

# Dragging Land Management into the 21st Century



**Geoff Lewis**  
GIS Analyst

(Precision guess work based on unreliable data provided by those of questionable knowledge solving problems you don't know you have in ways you wouldn't understand)

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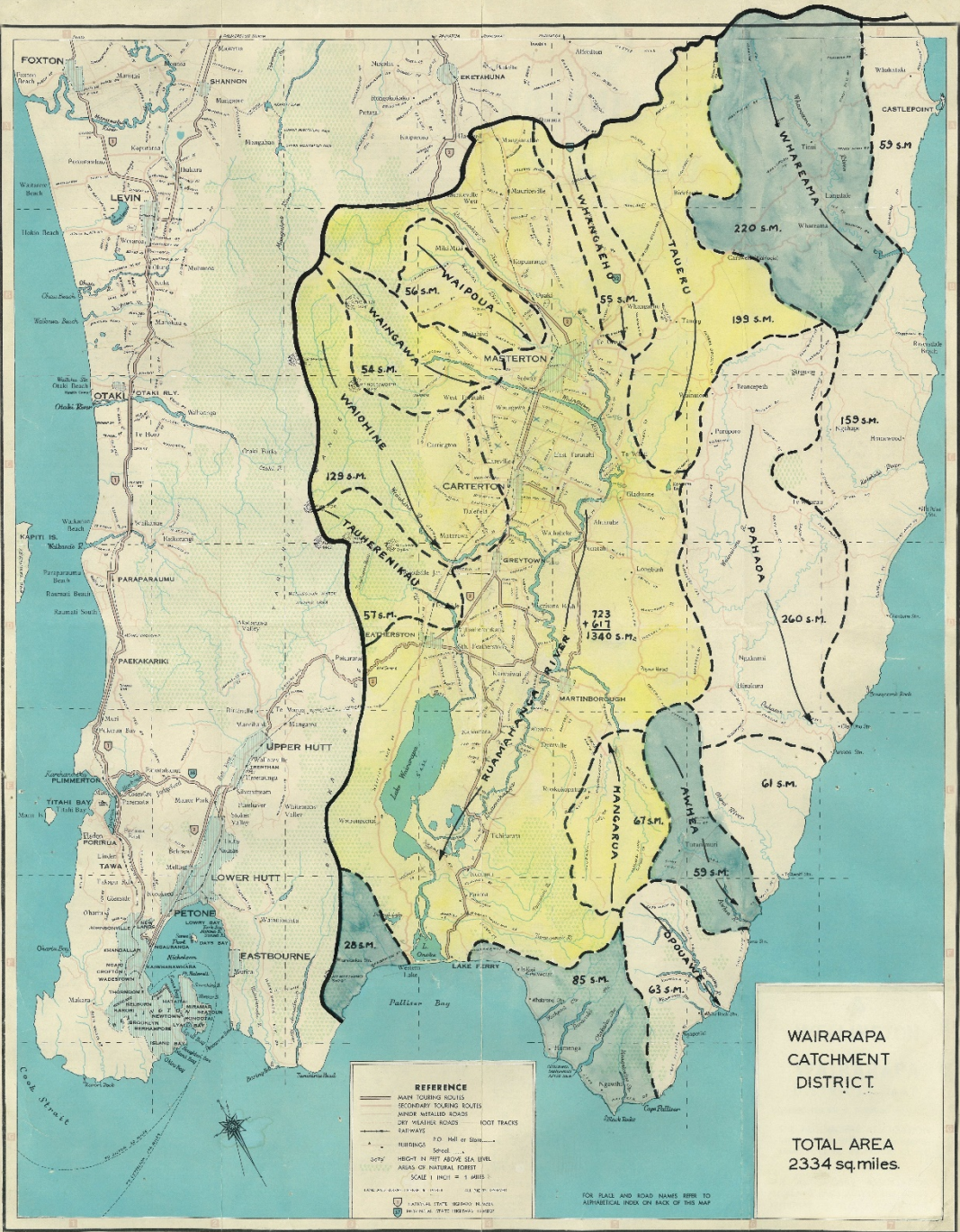
**Josie Winters**

