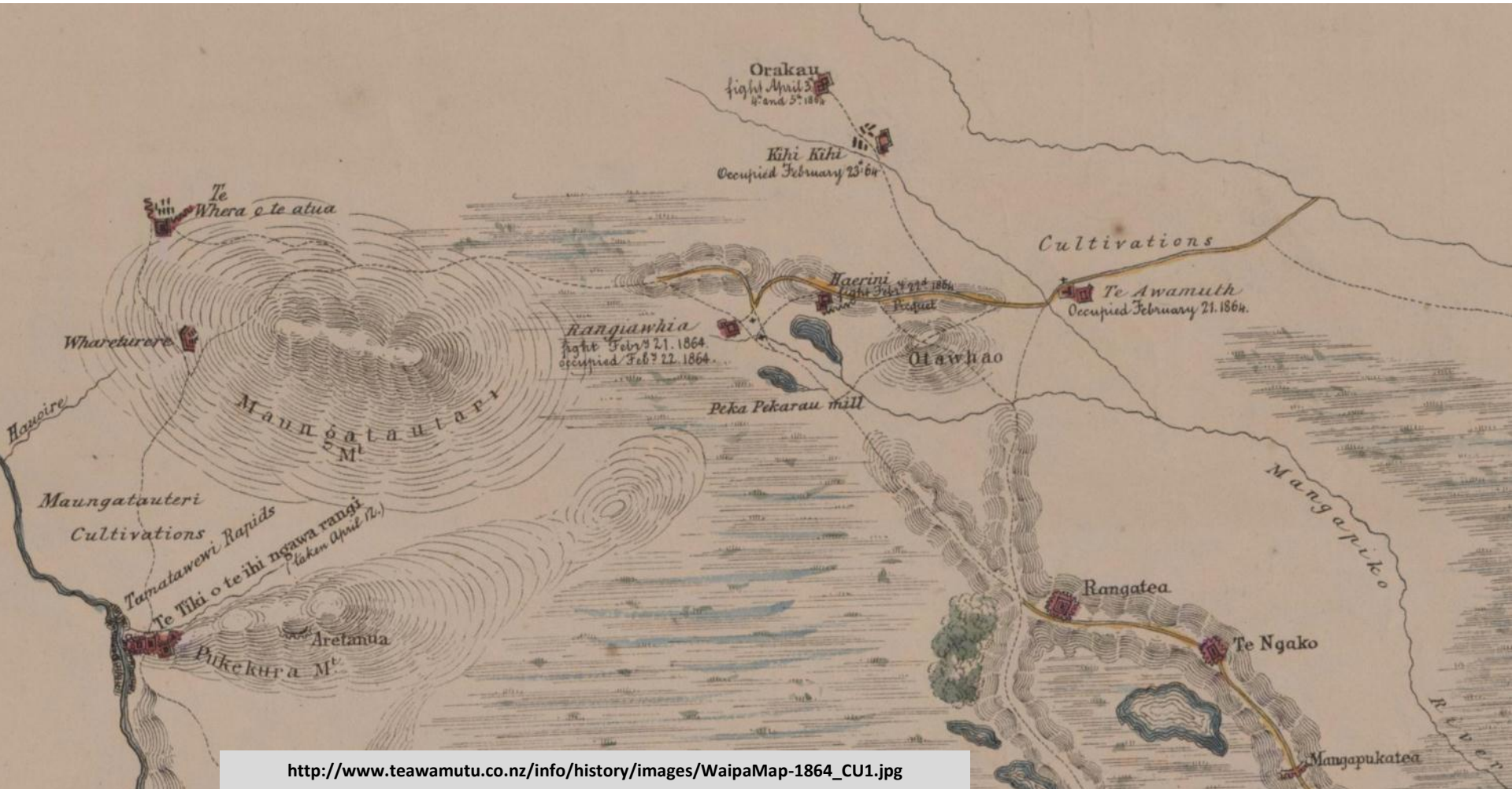
<http://www.teara.govt.nz/en>

Revealing the cartographic heritage detail

1864 One of the earliest maps, showing the colonial cartography of the advance up the Waipa river and ultimately to Orakau. The map recognises the Māori fortifications at Pāterangi and PikoPiko.



... as uncomfortable as the content might be, the cartographic heritage is impressive



AUCKLAND LAND DISTRICT NO. 939.



LAND FOR SETTLEMENTS ACT.
LANDS FOR SELECTION
ON
RENEWABLE LEASE.

10,154 ACRES 2 ROODS 30 PERCHES.

Monday, 21st December, 1908.

Applicants will have to appear personally before the Land Board at the District Lands Office, Auckland, on 19th March a.m. on Tuesday, the 23rd December, 1908, to answer any questions the Land Board may ask, but if any applicant so desires he may be represented by the Land Board of the district in which his land is situated. The notice for which there is room here was first published in the Auckland Standard, on 21st December, 1908, at 10 o'clock a.m., at the District Lands Office, Auckland.

TAUTARI SETTLEMENT.

BLOCKS X, XI, XII, AND XV, MAUNGATAUTARI SURVEY DISTRICT.

Block	Area	Class	Notes
Block X	1,000	First-class	...
Block XI	1,000	First-class	...
Block XII	1,000	First-class	...
Block XV	1,000	First-class	...

CLASSIFICATION AND DESCRIPTION

FIRST-CLASS LAND. 2. VILLAGE OF TAUTARI.

SECOND-CLASS LAND. ...

THIRD-CLASS LAND. ...

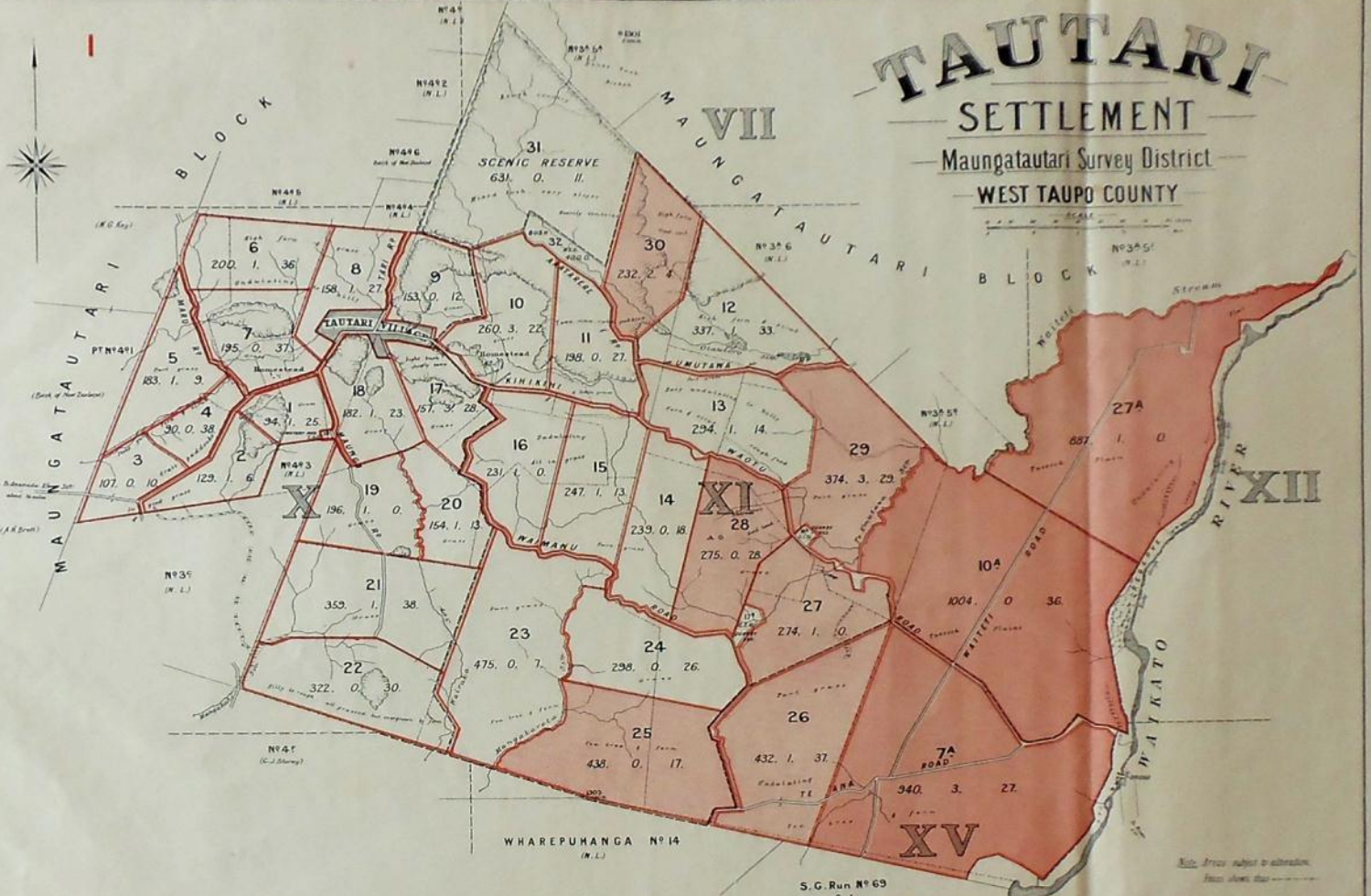
INSTRUCTIONS TO APPLICANTS.

