

Using NAFI — Viewing your own boundaries and creating kml and kmz files.



The **Upload Boundary** tool, at the bottom of the **Fire Maps** tab, lets you upload your own maps of boundaries, fire lines and breaks, significant sites, water points etc. to NAFI so you can view them on the site along with the other NAFI maps.

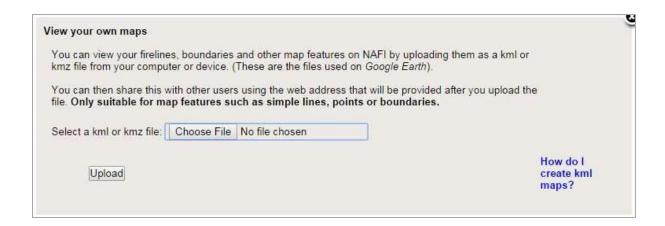
These maps are uploaded as kml (Keyhole Markup Language) files for viewing on NAFI – files that you can view, and create, on *Google Earth*. You can also upload the compressed or zipped version of these files – kmz files.

Fire Maps: Upload Boundary

The NAFI background maps have the commonly used map information such as the standard property boundaries, topographic features, roads, rivers etc. Often, however, you might need to see other map information for fire planning – for example, more detailed tracks, significant sites, paddock boundaries, fire breaks and waterholes. Or it could be that the property boundary shown on NAFI is not correct or out of date. You may also want to keep some of this information private.

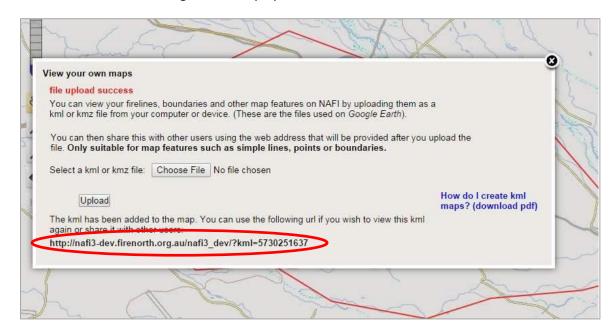
With this tool you can upload this map information as a kml or kmz (compressed kml) file to NAFI which will then generate a web address that you can share. This web address will take you to the NAFI site but with your own map information displayed on top of the background maps.

Selecting **Upload Boundary** should bring up the display below:



Click "Choose File" and then browse to the location of the kmz or kml file of the map features you want to view on NAFI and select the file. Then click "Upload".

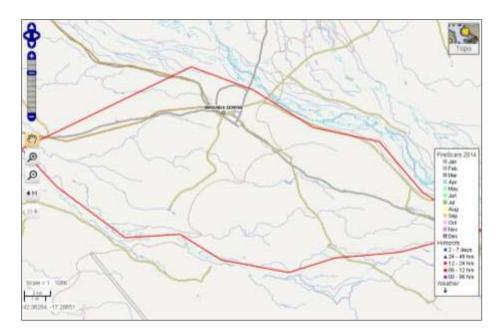
You should then see something like the display below:



HINT: This tool can only upload relatively simple map features like lines, points and property or simple area boundaries. It will not be able to upload files of images like fire scars, or complex files like large chunks of the cadastre. You will get an "upload failed" message when you try to upload these files.

The map behind the dialog box should now be centred on a display of the uploaded map – in this case a red boundary. You will also see a web address (circled in red above). This will link to a version of the NAFI site with your uploaded map displayed (shown below). You can save this in your favourites or circulate it to others.

In this way you can view map features on NAFI but still keep it private.



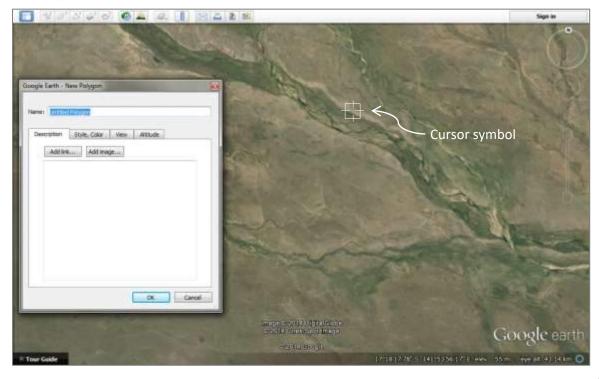
Creating kml and kmz files

You can create kml or kmz files in a couple of different ways: by creating your map features in *Google Earth* and saving them as kml/kmz files; or if you already have your map features saved as shapefiles or gpx files you can use a mapping program like Quantum GIS or ArcMAP to save them as kml/kmz files.

