NMP Online

Pat Murphy,

Teagasc

NMP Online

steven fox

Home | Admin

10395 - 2015 - Wexford - Barry McWilliams - Y1090493

New version | Create a copy | Send to external entity | Map Viewer | Report

Plan - Land Setup

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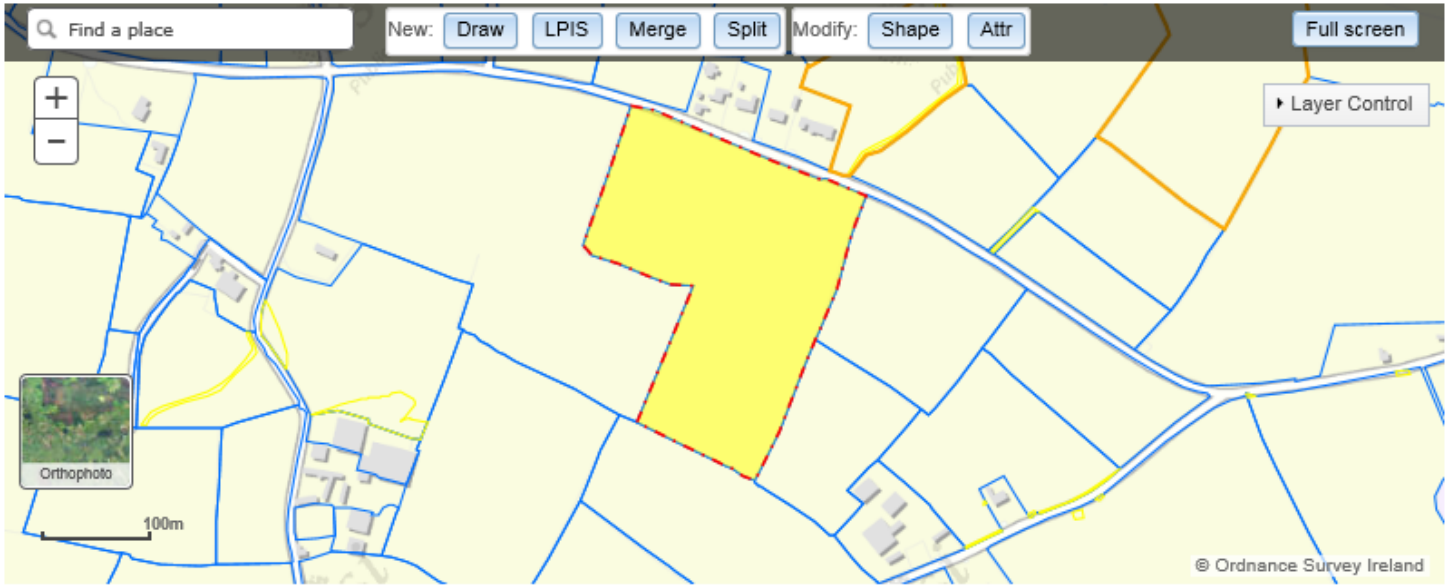

Search:

Name	Townland	Gross Area	Ref. Area	Soil Samples Ids	First Crop	Crop 2	Options
bens		4.83	4.83	bens(01/09/15),	GLAS Hen Harrier		Zoom To
biddys	kil	1.41	1.41	grass 2(01/09/15),	Grazing		Zoom To
billys		2.91	2.91	billys(01/09/15),	GLAS Riparian Margin		Zoom To

- Soil Samples
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  - Cereal crop yields
  - Lime
  - Land & Fert Max
  - Organic fertiliser
  - Chemical fertiliser
  - Fertiliser Plan Summary

Nutrient Management -Why is this important

Agricultural Output

- Feeding the World Sustainability

Water Quality

- Diffuse agricultural losses ~ 50% of loss to water
- WFD Cross Compliance, Derogation

Key Component of Irish GHG production

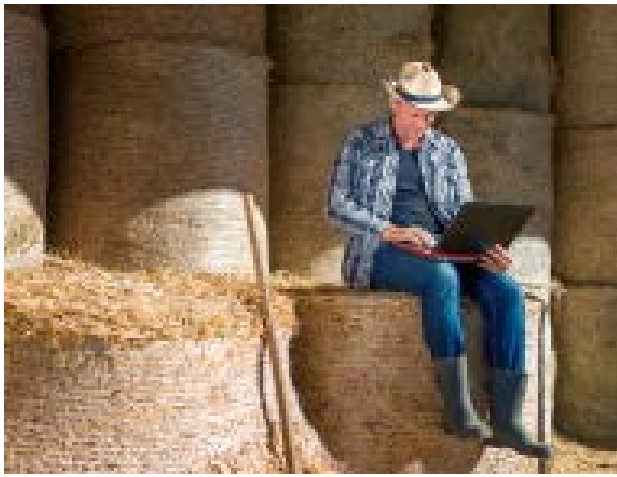
- Fertiliser and Manure ~13% Irish GHGs

Nutrient Management – It got complicated

- Used to be about feeding the crop
  - Soil Analysis → Recommendation
  - Low Cost Fertiliser
- Perfect Storm 2007-2009
  - Water Framework and Nitrates Directive
    - Farm Level Limits
  - Fertiliser Price increase
  - Farm Income Crisis
- Became a major challenge

The Challenge

- Strict Environmental Limits at farm level
- Enforced with Inspection Penalties
- More and More Farmers needed to plan
- Complex Rules and Calculations
- Different level of planning for different farmers
- Data Hungry and time consuming
- Statutory form of output