Land Management Adviser

(Soil geek, erosion fanatic, and agricultural enthusiast. I work with and for farmers, make maps, plant trees, help improve sustainability)

# Why would we share??

- Wish to share our learnings to help you build your own bridge of understanding.... And help you reach a state of bliss
- You can get awesome outcomes from ordinary workflow
- Sometimes there is more value in setting up the filing system than the Matrix



**WAIRARAPA CATCHMENT DISTRICT.**

**TOTAL AREA 2334 sq.miles.**

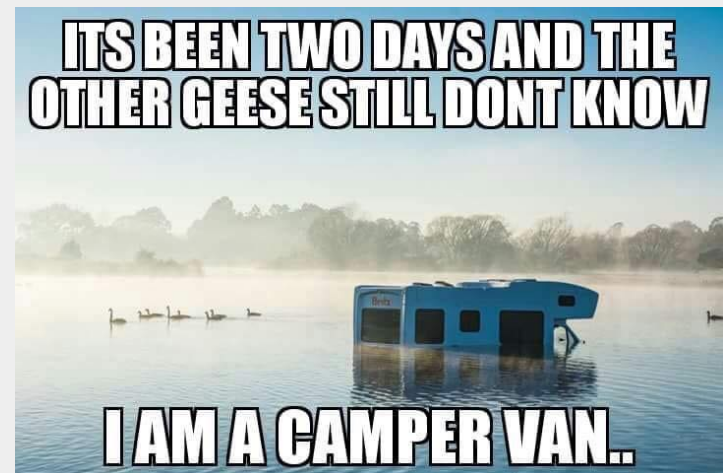
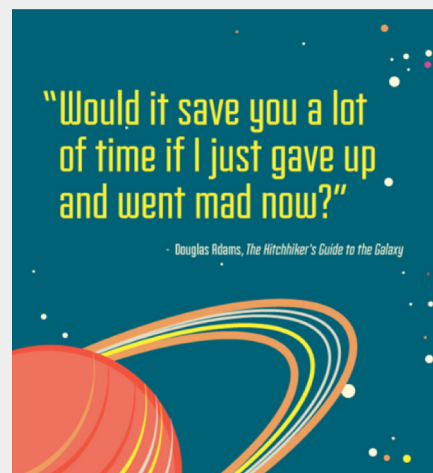
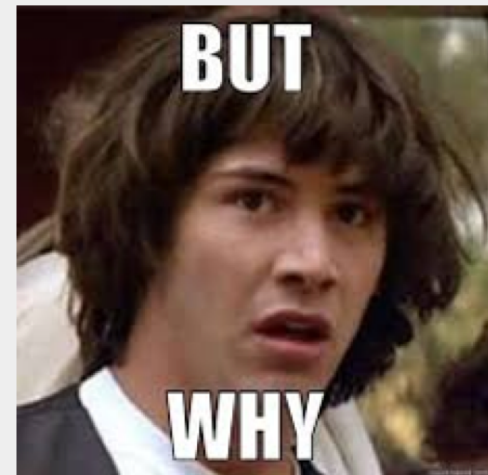
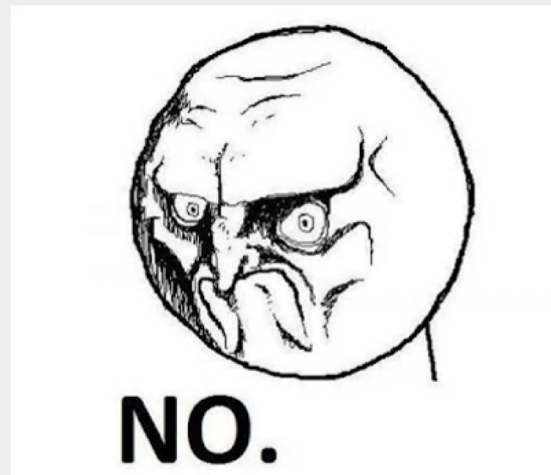


Wairarapa  
Catchment Board  
established in  
1944 for the  
purpose of soil and  
water conservation



One way to reduce erosion on steep land is by planting poplar and willow poles on land assessed to be at risk under the Wellington Regional Erosion Control Initiative





