## GrazingFutures Livestock Business Resilience

# **Mapping Reminders**

### QLD Globe, FORAGE and VegMachine



GrazingFutures Livestock Business Resilience improves drought preparedness and viability of Queensland livestock producers and is jointly funded by the Australian Government's Future Drought Fund and the Queensland Government.











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#### QLD Globe

The Queensland Globe provides an online interactive experience to view Queensland's location-based information. This mapping and data online interactive tool gives users access to explore Queensland maps, imagery and other spatial data.

Things to remember about QLD Globe -

- To use QLD Globe, you need to tick the terms and services box above "Get started" on the welcome page (see below for example)
- Users need to be signed in to save their maps, Gmail is the best for this
- QLD Globe works best when using Google Chrome
- Users are limited to 100 saved maps
- Save your work regularly and don't be afraid to make multiple versions i.e., save a fence/paddock
  map, water points map, Roads and tracks map, "to be improved" map, etc.
- The platform is very useful for making maps that can be used for planning, project applications, reporting on project progress and recording weed infestations and weed control works
- The "welcome" page will have any notices and updates displayed on it

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### Navigating the Layers in QLD Globe

#### Search by Lot and Plan

With a list of your Lot and Plan numbers you can quickly create a map of your property boundaries -











#### **Property Names**

The property layer utilises the same boundaries as Lot and Plan and also labels the Lot with its registered property name. This layer can be inaccurate, depending on the regularity of registered property name updates.











#### Road Commons, Lot and Plan Numbers and Boundaries Layers

These layers are used to display the Lot and Plan boundaries and label, as well as road common areas -



Fund

Program

Government



Australian Government

Future

Fund

Drought

Drought and Climate Adaptation Program





Vegetation Categories: This layer can be used for planning any vegetation management works -







Future Drought Fund

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ADD MY DATA

All Layers

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Filter layers by name

Biota (Flora & Fauna)

Boundaries

Economy

Elevation

Environment

□ Farming

Health

Events and incidents

Geoscientific information

Imagery and base maps

Inland waters



Drought and Climate Adaptation Program



Vegetation management information layer. Filter layers by name -Groundwater dependent v ecosystems (GDE) Nature conservation V information Queensland Wetlands v mapping Regional ecosystem V mapping Springs  $\sim$ Statewide biodiversity V corridors Vegetation management (i) information □ WildNet **A** ~ Boundaries **a** ~ Economy **a** ~ Elevation ADD MY DATA 1

Scroll down and click the drop-down arrow on the

Turn on the **Regulated vegetation management map (RVM)** layer. This will turn on all the subordinate layers in this category.







The Legend will have updated to show the

Tip: Use this link to request an auto generated vegetation map or property report <u>PMAV</u>

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Click the drop-down under each layer to adjust the opacity of the layer so you can see underlying layers as well.







Fund

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Stock Routes: Displays stock routes and reserves and their classifications -















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Tip: Zoom in to the area you want to view before switching the layers on, to reduce loading time.

Once you turn one of these layers on, a line symbol will appear next to the land parcel tab, this indicates some layers in the drop down have been turned on.







Fund

Adaptation

Program



Watercourses: Add named creeks, gullies and rivers to your map -

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Contours, Mountains, and Ranges: Useful for mapping landmarks (mountains & ranges) and planning anything impacted by elevations -

Fund







Adaptation

Program



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#### Adding Your Own GPS Data as a Layer

Things to remember:

- You need to be logged in to add your own GPS data
- If it is a ".gpx" file uploaded you can do minor symbology edits only (i.e., the colours of point and lines and symbols used)
- You will not be able to move any waypoints or change tracks, polygon shapes or lines
- You can only upload one file at a time
- The below walkthrough was made using a Garmin GPS so yours may be different.