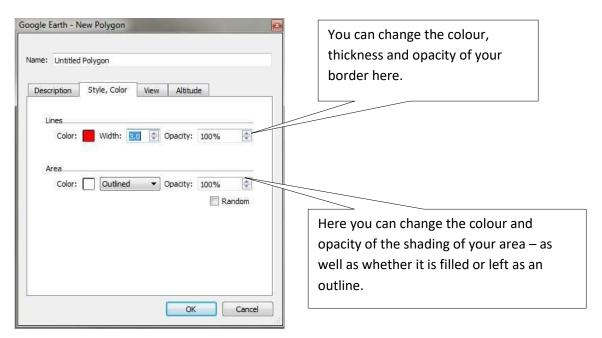
Using Google Earth to create kml or kmz files

Open *Google Earth* and navigate to the map area where you want to create a map feature. You can then choose one of the tools above the map: add placemark, add polygon or add path:

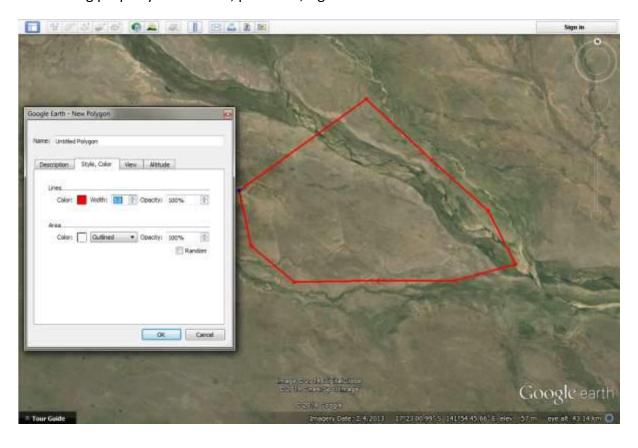
| State | State



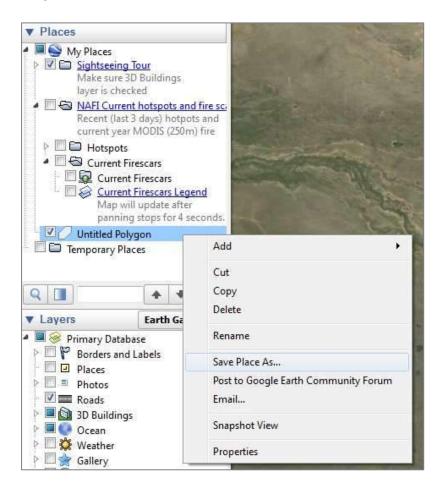
should then see the box above appear and the cursor should change into a target box. You can then outline your boundary with the cursor – you can also give your area a name. You will finish with a solid white shape, but you can change the appearance of the shape by clicking the "Style, Color" tab of the dialog box and adjusting the colour and thickness of the outline and whether your shape is filled with solid colour.



Using the control box above, we can create outlines of a given colour and thickness suitable for marking property boundaries, paddocks, significant areas etc. as shown below.



Once you have created your area, you can save it as a kml or kmz file by going to "My Places" in the left hand menu in *Google Earth* where you should see your area listed as a polygon with whatever name you gave it. Right-click on this polygon label and select "Save Place As..". A new box will then appear that allows you to save your area to your computer as a kml or kmz file.



Using Quantum GIS to create kml/kmz files

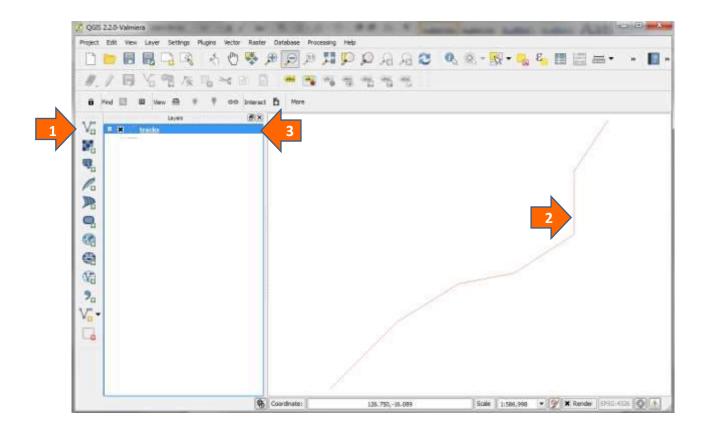
If you already have firelines, fencelines, boundaries etc. stored as shapefiles or .gpx you can convert these to kml/kmz files using the free mapping program Quantum GIS (QGIS). Google "Quantum GIS" to get to the download page for this software.