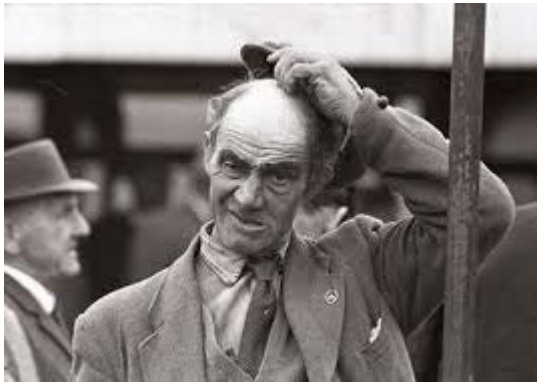
The Solution #1 - The Spreadsheet

- Quick / Versatile / Low Cost

BUT

- Standalone
  - No Linkage
  - Multiple version -
  - No utilisation of Data
  - Lose Control
- Grew bigger and bigger on a shaky foundation

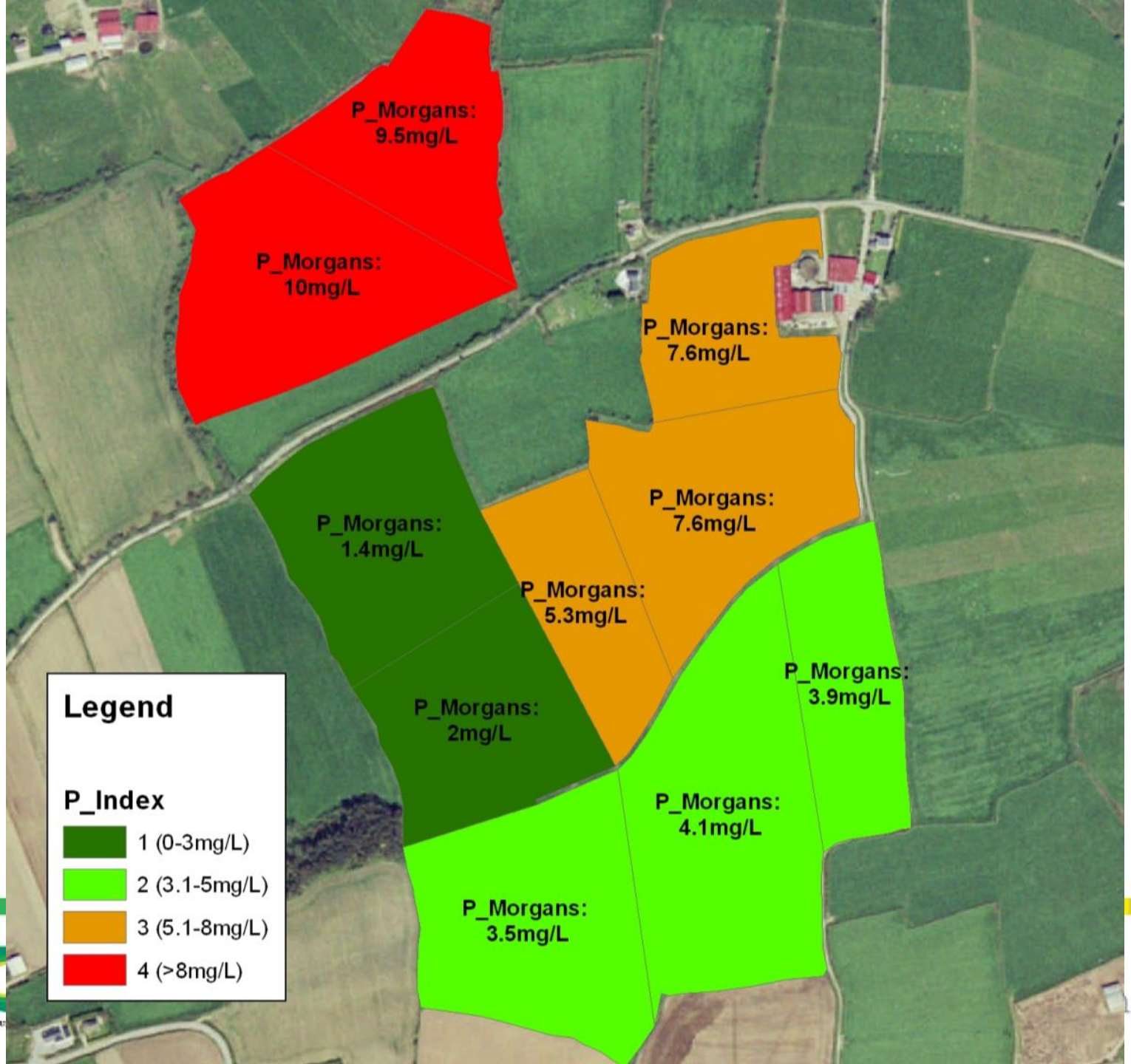
The Biggest Problem



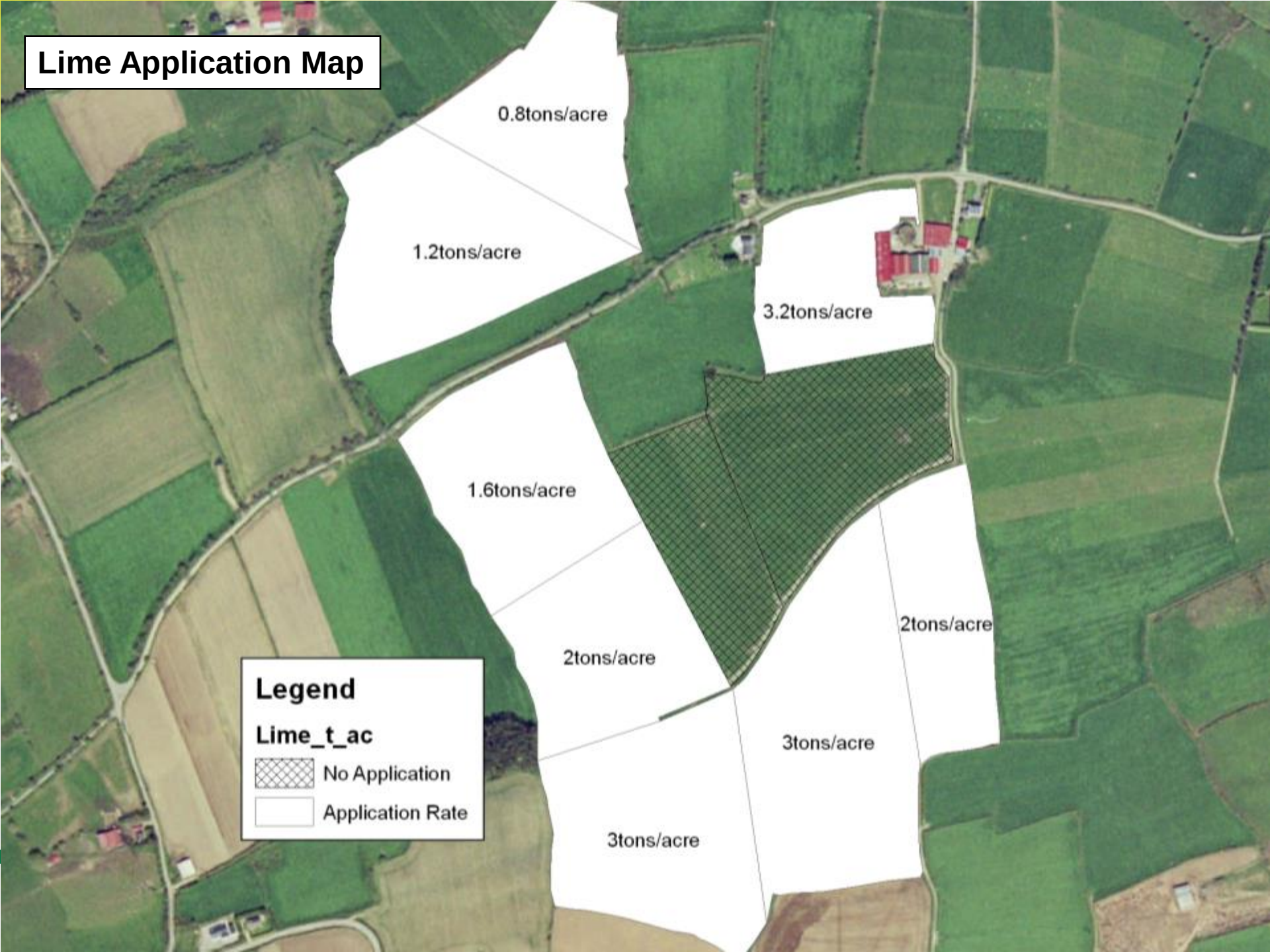
- We lost the farmer along the way
- Like Accounts for Business
  - Use for Tax
  - Not used in the running of the business
- Not understood by farmers
- Not Communicating to Farmers
- Set limits - useful
- PlansDid not reflect what was happening in practice

Talked to Farmers

- Focus Groups
- Clear response
  - Tables for the regulators
  - Maps for the farmers


P_Morgans:
9.5mg/L
P_Morgans:
10mg/L
P_Morgans:
7.6mg/L
P_Morgans:
7.6mg/L
P_Morgans:
1.4mg/L
P_Morgans:
5.3mg/L
P_Morgans:
3.9mg/L
P_Morgans:
2mg/L
P_Morgans:
4.1mg/L
P_Morgans:
3.5mg/L
Legend
P_Index
1 (0-3mg/L)
2 (3.1-5mg/L)
3 (5.1-8mg/L)
4 (>8mg/L)

Lime Application Map



Fertiliser Application - Map

Commitment to Fund

Commitment by Teagasc Management and Authority to fund an Industry wide tool for Nutrient Management Planning

The Team

Teagasc Research / KT

- Stan Lalor
- David Wall
- Mark Plunkett
- Paul Maher
- Pat Murphy

Agricultural Catchments

- Sarah Mechan
- Oliver Shine
- Eddie Burgess
- Cathal Buckley

Teagasc ICT

- Huk Muk
- Joe Lalor
- Ronan Coady

Compass Informatics

- Gearoid O'Riann
- Ken Dowling
- Steven Fox
- ++

The Solution – What we Needed

- Access to Data Sources to minimise effort and maximise accuracy
  - DAFM – LPIS and Animal Numbers
  - Client Information
  - Laboratory Information
  - OS and other for mapping layers
- Easy to Use Interface
- Flexible reporting – To meet multiple needs
- Nutrient recommendations and limits
- Fully integrated mapping system
- Manure storage management

NMP Online - Data Model

Client Information

Animal Information

LPIS – Mapping and Cropping Information

Soil Analysis Information

NMP Online

Teagasc Research and the 'Green Book'