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	Archive		File folder		
	Current		File folder		
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	Track_AAA1-10-18 125914.gpx		GPX File	961 KB	
	Waypoints_14-OCT-21.gpx		GPX File	6 KB	
	Waypoints_15-OCT-21.gpx		GPX File	25 KB	
	Waypoints_16-OCT-21.gpx		GPX File	50 KB	
	Waypoints_17-OCT-21.gpx		GPX File	60 KB	
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				Open	Cancel

Once the file is selected and appears in the **File name** bar, click **Open**. The file explorer pop up will close, then QLD globe will load the GPS file onto the map (this may take a few seconds).



Tip: This is an easy way to map out the waters on your property – Use your GPS to log a track of your waters, marking the watering points (trough, dams, etc.) as waypoints as you go. Once you have captured everything you can upload the tracks and waypoints as a layer into QLD Globe using the above instructions.











#### **QLD Globe Editing Tools**









Drought and Climate Adaptation Program



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#### How to Edit Places

Here you can change the name, colours and Click the drop-down arrow for the opacity. You can also make the name appear customisation options. on the map by selecting ADD LABEL TO MAP. Places 0 My Place 1 ~ Topics 💉 Edit places My Places Download 🗸 NAME My Place 1 Q Search FILL 0 My Place 1 Search Results 17 Download V 15% >FILL OPACITY Layers 3SP243890 0 ~ STROKE 2 0 Places STROKE WIDTH Зрх ADD LABEL TO MAP **D** 0 Attributes Maps Query layers using this place ē Print Zoom to Open in a 360 View Drought Future and Climate Queensland Drought Australian Government Adaptation Government Fund

Program

w places tool enables you to

- oint adds a customisable dot the map. Useful for marking ings like sheds, troughs & ateways.
- ine allows you to draw a ustomisable line on the map. ecords length/distance so it can e useful for marking/planning nce lines, pipelines, and tracks.
- olygon allows you to draw a ustomisable shape. It also ecords perimeter and area, hich is useful for marking addocks, weed infestations and reas of interest.
- ircle allows you to draw a ustomisable circle. Useful for arking the buffer zones around atering points and areas at risk weed infestations spreading.

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Click <b>Edit</b> tha	<b>places</b> then click on t at place and select it f	the tab to zoom to for editing.		C sa
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Once you have made your edits, click **Done** to save the changes, or click **Cancel** to undo edits.



Tip: Saving your edits will not save your map! Make sure you save your map regularly to avoid losing all your hard work.









#### Viewing the Attributes of Items in the Places Menu



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#### Saving additions/changes to a map Saving a map for the first time Maps ≣ Maps ŧ Topics • 🧪 Edit maps Save as Topics Edit maps Save as 1. Click "Save as" Name Q 2. Give the map a You can change Name Search name Q the name either Eulo Worksop ~ Include Places data after or during Search 3. Make sure these saving a map. **~** Include User data ~ Include Places data boxes are ticked. "Places data" refers ~ Include User data 🗟 ок to anything you drew Layers 15 on the map. "User Save Save as data" refers to any Save a map to share and reload at a later Layers mapping data you Like using "save 1 as" in Word, 9 uploaded as a layer Filter maps eload at a later time creates a new Save a map to share and Places Your Saved Maps saved map. 4. Click "OK", it may 0 take a couple Filter maps seconds to save Eulo Worksop ~ Places Like using "save" Your Saved Maps in Word, it saves 5. Once saved, it will pear areas over the current × appear in this list with 5 Eulo Worksop (edited) $\mathbf{v}$ open map. a blue square, meaning it is opened N 96 testing qfpi 4 × and unchanged. Hudson pear areas × Maps QFPI 4 project × 22

#### Saving QLD Globe maps You need to be logged in to save your map.









#### Sharing QLD Globe Maps using a Link

Things to remember:

- You can only share a link to a map that has been saved, so you need to log into QLD Globe to share maps
- <u>The link lasts 30 days from creation</u>
- The link you send, <u>does not affect the original map</u>. Any changes made by the map link recipient, will not be reflected on the original or the version on the link.
- Someone who is not logged into QLD globe can still access and edit the map, but they must be logged in to save it.
- If the map is saved to a QLD account, it <u>will not</u> disappear or stop working like the link.