Applications may be made at the District Lands Office, Auckland. Applications will be made on paper forms, to be obtained at the District Lands Office, Auckland, and filled up and returned to the Land Board on or before the 19th March 1909. The Land Board will consider the applications on or before the 23rd December 1908. The Land Board may require the applicant to furnish such information as it may think fit to require. The Land Board may also require the applicant to furnish such information as it may think fit to require. The Land Board may also require the applicant to furnish such information as it may think fit to require.

CAUTION.

The attention of applicants is drawn to sections 101 and 102 of "The Land Act, 1908," which provide that any person wilfully making a false declaration or obtaining false and untrue evidence for the purpose of obtaining or retaining a lease of land under the provisions of the Land Act, 1908, shall be liable to a term of imprisonment, in addition to the forfeiture of any land obtained by such false declaration.

JOHN STRAUCHON,
COMMISSIONER OF GOVERN LANDS.



REFERENCE.

First-class land	Red
Second-class land	Orange
Third-class land	Yellow
Village land	Green

The figures in colour on detail plans correspond with those in advertisement, and on locality plan.

Sites of Triangulation Stations and rights of way therein are reserved. Interference with any survey peg or mark is a misdemeanour under the Land Act.

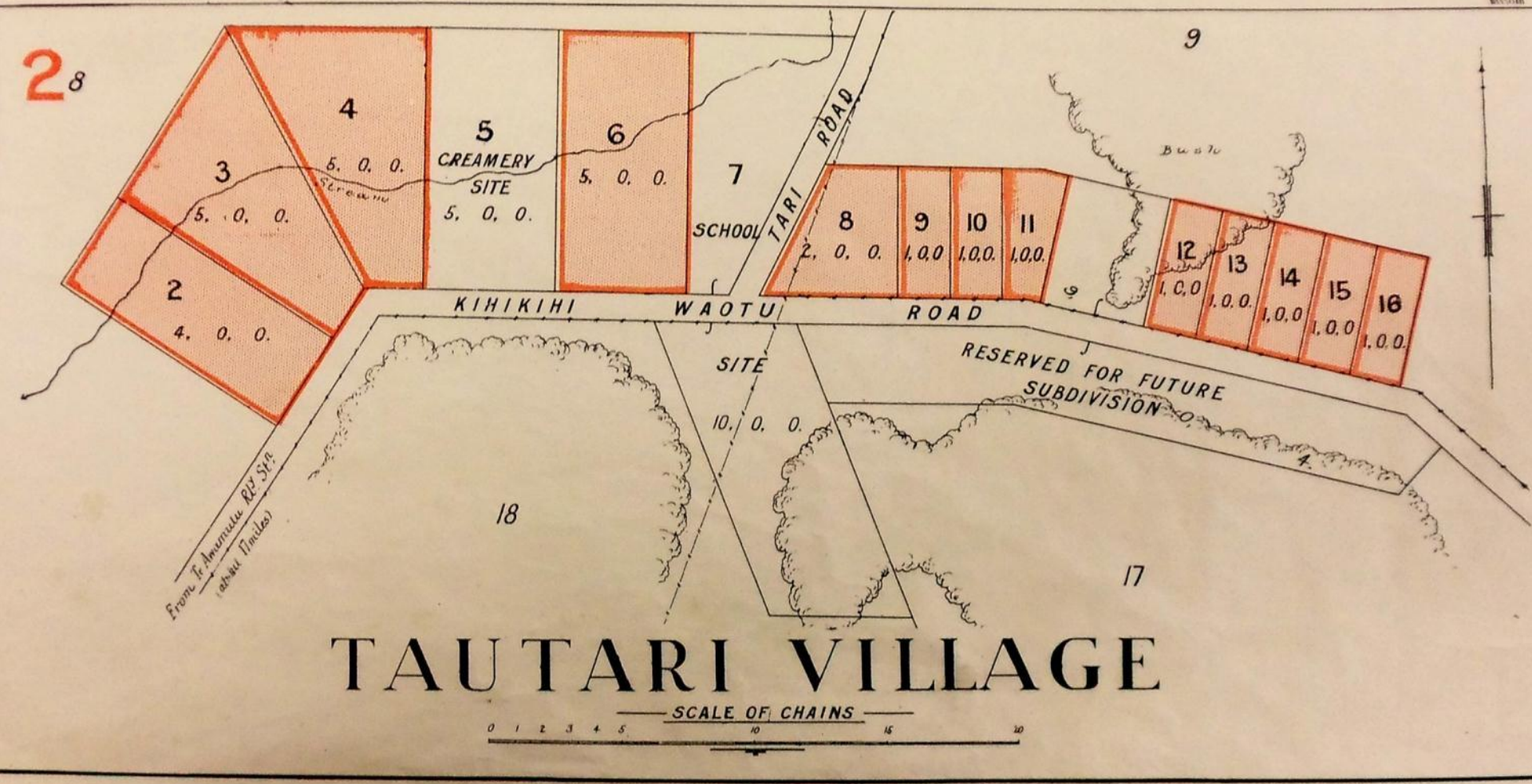


TAUTARI VILLAGE

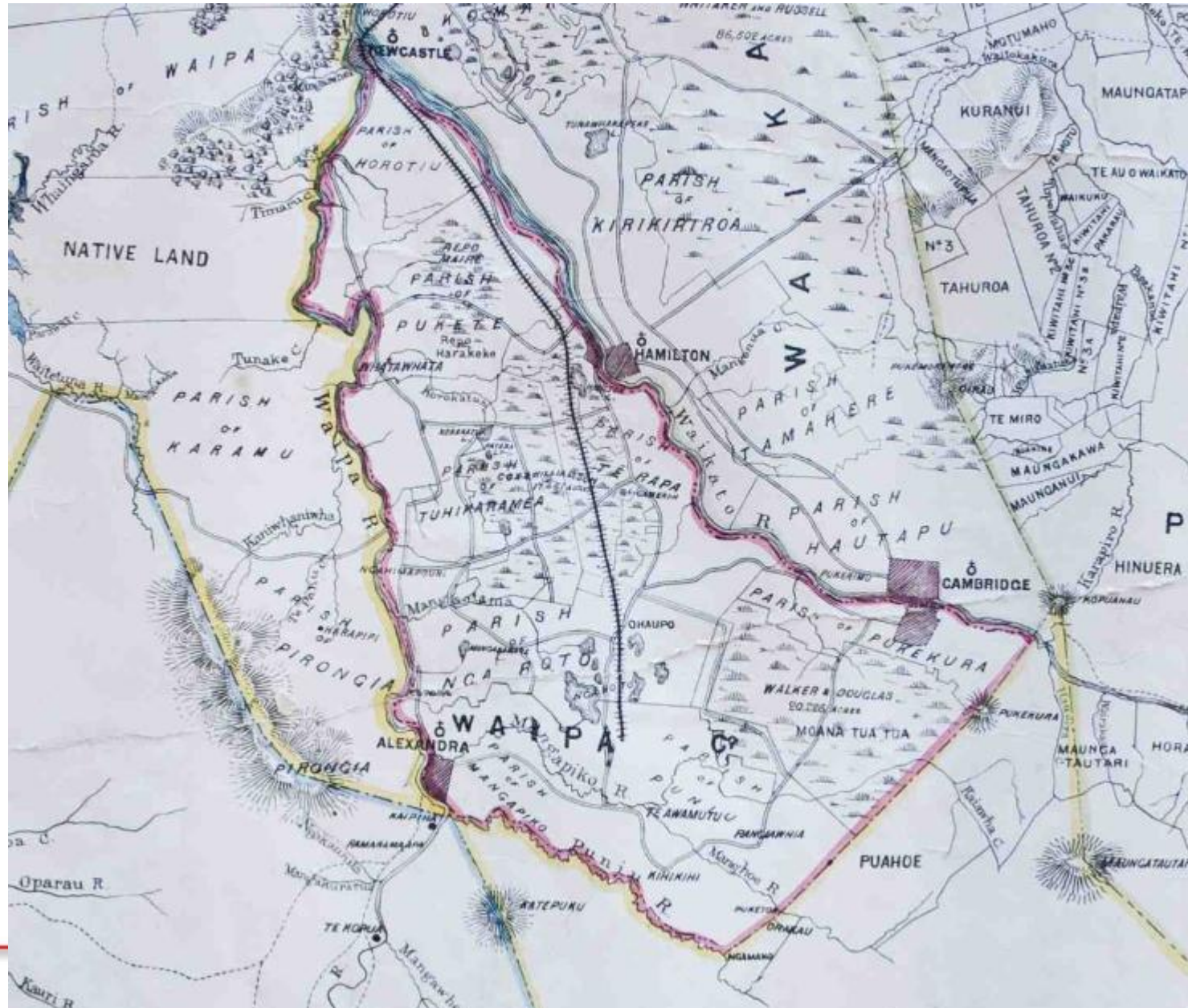
SCALE OF CHAINS

ABSTRACT OF CONDITIONS OF LEASE.

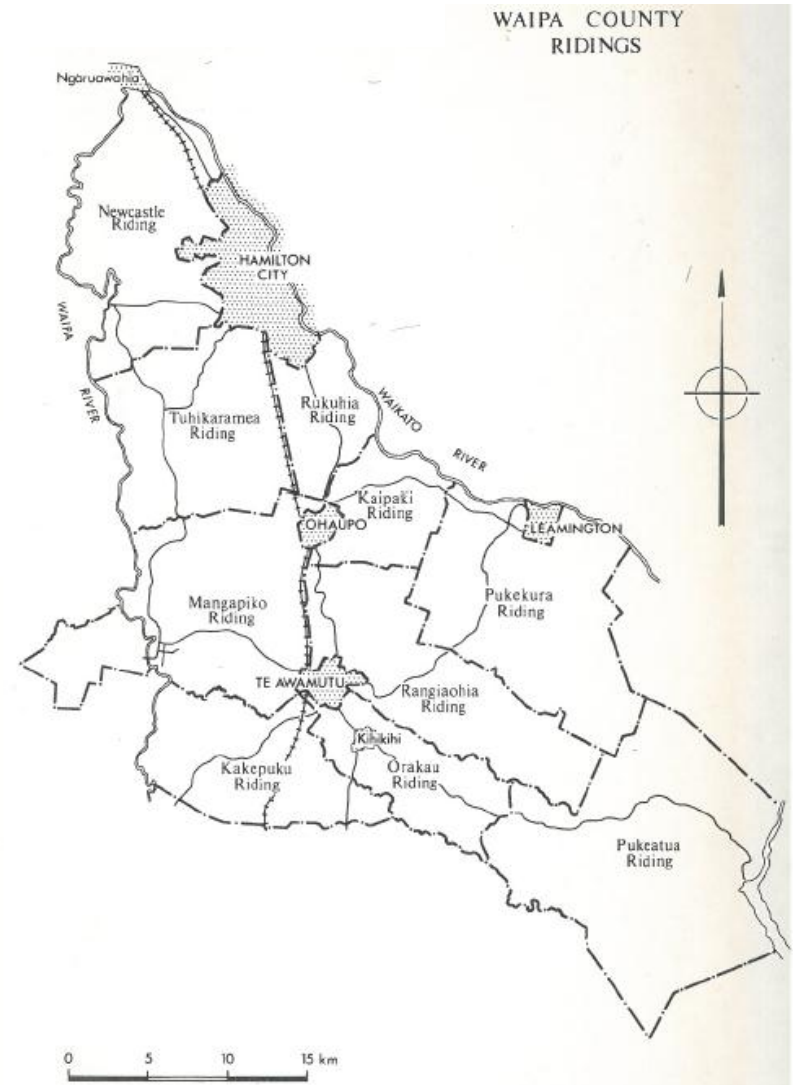
1. Term of lease, 21 years, with a period of 10 years to be further extended at the option of the lessee.
2. The lessee shall be bound to observe the conditions of the lease as set forth in the schedule of conditions of lease.
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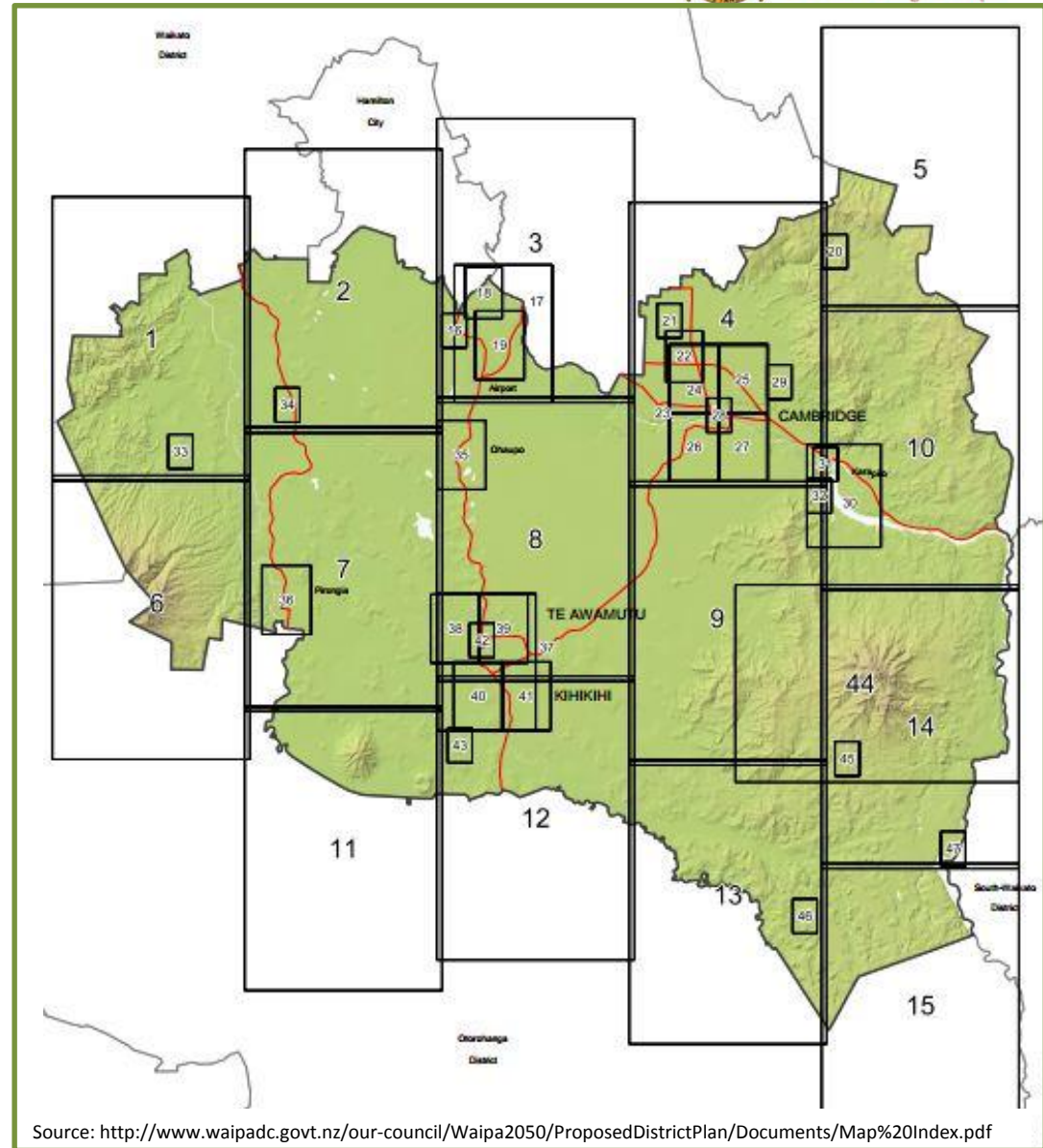
Abolition of Provinces (1876) produces the first identifiable Waipa County and the county towns of New castle, Hamilton, Cambridge and Alexandra
In 1877.