Statutory Plan

Adviser Consultation

"Farmers" Plan

Alerts

Livestock	12
Land	2
Soil Sample	22

Clients

Plan Types

Search:

Name	HerdNumber	Address	County	Mobile	Client Number
Richard Furney	Y1961281	Ballycanew, Gorey, Co Wexford, ,		353879256764	000114641
. Patrick Pettit New Potatoes Ltd	Y1372073	Ballycushlane, Broadway, Co Wexford, ,	Cavan	353872612389	000112778
Adrian Thackaberry	A1360259	Hillview, Rathglass, Tullow, Co Carlow,	Carlow	353876475079	000069559
Andrew Brennan	D1580354	Ferlihanes, Rossmore, Clonakilty, Co Cork,	Cork	087-3577853	000052426
asdasd		asdasd	Carlow	745645745747	0
Barry McWilliams	Y1090493	Killesk, Campile, New Ross, Co Wexford,	Wexford	353851316871	000113088
Bernard Wallace	Y1040186	Kilbride, Duncannon, Co Wexford, ,			000113226
Christopher Sweetman	F1011030	Clonard, Ballbriggan, Co Dublin, ,		353868102144	000059329
Danny Somers	Z1031171	Thomastown, Arklow, Co Wicklow, ,	Wicklow	353876841135	000243365
Dave Murray		aaaa	Carlow		0

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Help Links

To transfer a plan, open the plan and click transfer

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Plan - Soil Samples

Next »

Search:

	Lab Sample Id	Lab Sample Code	Sample Date	pH	Lime Req	P Value	K Value	Trace Elements							
								Mg	Cu	ER Mn	Zn	Bo	Co	Tot. Mn	
	SS21	EAL - 1727	26/11/2014	6.56	0	2.94	30.5								L
	SS22	EAL - 1728	26/11/2014	6.31	1.5	2.11	24.1								L
	SS1	EAL - 1384	06/12/2013	5.66	2.5	5.22	124								L
	SS2	EAL - 1385	06/12/2013	6.06	4.5	5.88	183								L
	SS3	EAL - 1386	06/12/2013	5.51	4.5	3.31	182								L
	SS4	EAL - 1387	06/12/2013	5.55	2.5	2.89	48								L
	SS5	EAL - 1388	06/12/2013	5.86	3	1.68	85.1								L
	SS6	EAL - 1389	06/12/2013	5.85	2.5	7.91	127								L
	SS7	EAL - 1390	06/12/2013	5.63	4	1.6	53.9								L
	SS8	EAL - 1391	06/12/2013	5.89	2	1.9	50.1								L

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Add Soil Sample | Import LIMS Samples | Import From File

Advisor notes

Farmer notes

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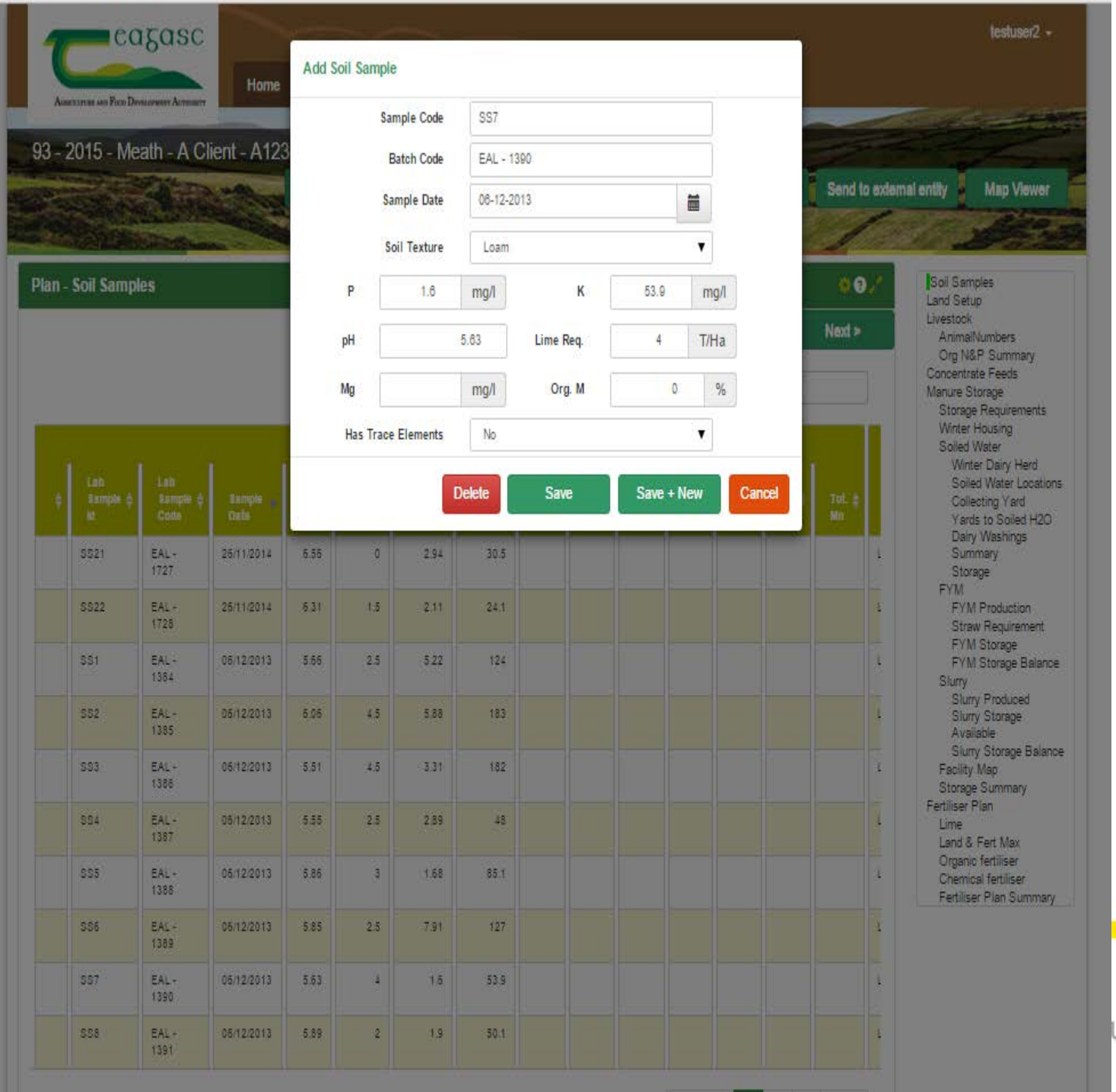

