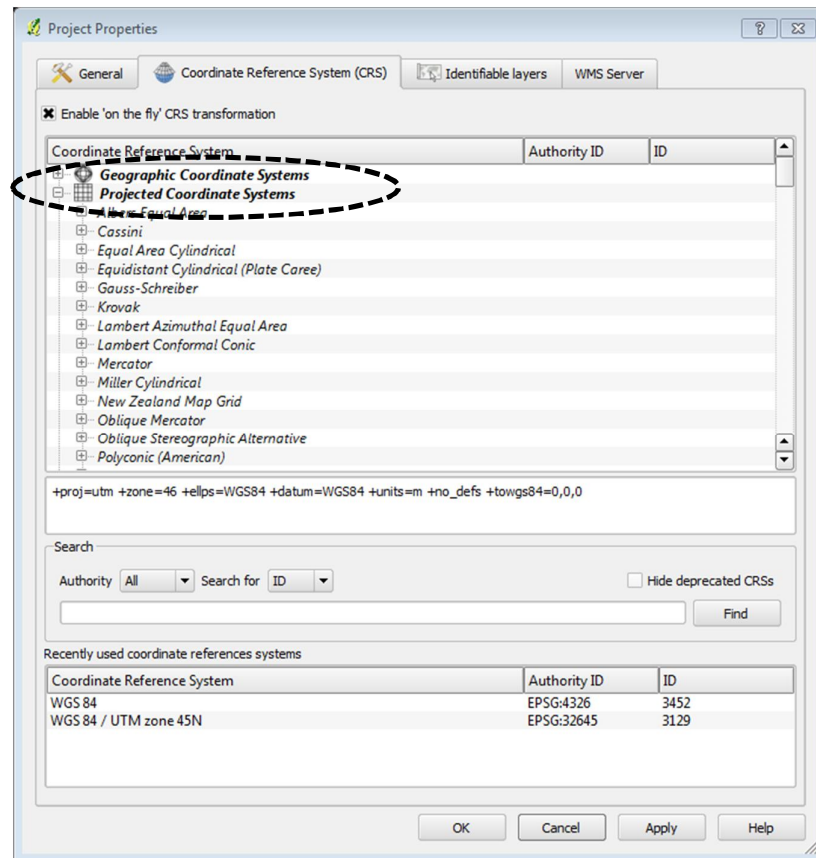


Printing or Emailing a Map from Quantum GIS

1 Using Print Composer to Make Finished Map

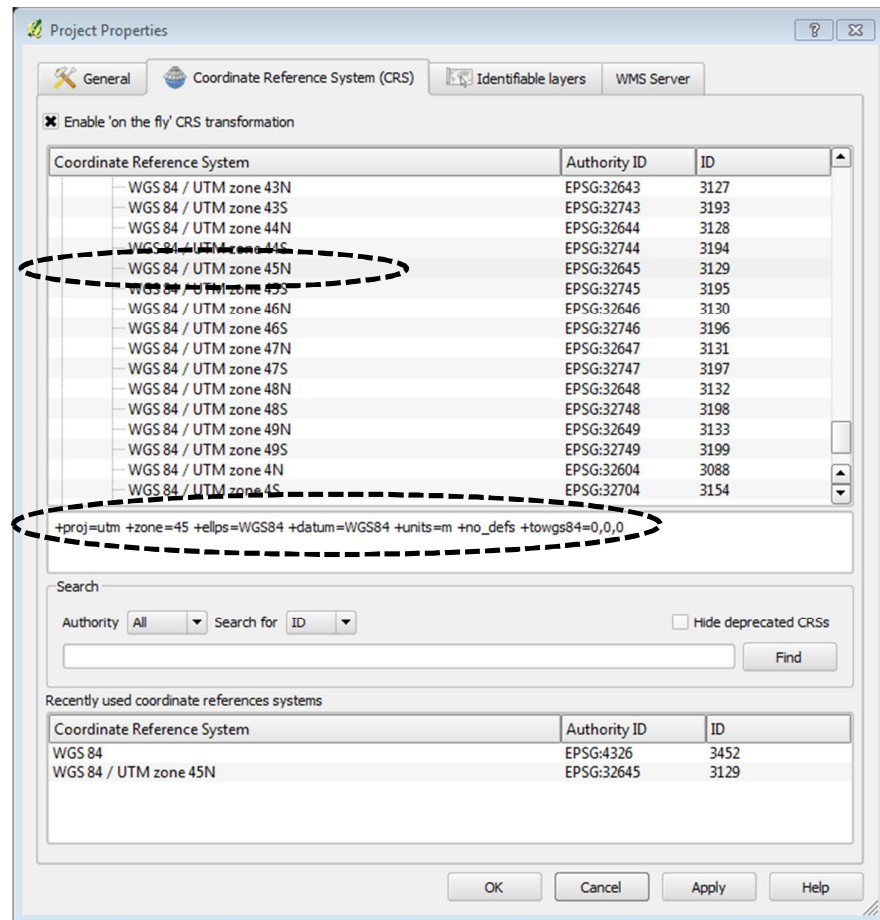
1. Open Quantum GIS.
2. Setup your map first, adding any layers you want to include. Set the layer colors, symbols, and labels as you want them to appear in your map.
3. Because we are making a flat, paper map, we want to use a *projected coordinate system*. By default, Quantum GIS uses a *geographic coordinate system* (WGS84). We need to change to a projected coordinate system.