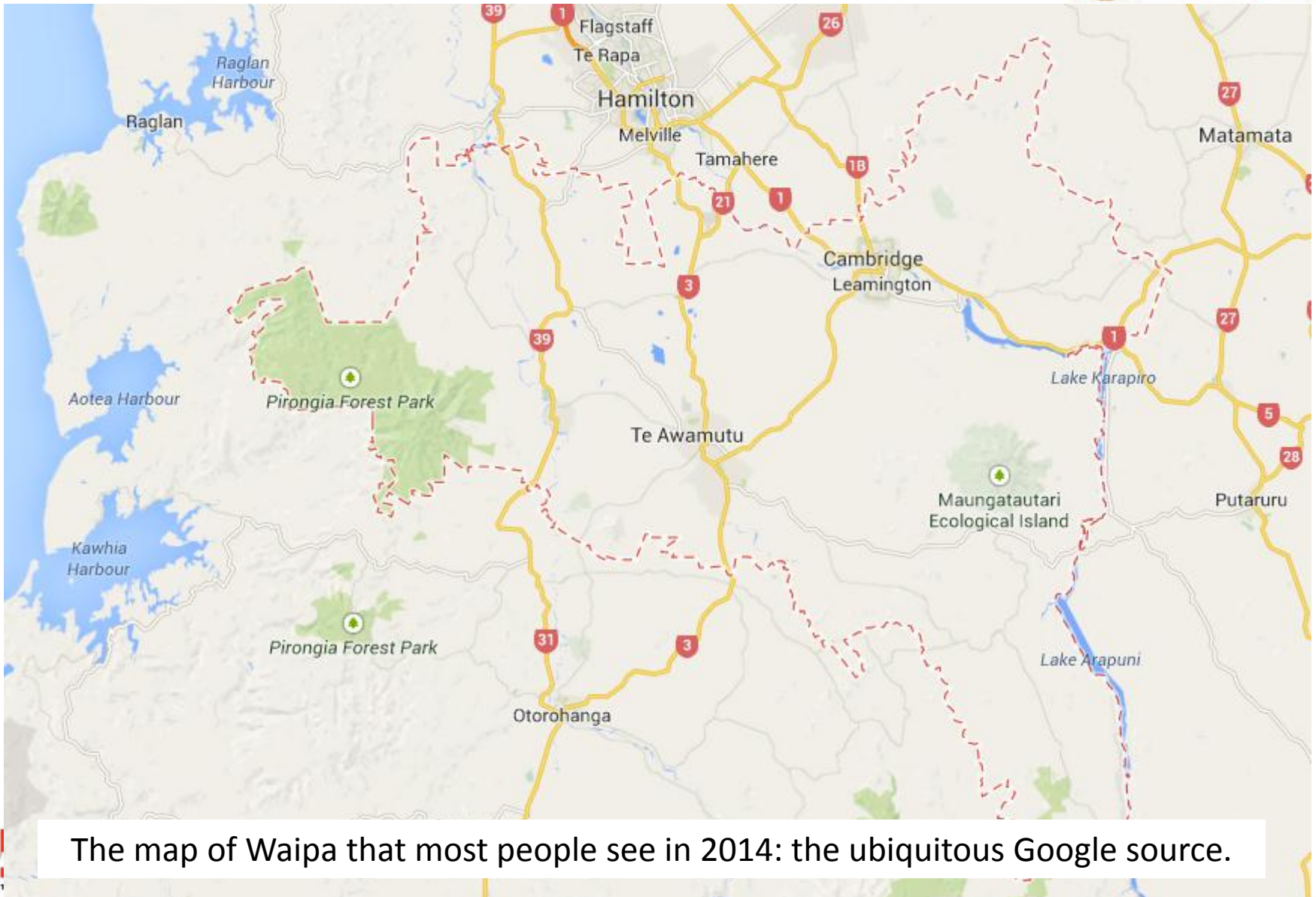


Before the local government reorganisation in 1989, Waipa County maps looked like this



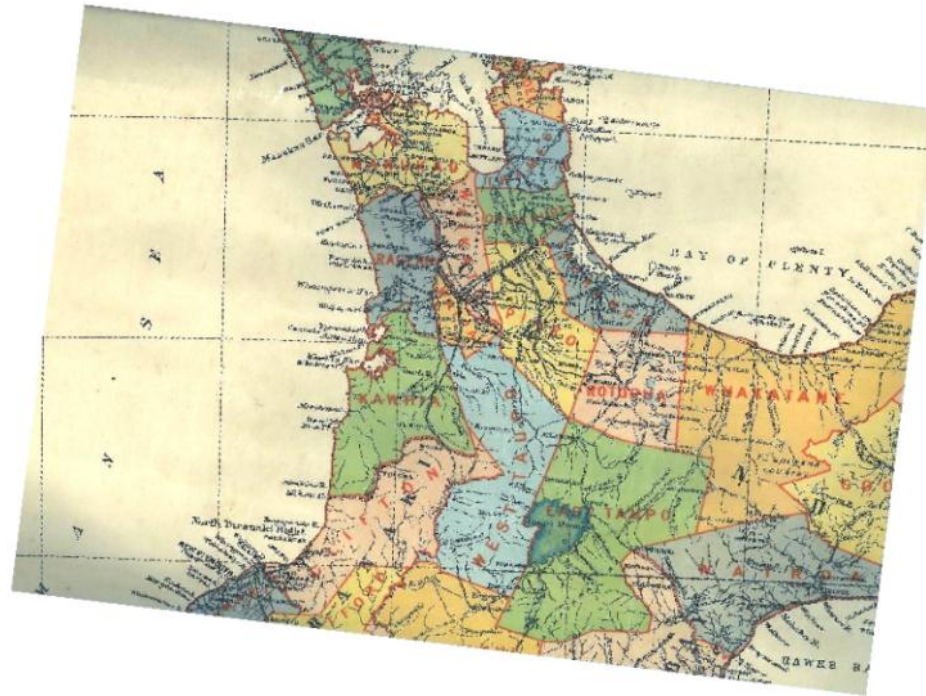
Contemporary maps of Waipa District are indicated in this reference map.