#### "Printing" QLD Globe Maps

- Can be done <u>without</u> logging in
- You aren't printing the map; you're downloading it as a PDF or picture (PNG) which you can then print.
- If the PNG (picture) is copy pasted into a Word document, you can crop and expand it to fill the page for easier labelling and legend creation
- 1. Click the on "Print", in the bottom left corner

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Print	GDA2020LatLng lat: -28.75225 long: 154.47884
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2. Another tab called "Queensland Globe Print" should open, and it may take a second to load. If you're using google chrome it should look like this:



3. Go into the "Queensland Globe Print" Using the below tools, edit the view of the map to be what you want "printed"-

Landscape	Portrait	Changes the orientation of the page/map
A4	A3	Changes size of the map











4. Once you have the map looking the way you want click on "PRINT TO" and select which file type you would like to "Save as" -



5. Whether PDF or PNG it will be saved to your downloads folder -

V Folders (7)			
3D Objects	Desktop	Documents	Downloads
Music	Pictures	Videos	

No matter what you title the map, the file name will be expressed as a code -

∨ Today (2)	PDF file			
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png_upload_r1-RZglot	PNG file	22/12/2021 10:31 AM	PNG File	3,259 KB









You can rename the files via right clicking on them and clicking rename from the drop down -

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Tip: Open the file to check it is correct before sending or printing.











#### VegMachine

#### **VegMachine**

• Even if you search by lot and plan you must draw in the polygons. The search function only puts it (the Lot and Plan block) into the centre of the map.

#### How to draw polygons:



Tip: Once the polygon menu is open any click on the map adds a point, so **you won't be able to click and drag** 















#### How to turn on the "ground cover" layer -

- 1. Hold your mouse over the "layers" button.
- 2. Once the menu appears, select "Ground Cover".



The ground cover layer is a great way to get a quick estimation of vegetation/groundcover percentage. This is an especially useful tool to use in the areas that may be difficult to access to inspect in the field.



In the bottom right of the map is the visibility slider and colour key -











Using the time lapse bar, you can watch and compare the changes in ground cover -



#### How to get a "ground cover analyses" -

- Draw a polygon (remember to click "finish" to complete the polygon)
- Select/click the polygon, you'll know when it's selected because it will lose most of its interior shading.
- Click the drop-down arrow in the "Interactive Analyses" tab then do the one for "Single Polygon" and finally click "ground cover".



• Once it loads you should see a multi coloured graph on the left side of the screen showing the changes in ground cover over time.











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Tip: Clicking on one of the points in the graphs will show the corresponding data and date on the map if the "Ground Cover" layer is turned on.

#### FORAGE

#### **FORAGE**

How to get a regional comparison (VM Regional Comparison) report:

- Select "FORAGE" from the "reports" drop-down.
- Enter your email and a label for the report.
- You should receive the report within a few hours.











#### FORAGE Reports

Please Note: Only polygons greater than 5 ha will be processed. Results will also be less accurate for smaller polygons (under 10 ha).

Report Type	VM Regional Comparison 🗸
Email	john.doe@somewhere.com
Label	Text input
	Close Submit

You can get a regional comparison report on multiple polygons.

#### Things to remember when using FORAGE -

- The FORAGE reports are emailed to you. The system is automated so you may find the email report in your junk mail or spam.
- FORAGE can be a little slow sending the reports, but if it still has not arrived in your emails after 24 hours try requesting the report again.
- The data in these reports is based on survey data and satellite imagery, so it is not always current, but the reports do make a great starting point for planning.
- You can request a report that incorporates multiple lot and plans on a single report.

#### FORAGE Report Types and How They Can Help You

• Long-Term Carrying Capacity

This report may take a few hours to be generated and is intended to be a guide or tool to be used alongside other methods of calculating carrying capacity. The information supplied in the report is intended as a guide for long-term grazing assessment and significant management of property grazing pressure is still required on a season-to-season basis (i.e., forage budgeting). The email will include 2 excel spreadsheets as well as the report, these spreadsheets just contain a summary of the info in the report.