 - a. From the menubar, click “Settings”. Choose “Project Properties”.
 - b. Click on the “Coordinate System” tab if it is not already open.
 - c. Scroll the window until you can see “Projected Coordinate Systems”.
 - d. Click the “+” symbol next to “Projected Coordinate Systems”, so the window looks like this:



- e. Scroll until you can see “Universal Transverse Mercator”, and click the “+”

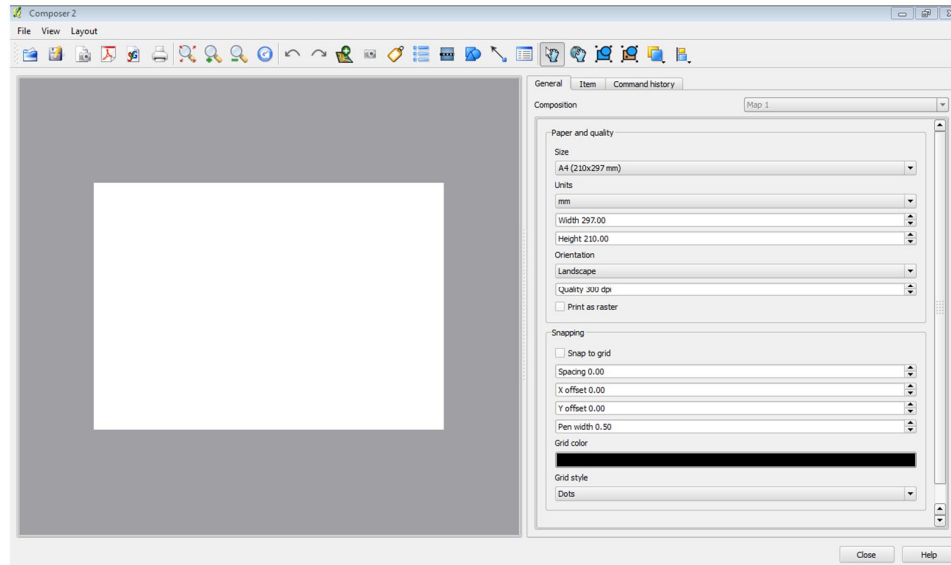
symbol next to “Universal Transverse Mercator”.