Lab Sample Id	Lab Sample Code	Sample Date					Tol. Mn
SS21	EAL - 1727	25/11/2014	5.55	0	2.94	30.5	
SS22	EAL - 1728	25/11/2014	6.31	1.5	2.11	24.1	
SS1	EAL - 1384	06/12/2013	5.66	2.5	5.22	124	
SS2	EAL - 1385	06/12/2013	6.06	4.5	5.88	183	
SS3	EAL - 1386	06/12/2013	5.51	4.5	3.31	182	
SS4	EAL - 1387	06/12/2013	5.55	2.5	2.89	48	
SS5	EAL - 1388	06/12/2013	5.86	3	1.68	85.1	
SS6	EAL - 1389	06/12/2013	5.85	2.5	7.91	127	
SS7	EAL - 1390	06/12/2013	5.63	4	1.6	53.9	
SS8	EAL - 1391	06/12/2013	5.89	2	1.9	50.1	

uthority

Search:

Name	Townland	Gross Area	Ref. Area	Soil Samples Ids	First Crop	Crop 2	Options
plot1	Gravelstown	3.36	3.36	SS1(05/12/13),	Grazing		Zoom To
plot10	Gravelstown	3.04	3.04	SS16(06/12/13),	1 Cut + Grazing		Zoom To
plot11	Kilbeg Upper	3.15	3.15	SS17(06/12/13),	2 Cut + Grazing		Zoom To
plot12	Kilbeg Upper	3.15	3.15	SS18(06/12/13),	2 Cut + Grazing		Zoom To
plot13	Gravelstown	3.74	3.74	SS19(06/12/13),	2 Cut + Grazing		Zoom To
plot14	Gravelstown	4.80	4.80	SS2(06/12/13),	Grazing		Zoom To
plot15	Gravelstown	2.89	2.89	SS20(06/12/13),	2 Cut + Grazing		Zoom To
plot16	Emlagh	3.29	3.29	SS21(26/11/14),	1 Cut + Grazing		Zoom To

Concentrate Feeds
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Fertiliser Plan
- Lime
- Land & Fert Max
- Organic fertiliser
- Chemical fertiliser
- Fertiliser Plan Summary

Livestock - AnimalNumbers

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Average Stock Numbers for the Year - Grazing Livestock

Search:

Animal	No. Animals	N/head	N Total	P /head	P Total
Dairy cow	90	85	7650	13	1170
Cattle (1-2 year old)	70	57	3990	8	560
Cattle (1-2 year old)	0	57	0	8	0
Cattle (0-1 year old)	65	24	1560	3	195

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Add Live Stock

Advisor notes

Farmer notes

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FYM Storage Balance
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Slurry Storage Balance
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Lime
Land & Fert Max
Organic fertiliser
Chemical fertiliser
Fertiliser Plan Summary

Plan Summary

Grassland Stocking Rate: 170

Whole Farm Stocking Rate: 170

Farm Area: 77.48

Grass Land Area: 77.48

Non Grass %: 0

Livestock - Org N&P Summary

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Total Nitrogen and Phosphate produced

Animal	No. Animals	N/head	N Total	P /head	P Total
Dairy cow	90	85	7650	13	1170
Cattle (1-2 year old)	70	57	3990	8	560
Cattle (1-2 year old)	0	57	0	8	0
Cattle (0-1 year old)	65	24	1560	3	195
		Total N	13200	Total P	1925

Animal Breakdown

Animal Category	N Total	P Total
Grazing	13200	1925
Non-Grazing	0	0

Projected Exports

Manure Type	Quantity (t)	Available N (kg)	Available P (kg)
No data available in table			

Projected Imports

Manure Type	Quantity (t)	Available N (kg)	Available P (kg)
No data available in table			

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Manure Storage - Winter Housing

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Livestock Winter Housing Numbers

Search:

Animal	Total Animals	Animals Over Winter	No. Animals Out Wintering	On FYM	Straw Usage	On Slurry
Cattle (0-1 year old)	65	65	0	17	H	35
Cattle (1-2 year old)	70	70	0	0		35
Cattle (1-2 year old)	0	0	0	0		35
Dairy cow	90	90	0	0		90

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Plan Summary

Grassland Stocking Rate: 170

Whole Farm Stocking Rate: 170

Farm Area: 77.48

Grass Land Area: 77.48

Manure Storage - Storage Summary

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Soiled Water

Storage Type	Location Name	Length	Width	Diameter	Depth	Net Capacity
Uncovered(Rectangle)	11	6	3		2	30
Uncovered(Rectangle)	A	3.1	3.1		3.1	27
					Net Capacity	57