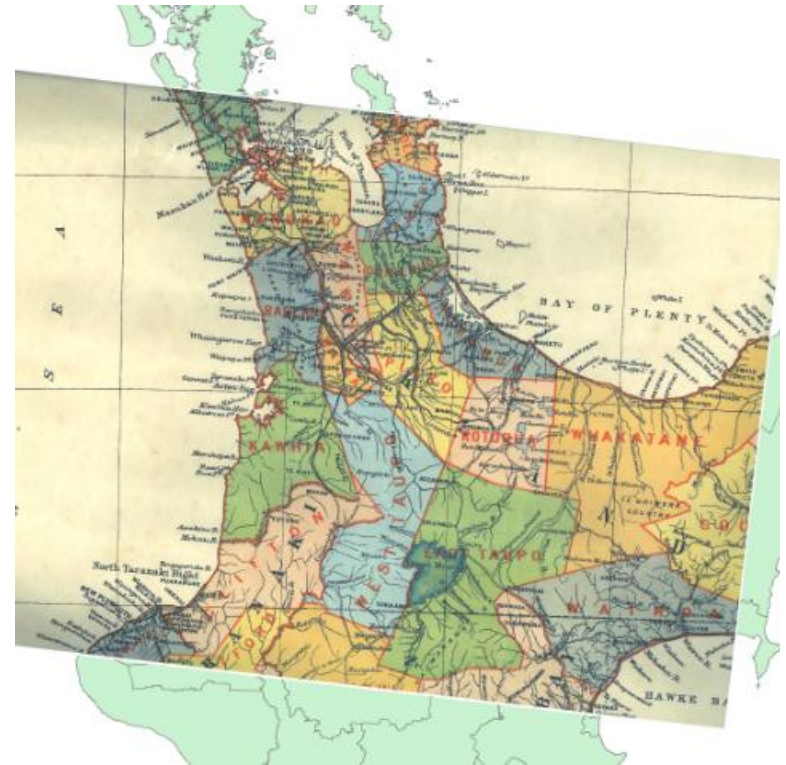
The map of Waipa that most people see in 2014: the ubiquitous Google source.

**Uncovering the mapping heritage requires some image processing.
If we are to 'relate' maps and their detail, we need a common reference system,
and Geographic Information Systems provide the toolbox.
Starting with the original lat./long. version of 1897...**





‘Rubber sheeting to get an overlay on a common base. GIS tools



The current standard is the NZ Transverse Mercator, based on the NZ 2000 Geodetic datum. The projected co-ordinate system gives us recognisable measurements in metres rather than geographic co-ordinates in lat./long.

Richness of the image files held in local, regional and national collection like the National Library in Wellington



Harapepe Creamery



Pukekura 2 on Maungatautari Road



Rukuhia Cheese Factory

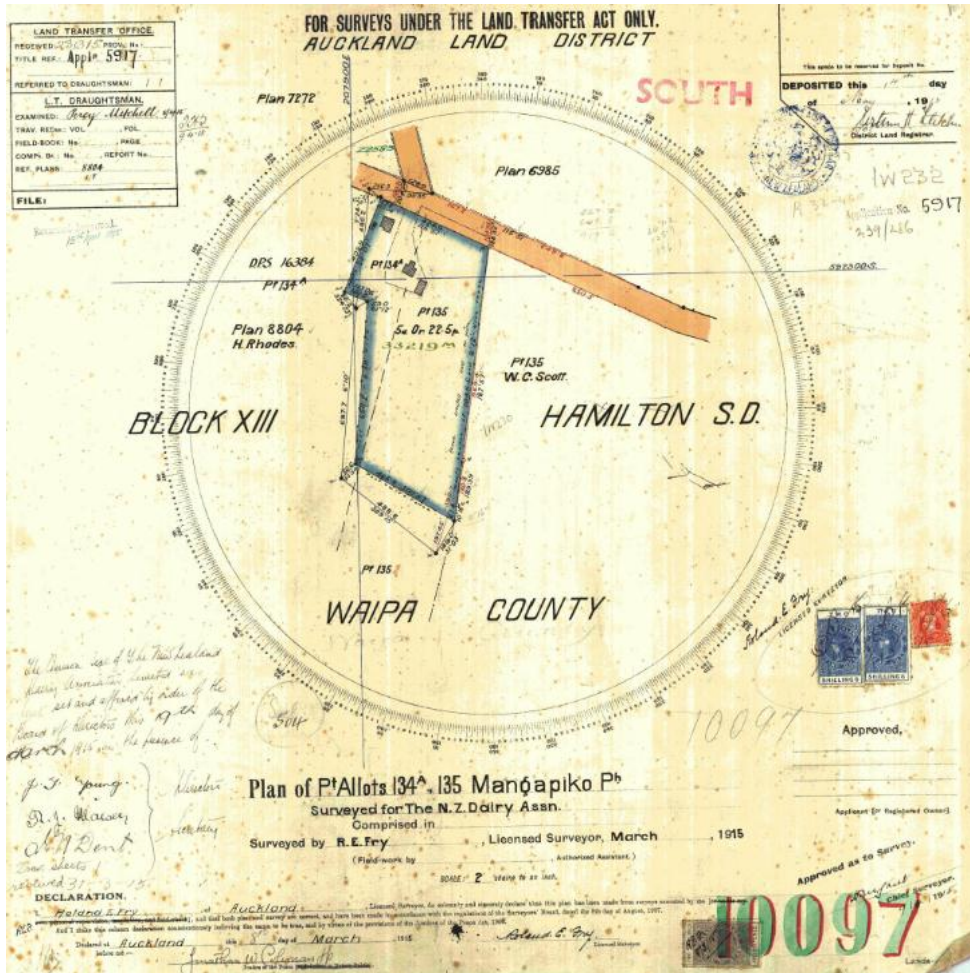
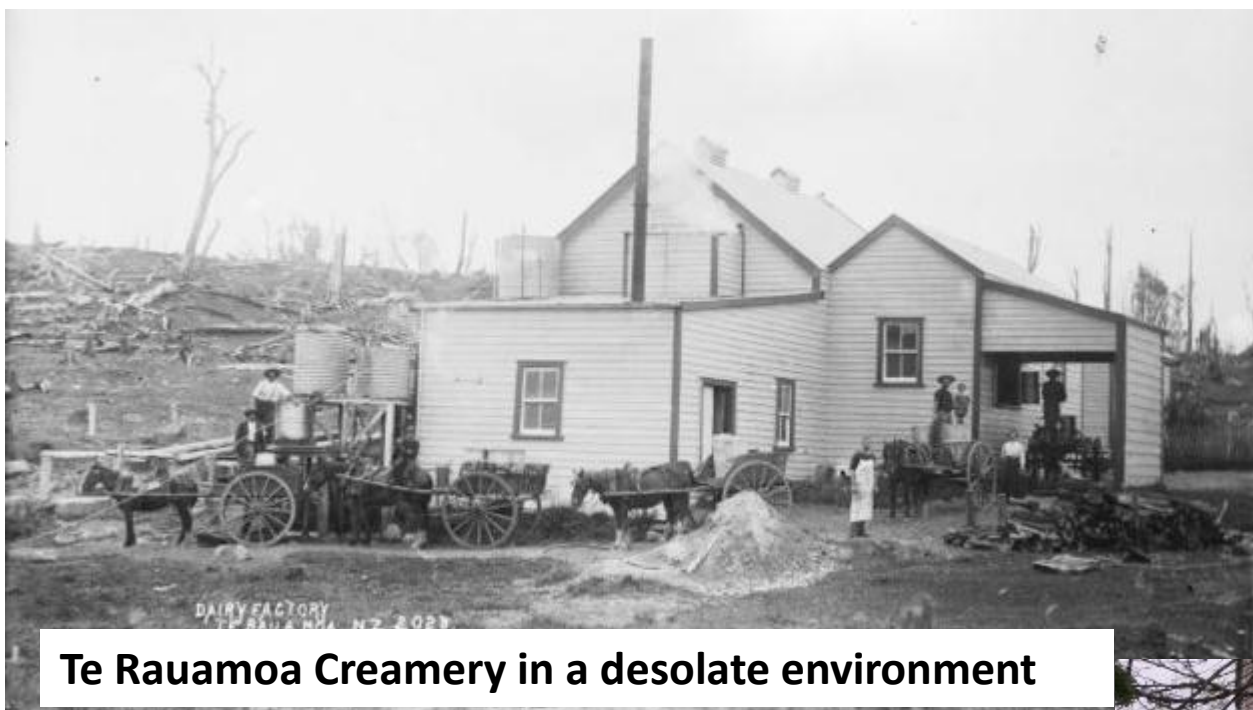