- f. Scroll until you see “WGS 84 / UTM zone 45N”. Click on “WGS 84 / UTM zone 45N”. Your window should look like this:

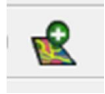


- g. Click “OK”.

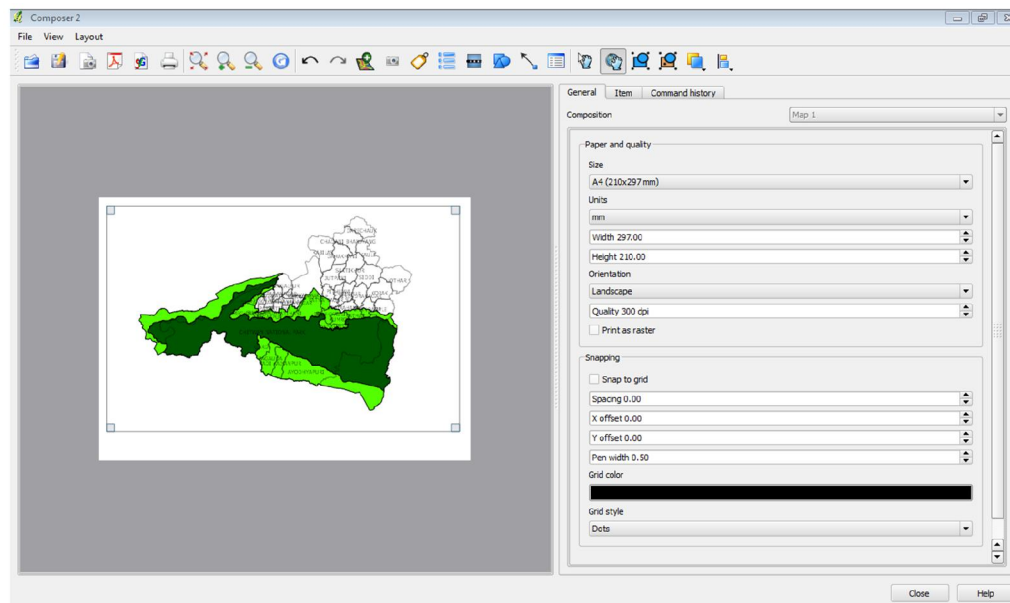
- Once you have all of your layers setup, click “File” on the menubar, and then choose “New Print Composer”.
- The print composer window will appear:



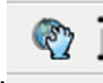
6. On the right-hand side, under “Paper and quality”, set the paper size (under “Size”) to “A4 (210x297 mm)”.
7. Add a new map to the page by clicking the “Add new map” button, that looks like:



8. Then click in upper left of the page, hold down the button, and hold down the left button while dragging down to the bottom-right of the page. Release the button. It should look something like this:



9. You can move around you map by clicking on the “Move item content” button that

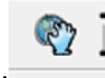


looks like this: . To zoom in or out on the map use the scroll wheel on your mouse.

10. To zoom in or out on the map if you don't have a scroll wheel:

a. Go back to the main Quantum GIS window (but don't close the print composer window) and zoom in or out so the map looks like how you want it to look.

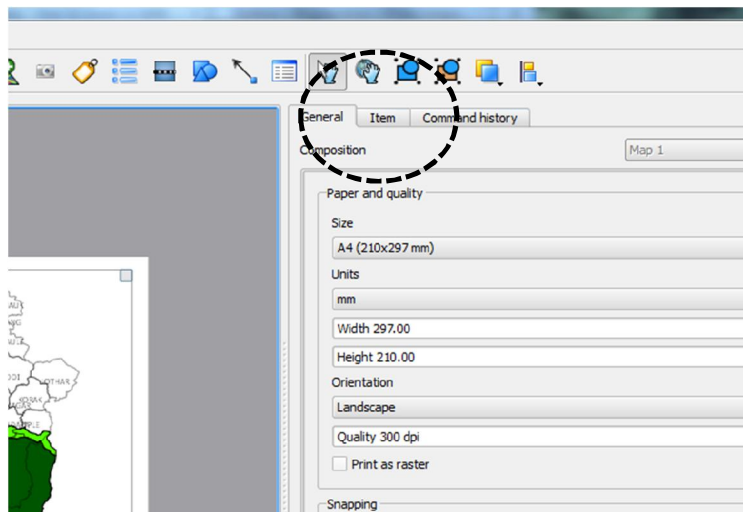
b. Now go back to the print composer window and click on the "Select / move