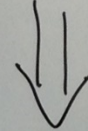
ADD ON  
 STORAGE DAMS  
 WETLANDS  
 PROPOSED FENCE  
 RETIREMENTS  
 TRACKS -  
 ETC

10 YEAR

LMA REVIEW/NEW MILL  
 EFFECTIVE AREA - TOOL  
 EXISTING VEGETATION DIGITISED LIDAR CHM.  
 PROPOSED PLANTING

GSA REVIEW/NEW.FEP  
 - CUC  
 - FARM PLAN INDEX  
 - FENCE

PLANNING



LMA WRECI WORKS ANNUAL.

COMBINED

① APP → PLANNED POLE PLANTING. POLYGONS \*

HELICOPTER - POLE BUNDLING PICK UP POINT

HELICOPTER - POLE DROP POINT DROP OFF

COMBINED LAND MANAGEMENT WORKS

MANAGED BY JESIE

POLES POLY  
 AFFORESTATION POLY  
 FENCES LINE  
 OTHER POINT? LINE? POLY?

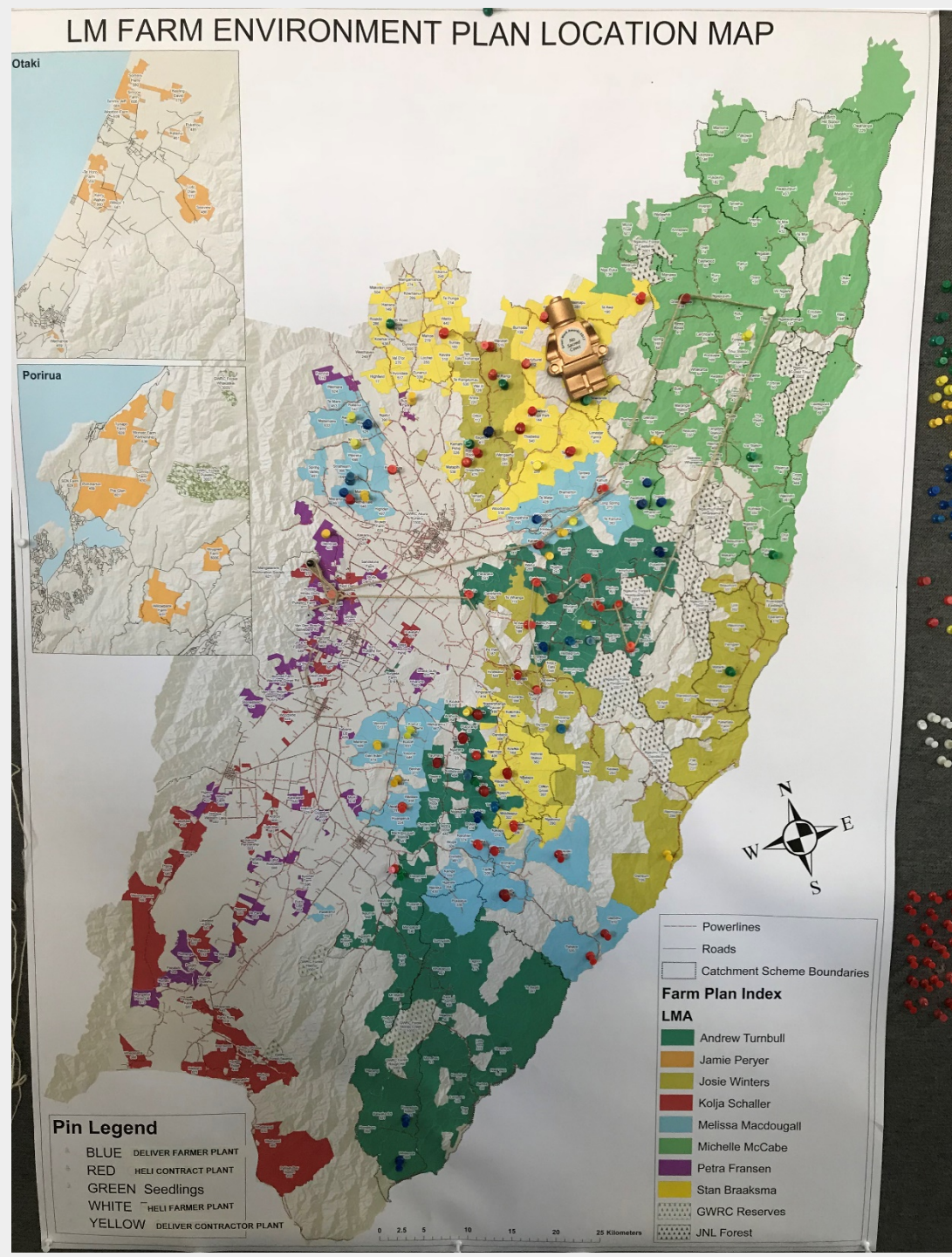
ACTUAL WORKS  
 AFFORESTATION  
 COMBINED WORKS