Image of survey for N Z Dairy Association as part of the Paterangi Creamery

Survey plans need to be cited for each property where individual title are issued. The Institute of Cadastral Surveyors creates a searchable database of PDS and SO records

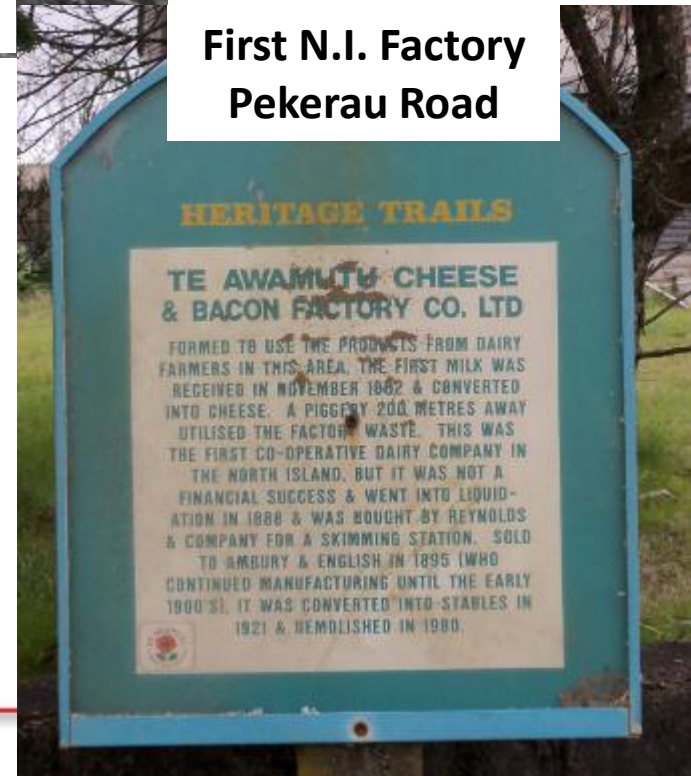


Te Rauamo Creamery in a desolate environment

**First N.I. Factory
Pekerau Road**

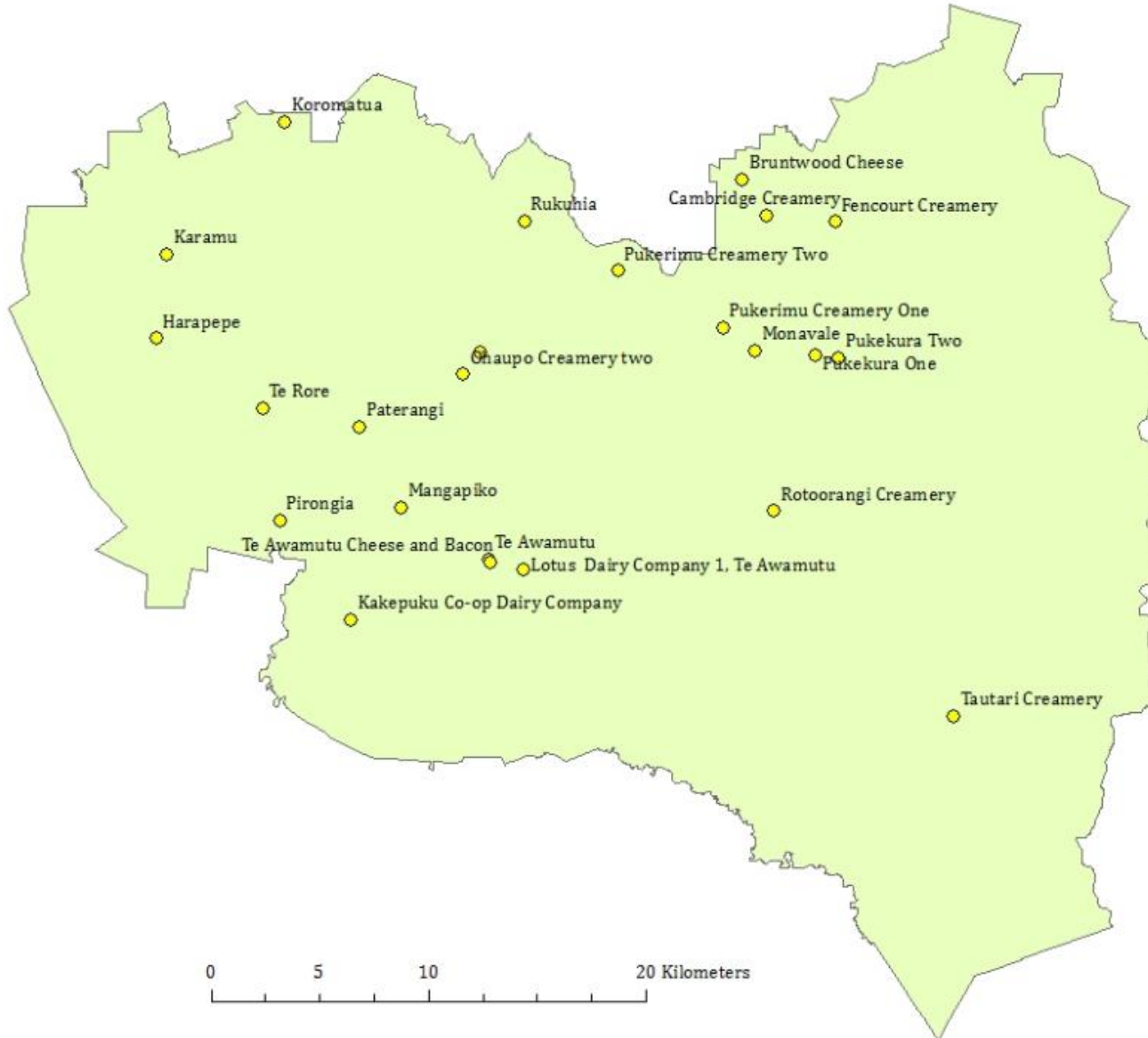


Monovale Creamery

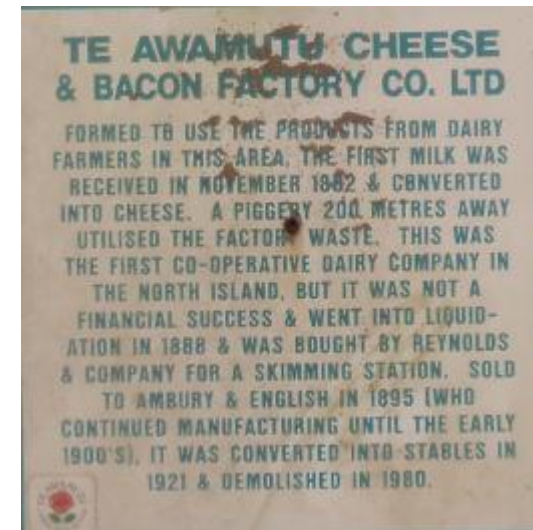


What does the cartographic heritage reveal about the Waikato, and about Waipa region