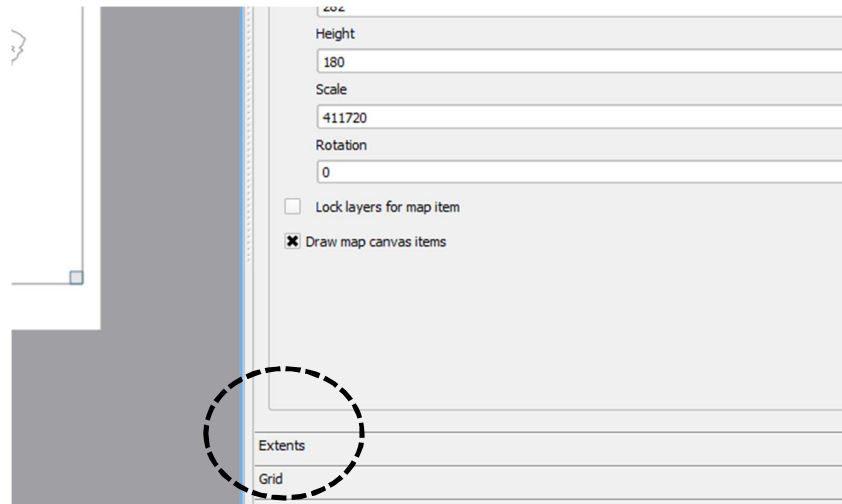
item" button that looks like this: .

c. Click once in the middle of your map.

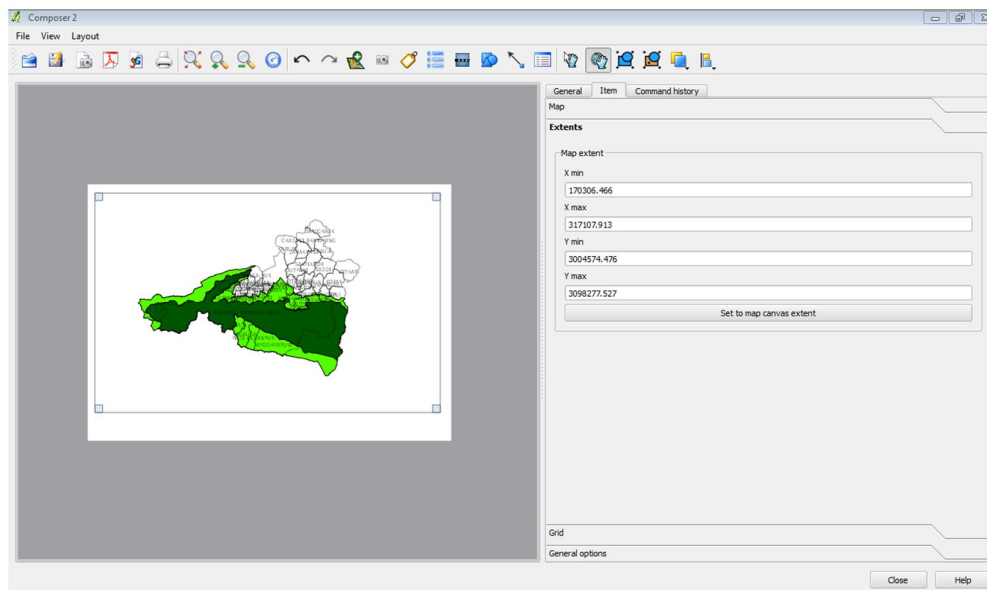
d. Now click on "Item" on the right side of your window.