x

Understand the workflow forget the system

Pick a bite  
sized  
starting  
point

*(something that  
probably can't get  
worse...)*





# Introducing the Editor Range

Learning from the last person you should be learning the (non-existent) protocols from



The Over achiever who puts in more that anyone cares about but may become useful some day....

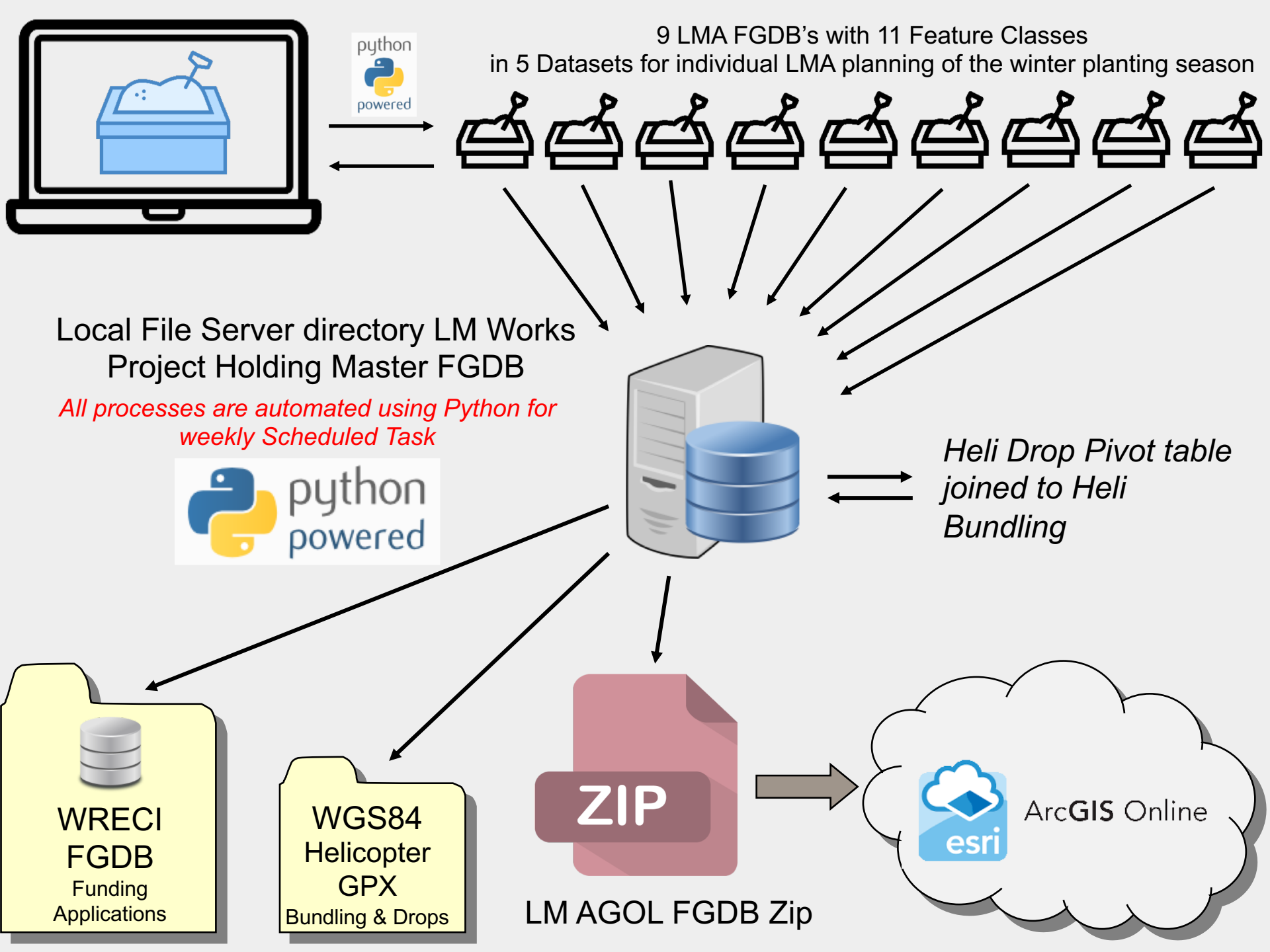
Polygons with no attributes and inconsistent feature names