For more info see the report example on FORAGE: <u>Long-Term Carrying Capacity Report</u> (prototype)

#### • Pasture Growth Alert

Provides an assessment of reduced pasture growth and pasture resilience risk for a property. The report can be used to assist in stock and property management decisions to increase property resilience to drought and help to identify pasture recovery opportunities by assessing the property's:

- o last 12 months pasture growth
- o pasture growth forecast for the next 6 months
- the monthly total cover percentile

For more info see the report example on FORAGE: Pasture Growth Alert Report









• Inductive Land Type:

The report shows the current version of Grazing Land Management (GLM) land type mapping (updated February 2019) and the approximate area of each land type. For more info see the report example on FORAGE: <u>Indicative Land Type Report</u>

• Rainfall and Pasture by Land Type:

The Rainfall Pasture by Land Type report provides historical rainfall, pasture growth, total standing dry matter (TSDM) and pasture cover information for a selected Lot/s on Plan by <u>GLM</u> <u>land type</u>. Rainfall is estimated from surrounding rainfall stations, pasture cover from satellite imagery and modelling, and pasture growth from modelling alone. For more info see the report example on FORAGE: <u>Rainfall and Pasture Report</u>

• Ground cover report

The Ground Cover report shows a ground cover and minimum ground cover map for the month and the year selected generated from satellite imagery. The minimum ground cover map indicates the lowest ground cover for each satellite pixel in the selected Lot (or Lots) on Plan since the early 1990s. The report also shows a time series graph (1988 to the present) of percentage ground cover values derived from two sources: pasture modelling and satellite imagery.

For more info see the report example on FORAGE: Ground Cover Report

- Regional Comparison Ground Cover: Regional Comparison report shows the ground cover levels over time for the dominant land types and compares them to the same land types in the local region, defined by a 25km or 50km radius around the selected area depending on the size of the area. For more info see the report example on FORAGE: <u>Ground Cover Report</u>
  - Crop Frequency and type: Displays the 10-year crop frequency and type plus summer/winter satellite images. Click the report example link below for the map of regions where this report is available Future updates will incorporate other agricultural regions of Queensland. For more info see the report example on FORAGE: Crop Frequency and Type Report
- Drought Assessment: arranges multiple diagnostic maps for a shire/regional council and adjoining regions.
   The Drought Assessment Information report is a multi-map report for a specific shire or regional council produced by the AussieGRASS model via the FORAGE system; it includes rainfall, pasture growth, potential flow to stream, total standing dry matter (biomass) and a curing index for different time periods to assist with drought assessment.
   For more info see the report example on FORAGE: <u>Drought Assessment Information</u>
- Erodible Soils (Burdekin, Fitzroy regions):
   A broad scale ranking on the potential for a soil to erode based on soil attributes in the surface and subsoil. Three maps are produced: a surface map, subsoil map and overall erodibility map. The report is currently available for the Burdekin, Fitzroy and Burnett-Mary catchments/regions. For more info see the report example on FORAGE: <a href="mailto:Erodible Soils Report">Erodible Soils Report</a>
- Foliage Projective Cover (FPC): Provides tree and shrub Foliage projective cover (FPC) classes obtained from the most recent satellite imagery. FPC is considered to give a better indication of the influence of woody vegetation on grass productivity than tree basal area (TBA). This is because FPC is more closely related to light interception and tree water use. For more info see the report example on FORAGE: Foliage Projective Cover Report









• Fire Scar:

A range of fire scar maps and graphs describing fire scar seasonal distribution, fires detected in different years and fuel load information. For more info see the report example on FORAGE: <u>Fire Scar Report</u>

• Regional Climate Projections:

The report provides historical and projected climate information for 2030 and 2050 based on the SILO climate dataset and the <u>Consistent Climate Scenarios projections data</u> developed by the Queensland Government. The climate information presented in this report includes rainfall, evaporation, vapour pressure and mean, minimum and maximum temperatures.

For more info see the report example on FORAGE: Regional Climate Projections Report

#### How to navigate the FORAGE help section



Complied by Lucas Mackie, Southern Queensland Landscapes, January 2022