Farmyard Manure

Storage Type	Location Name	Length	Width	Diameter	Depth	Net Capacity
Uncovered(Rectangle)	2 (Under Animals)	10.6	4.9		0.5	9
Uncovered(Rectangle)	3 (Under Animals)	13.4	3.6		0.5	8
Uncovered(Rectangle)	4 (Under Animals)	12.8	5.5		0.5	12
Uncovered(Rectangle)	14 (Under Animals)	12	5		0.5	10
					Net Capacity	39

Slurry

Storage Type	Location Name	Length	Width	Diameter	Depth	Net Capacity
Covered(Rectangle)	8	12.2	18.3		1	178.6
Covered(Rectangle)	9	21.3	3.6		2.2	153.4
Covered(Rectangle)	13	6	3		2.2	36
Covered(Rectangle)	5	7.3	0.9		0.8	3.9

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dirty yard
collecting yard
A
11
2
3
1
plot 2.5
14
12
8
6
13
9
5
plot 7
plot 6
plot 12

Fertiliser Plan - Chemical fertiliser

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Manure Allocations

Fertiliser	Estimated T	Applied T	Balance T
Total P in Manures			0
Manure P allocated			0
Manure P remaining			0
Total Manure P on Index 1&2			0
Total Manure P on Index 3&4			0
Total Available P (kg)			-999
Total Unavailable P (kg)			-999