The Draw tool 😊



# Contain the Chaos







# Land Management Field Supervisor Map

# So What Next??



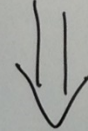
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ACTUAL WORKS  
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 COMBINED WORKS

x

Understand the workflow forget the system



Survey123 Land Management FarmTrakka (Thanks Willie)

# Farmer Contact Management

Farm Plan	Farm	Owner	Manager	Contact No.	Mob	Address
64	Arndale	Richard Bath		08 372 8546		
55	Arney	Andrew Fyfe & L...	John Fyfe	08 372 8546		
437	Argoona/Watpurl	Watson & Son	Ben Ryan	08 372 8546		
220	Arka				027 271 0015	1000 Moulton St, ...
4	Arndale	Stuart McManis		08 372 8546		
110	Arndale	Richard Fyfe		08 372 8546		
230	Arney	Mike Hagenbaum		08 372 8546		
47	Arney	Mike Taylor		08 372 8546		
192	Bushyrove	Steve Thomson		08 372 8546		
61	Arka	Tom Buller	Nick Buller	08 372 8546		
85	Castleton Station	Emily & Andrew Crawford		08 372 8546		
489	Cross Keys	Farm Partners	Wynne James	08 372 8546		
60	Eastwood	Blair McPhie		08 372 8546		
65	Elkruil	Gemma Schfield	Paul Schfield	08 372 8546		
34	Edendale			08 372 8546		
50	Edendale			08 372 8546		
354	Edendale	Peter Graves	Belin, passed by Steve Thompson	08 372 8546		
238	Edwardsdale	George Wilton		08 372 8546		
69	Edwardsdale			08 372 8546		
70	Edwardsdale			08 372 8546		
300	Edwardsdale			08 372 8546		
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48	Edwardsdale			08 372 8546		
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100	Edwardsdale			08 372 8546		
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41	Edwardsdale			08 372 8546		

T:\Land\_Management\LM Farm Contact

Home Share View

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Land... > LM Farm ...