Once you have downloaded QGIS you should see the interface shown below.

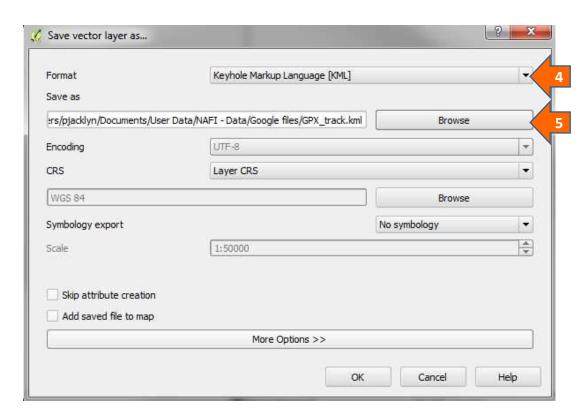


Click on the **Add Vector Layer** button and browse to your .gpx or shapefile on your computer and click "open" to display it in QGIS.

For some .gpx and shapefiles you will need to specify the type of file you are displaying.



- Your fireline/boundary etc. should now be displayed in the main window.
- Right click on the name of your layer in the Layers column and then select "Save as...". You should see the box below appear:





Select "Keyhole Markup Language [KML]" as your format from the drop-down menu

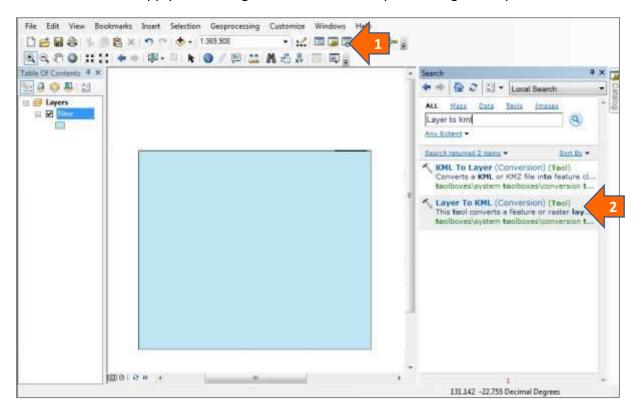


Select the location where you want to save your kml file to. When this is done click the "OK" button at the bottom of the box and you should get a message at the top of the map window saying the export has been successfully completed.

If you have installed *Google Earth* you can check that the kml file has been created correctly by double-clicking on it – it should then open in *Google Earth*. You can then use *Google Earth* to alter to colour and style of your boundaries/lines and whether you want it saved as a kml or compressed kmz file (see above).

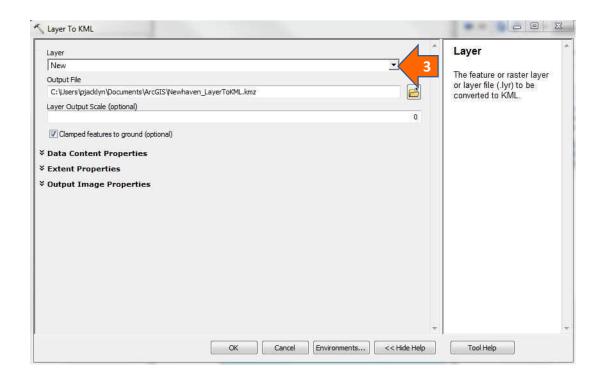
Using ArcMap to create kml/kmz files

These instructions apply to creating a kml file from a shapefile using ArcMap 10.



- 1
- Once you have displayed your shapefile as shown above, you will need to search for the "Layer to KML (conversion)" tool using the search above the map display.
- 2

This will appear in the Search window on the right – clicking on the tool should bring up the box below:





Use the drop-down menu to select the current layer you have displayed in ArcMap. Then in the box below select the destination file location. Note that this will be stored as a compressed .kmz file. Then click "OK" at the bottom of the box – and your .kmz file should be created.

Again, you can use *Google Earth* to check that the .kmz file looks Ok and to edit the style and colours used.