Allocated Fertilisers

Fertiliser	Tonnes
CAN(27%N)	7
10-10-20	6
Urea(46%N)	6
24-2.5-10	3

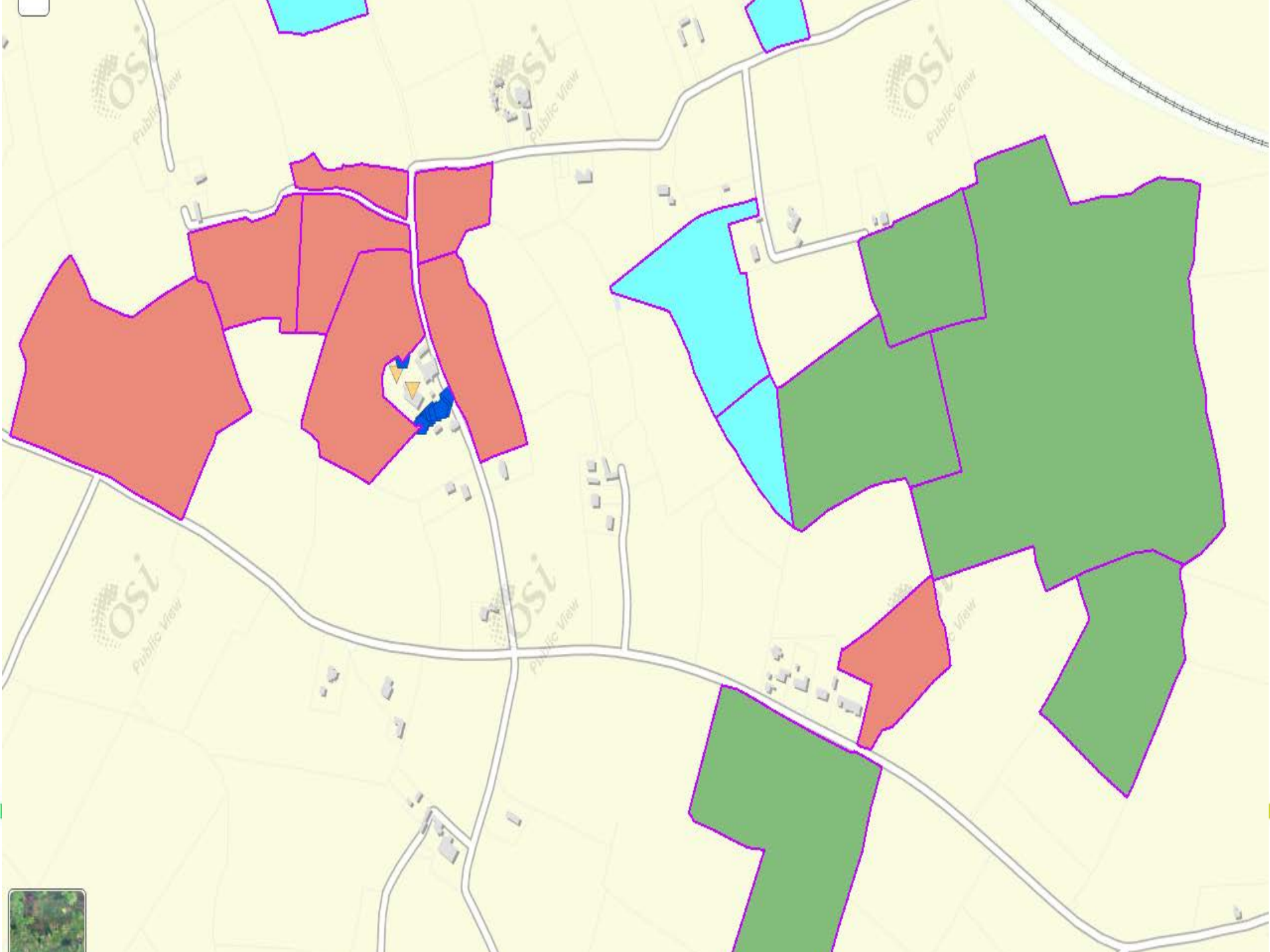
Chemical Fertilizers plan

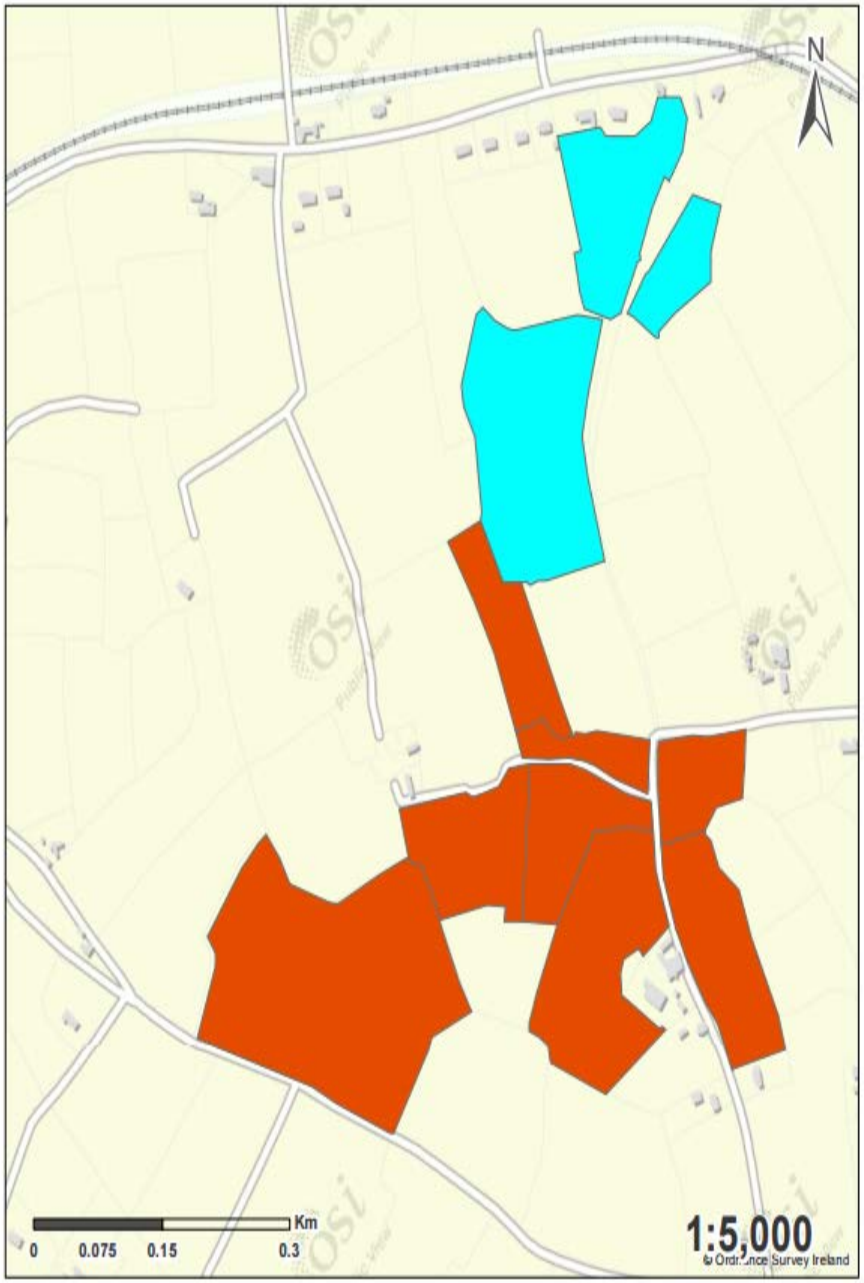
Crop: | N Index: | P Index: | Search:

Plot(Ha)	Crop	Nutrients Applied (KgHa) N	P	K	Nutrients Advice (KgHa) N	P	K	Nutrients Balance (KgHa) N	P	K	Chemical Fertilizers 1 CAN(27%N)	2 10-10-20	3 Urea(46%N)	4 24-2.5-10
Plot 8(NaN)	1 Cut + Grazing	178.00	32.50	80.00	0.00	0.00	0.00	-178.00	-32.50	-80.00	300.00 KgHa	250.00 KgHa	0.00 KgHa	300.00 KgHa
Plot 9(NaN)	1 Cut + Grazing	153.00	7.50	30.00	0.00	0.00	0.00	-153.00	-7.50	-30.00	300.00 KgHa	0.00 KgHa	0.00 KgHa	300 KgHa
Plot 14(NaN)	Grazing + Reseed	79.00	25.00	50.00	0.00	0.00	0.00	-79.00	-25.00	-50.00	200.00 KgHa	250.00 KgHa	0.00 KgHa	0.00 KgHa
Plots 2(NaN)	Grazing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00 KgHa	0.00 KgHa	0.00 KgHa	0.00 KgHa
Plot 1(NaN)	Grazing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00 KgHa	0.00 KgHa	0.00 KgHa	0.00 KgHa
Plot 10and 11(NaN)	2 Cut + Grazing	25.00	25.00	50.00	0.00	0.00	0.00	-25.00	-25.00	-50.00	0.00 KgHa	250.00 KgHa	0.00 KgHa	0.00 KgHa
Plot 15(NaN)	Winter Wheat (Milling)	138.00	0.00	0.00	0.00	0.00	0.00	-138.00	0.00	0.00	0.00 KgHa	0.00 KgHa	300.00 KgHa	0.00 KgHa
Plot 13(NaN)	1 Cut Silage	138.00	0.00	0.00	0.00	0.00	0.00	-138.00	0.00	0.00	0.00 KgHa	0.00 KgHa	300.00 KgHa	0.00 KgHa