Search LM Farm Contact

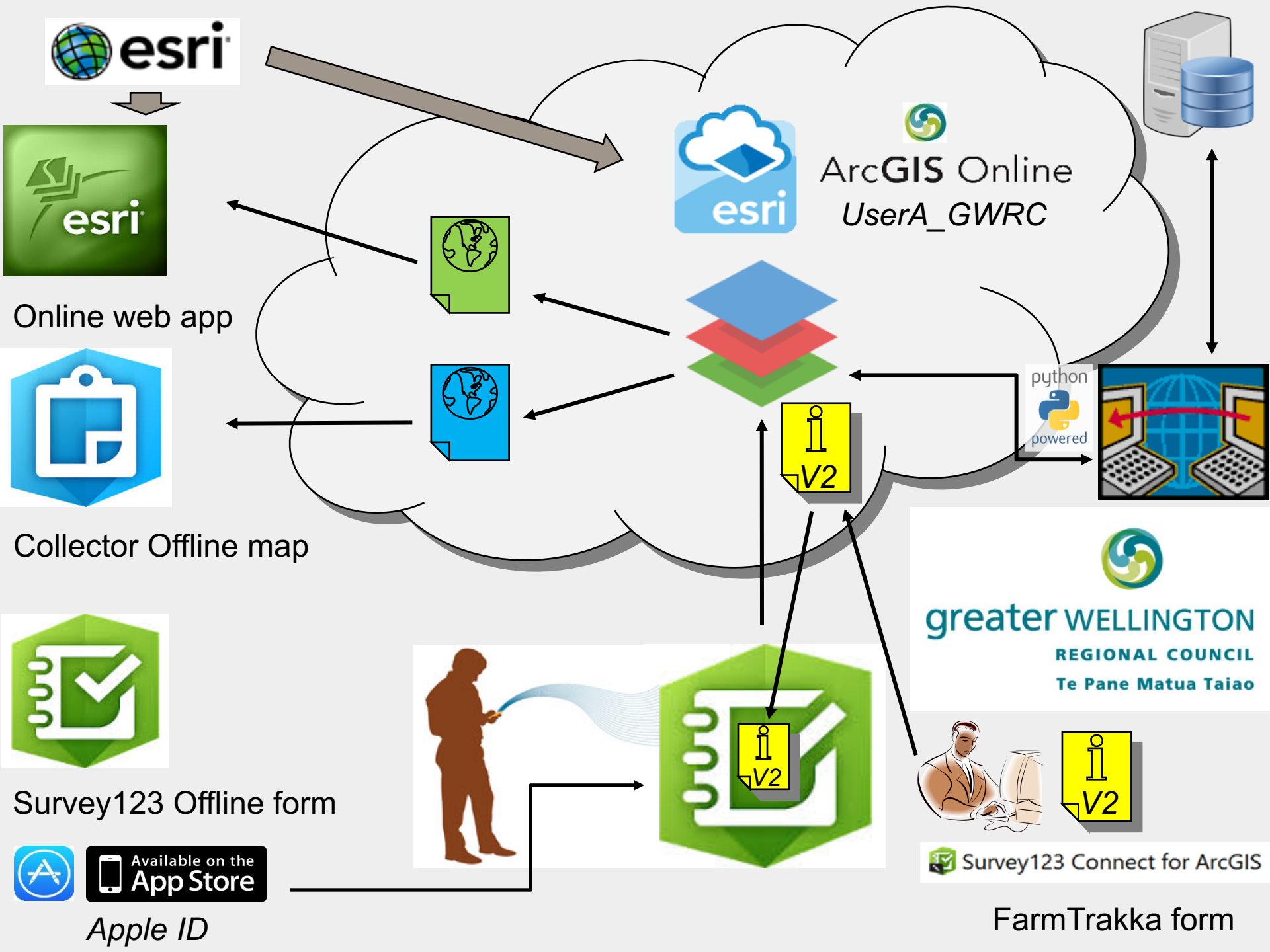
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Name Date modified

- Contact Change 9/07/2018 8:09 AM
- FGDB Archive 9/07/2018 4:46 AM
- Map Orders 9/07/2018 1:48 PM
- contact\_change\_csv\_1.csv 9/07/2018 4:45 AM
- ContactMaster\_0.csv 9/07/2018 4:45 AM
- download.zip 9/07/2018 4:45 AM
- map\_order\_csv\_2.csv 9/07/2018 4:45 AM
- prop\_works\_csv\_3.csv 9/07/2018 4:45 AM
- tool\_loan\_csv\_4.csv 9/07/2018 4:45 AM
- works\_claim\_csv\_5.csv 9/07/2018 4:45 AM

10 items State: Online





# What we got learned...

- Find a friend and don't give up at the first No...
- Learn to translate, you may not have asked the right question
- Understanding work flows is the beginning
- Schema is everything
- Establish base data Farm Plan Index as the Word of God
- Generous use of drop downs and defaults to hook the users
- Python scripts run as scheduled tasks FTW
- ModelBuilder is your friend
- Think forwards and backwards to identify the solution
- Future proof with user numbers not names
- Training and support for stress free transition
- DIY means flexibility with user defined symbology
- Most iPhone users don't know how to use an iPhone

Josie will now answer questions