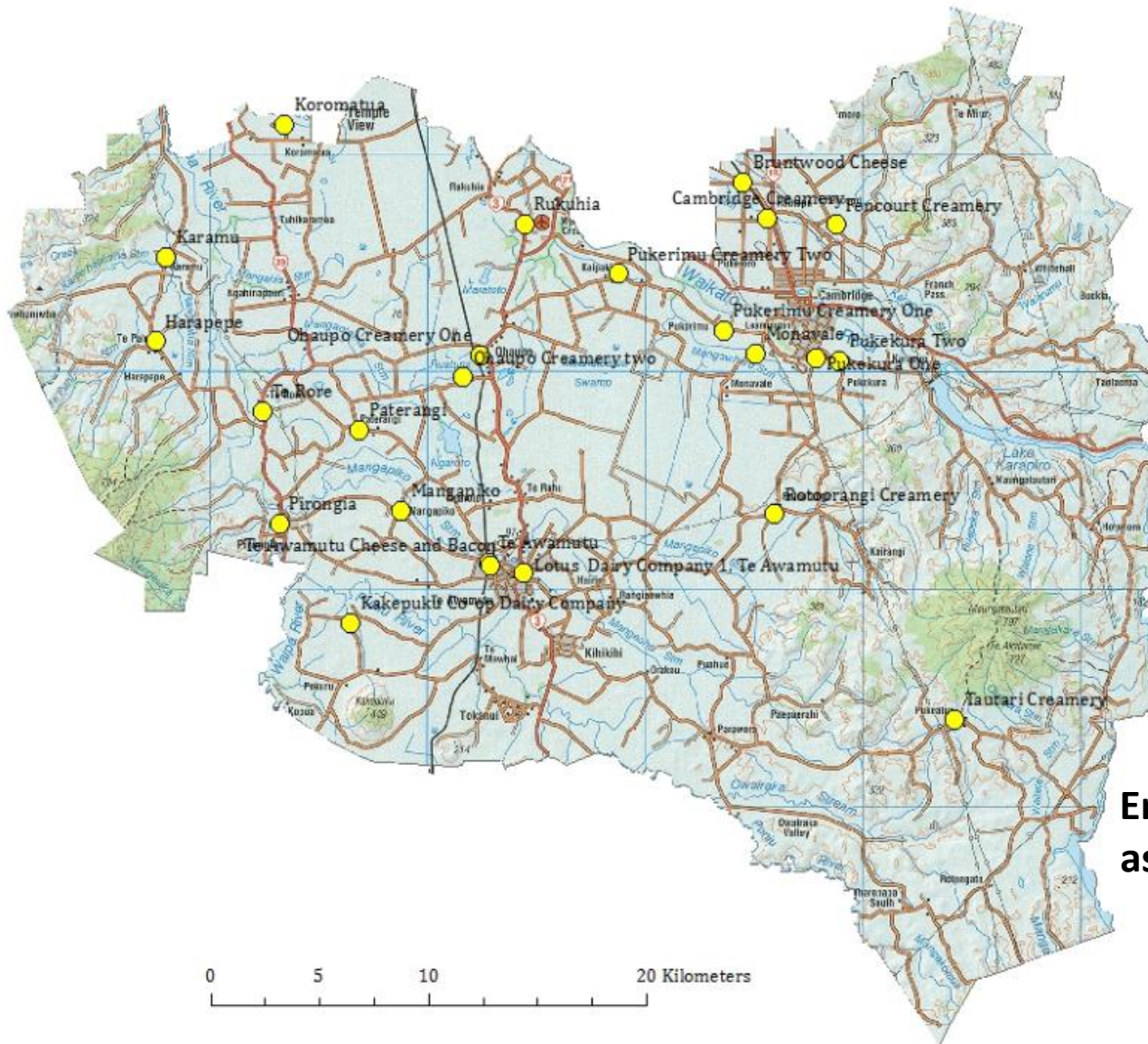
In the Waikato region there are parts of Waikato and Matamata-Piako districts that have similar patterns of pre-industrial, then local area and regional development in the dairy industry. It is not until the Dairy Industry Restructuring Act (DIRA) that we see national industrial base.



25 of about 30 sites of local milk processing established before 1920.



Some creameries (like Te Rahu, Puahue, Kihikihi) are missing, and some need to be relocated on the basis of NZCS Institute data. The 'pattern' won't change.



**Environmental determinants
as well as history have a role
to play.**

With hindsight, and a different set of historical conditions, we can see the great environmental stress involved in the conversion of land under indigenous vegetation to the pasture we see today . It is clear that the environmental challenges facing the dairy industry today are far greater than the economic ones.

But our focus is on using heritage information to represent what happened in Waipa. The next two slides will suggest there were four stages in the development of dairying in the region. The 50,000 words of heritage texts collected for the region's dairy industry for this project will substantiate this case.

1. Pre-industrial. **1841 1882**. Domestic butter and cheese production from local farms traded locally. Holstein-Friesian and Jersey animal stock. Good personal records, statements. Refrigerated exports from 1882 changed what was possible.

2. Creameries, butter and cheese factories. **1882-1920**. Most factories owned co-operatively by farmers by 1900. Horse and dray movement off-farm of whole milk to produce cheese and/or butter, but also cream/skimmed milk in creamery concentration of supply; down the Waipa River or up the railway line from Waipa. Perhaps 20 farms involved per creamery.