Save

eagasc
Agriculture and Food Development Authority
COMPASS INFORMATICS





K Value

Kvalue

0 - 50 mg/L

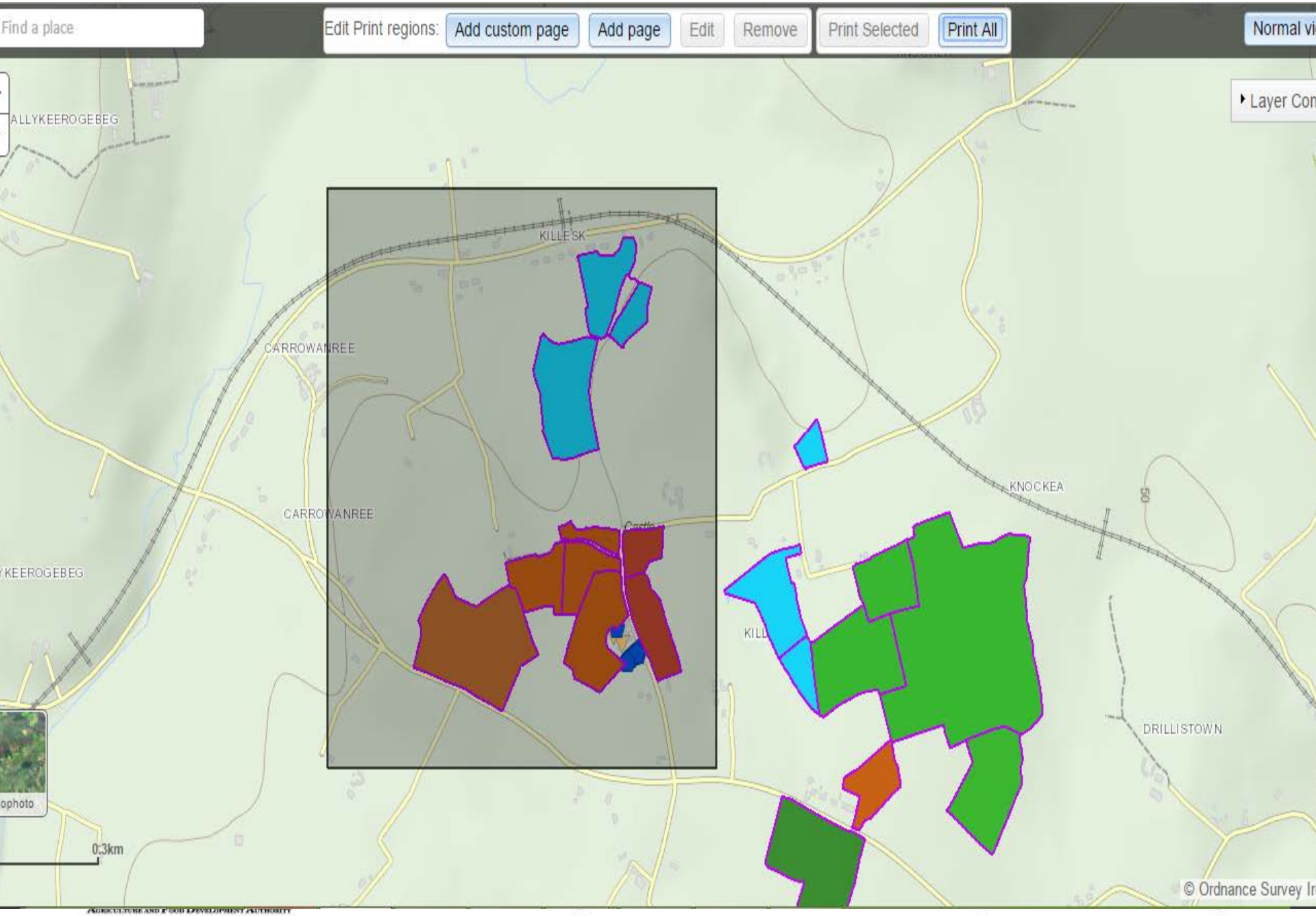
Railway station

LUAS station

DART Station

Author: Compass Informatics Ltd

Date: 09/10/2015


Find a place
Edit Print regions:
Add custom page
Add page
Edit
Remove
Print Selected
Print All
Normal vi
Layer Con
ALLYKEEROGEBEG
KILLESK
CARROWANREE
CARROWANREE
KNOCKEA
KEEROGEBEG
DRILLISTOWN
0.3km
© Ordnance Survey Ir

Next Steps

- Complete System Testing
- Training for Planners
  - Beginning End November
- GLAS Plans 37,000 in 16 months
- Derogation Plans 3000 pa
- Will be Mandatory for GLAS and Derogation
- Online Submission

On-going System Development and Support

- To be funded by users
- Charging on the basis of plans prepared (Bands)
- Package – (Part of Teagasc Connect Ed Service)
  - Training
  - Support on NMP Online
  - Soil Fertility update

Future Developments ?

- Extra Functionality
  - Mapping
- Teagasc Research
  - Fertility - Trends
  - Soil Fertility Mapping
- Farmer applications
- Big Data
  - Precision Agriculture ???