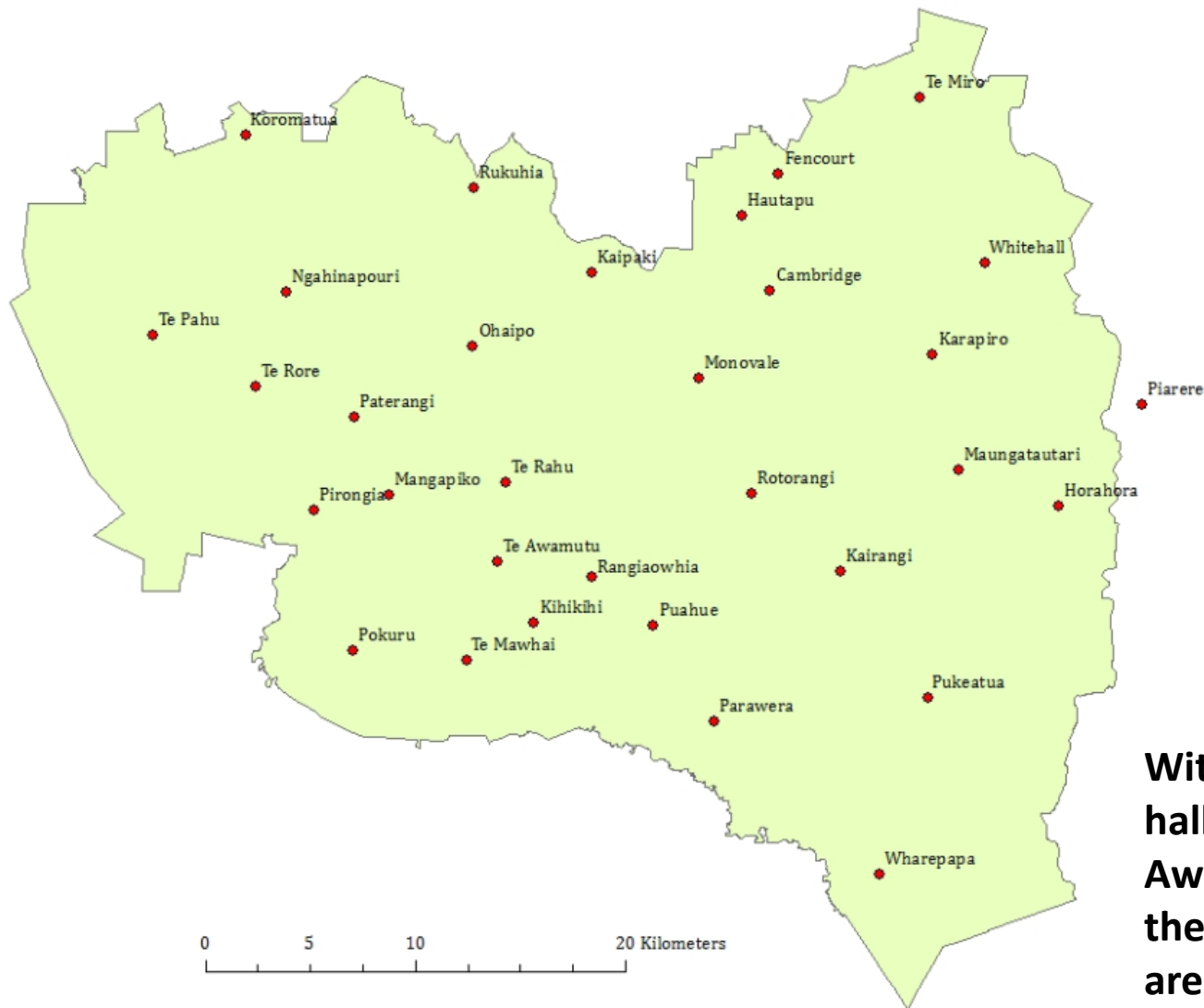
3. Industrial phase. **1920- 2000. Milking machines on farm.** With improved technology and greater investment in plant, factories grew in size, and the numbers fell from the national high point of 600 in 1920. Just a few of the old wooden creameries remain in Waipa today. Cream can collection at the farm gate stopped in 1951; tanker collection became the norm.

4. Corporate. **2000 – 2014.** Fonterra's emergence meant that only one dairy factory survived 100 years from foundation – Tātua. I suggest Fonterra's legacy likely to be reflection on the increasing creation of mega-farm enterprises, and progressive changes in rural demography with decay or re-occupation of rural housing,

The change in farm enterprise and the processing of farm produce is fundamentally economic, but there are other activities that contribute to rural heritage.

Communities were built around local creameries which were often located at road junctions for convenience of access. Rural **schools** were built to collect children in the same sort of 'catchments'.

In time, **rural halls** provided a focus for the communities' social life, and these equally provide part of the dairy industry heritage.



With the exception of the halls in Cambridge and Te Awamutu (historic) all of the community halls shown are in rural settings.

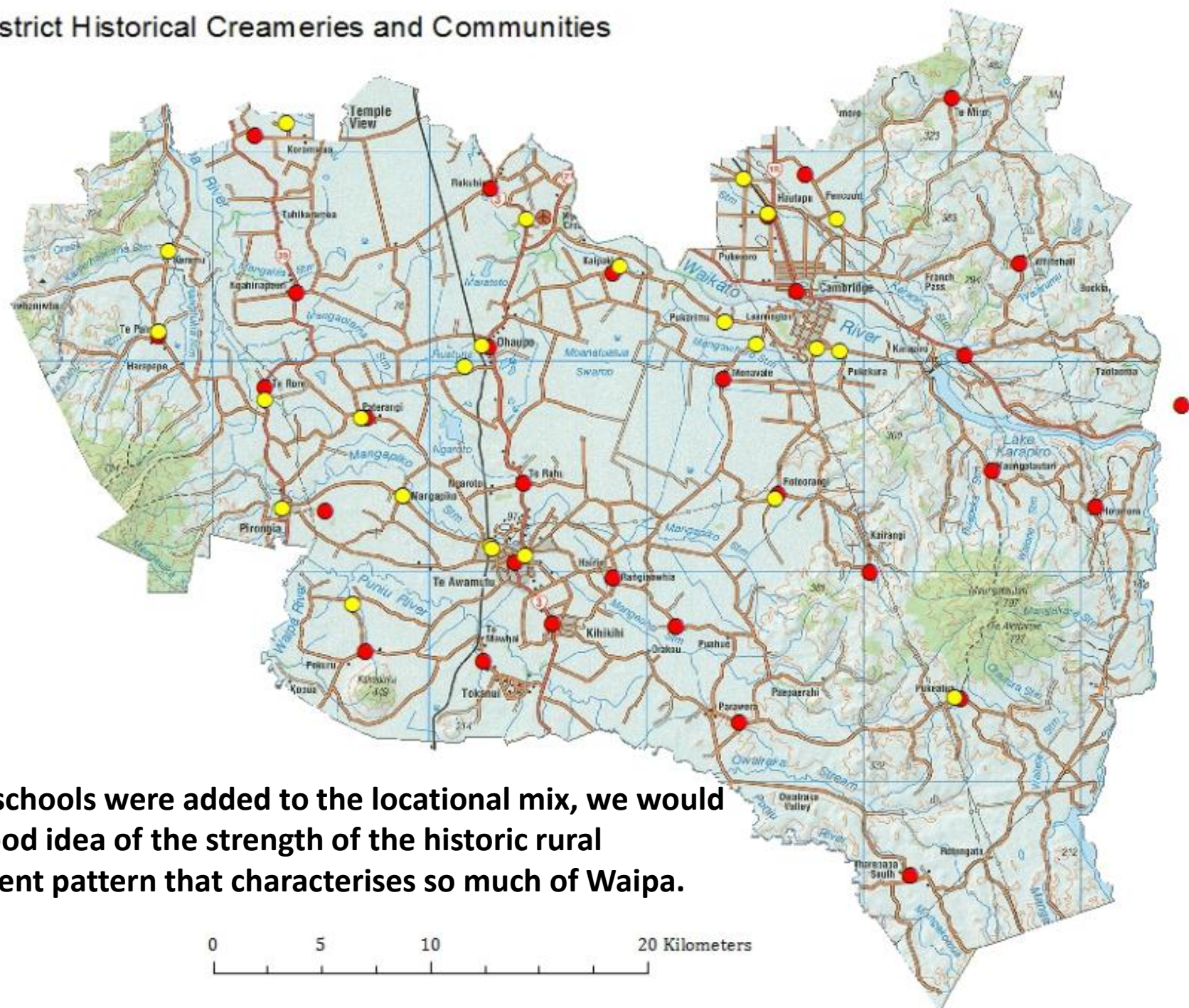


Monovale



Te Rahu

Waipa District Historical Creameries and Communities



If local schools were added to the locational mix, we would get a good idea of the strength of the historic rural settlement pattern that characterises so much of Waipa.



Unanswered questions

What role did statutory/regulatory environment have on the development of dairying in Waipa?

How influential were Henry Reynolds, Wesley Spragg and Sir William Goodfellow in Waipa?

In terms of age and gender, what has happened to rural Waipa through time, and what will happen next?

We're time-bound and 'of an age'; the social and infrastructural character of Waipa is changing, and some vital heritage will not last.

The way we record the heritage detail for posterity is also in flux; at every step we must ask 'how do I make this information digitally useful for the next 30 years/generation'?

Disappearing heritage; the contribution of dairying to the character of contemporary Waipa

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