e. Now click on "Extents" on the bottom of the right-hand pane.



f. Now your page should look like this:



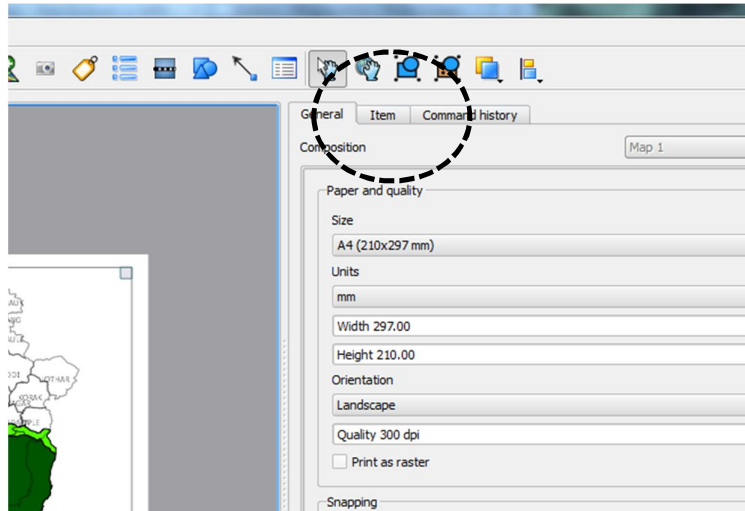
g. Now click on “Set to map canvas extent”. The image will zoom to match how your window looks in the main Quantum GIS window.



11. Add a title by clicking on the “Add Label” button, that looks like:

12. Now click near the center of your map. A label that says “Quantum GIS” will appear.

13. Click on the “Item” tab on the right-hand side of the screen.



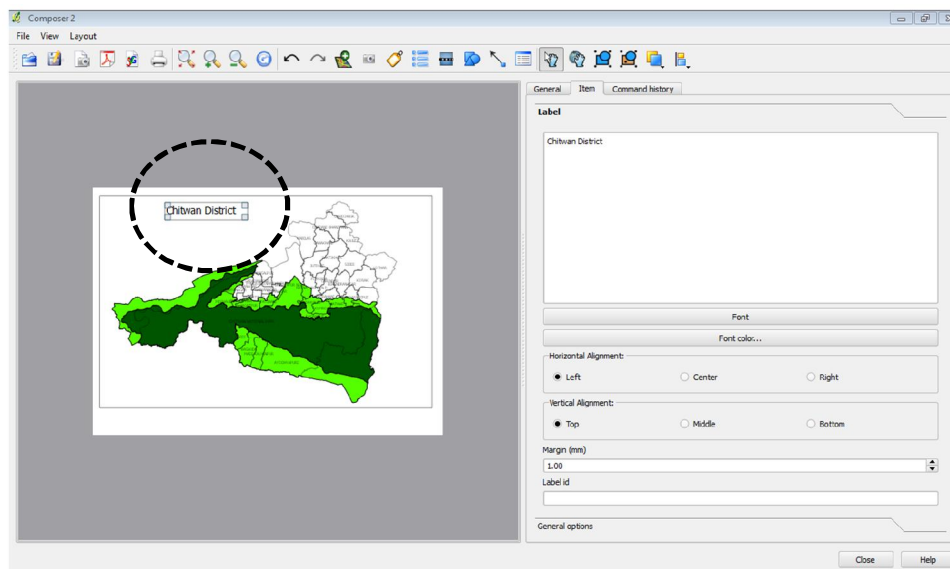
14. Now, in the label text box, type the title of your map. For example, type “Chitwan District”.

15. The title is too small to read. We will make it bigger. Click on “Font”.

16. Choose a font size of 24. Now we can’t read our title since the box is too small. Increase the size of the box with the title by clicking and dragging on the handle at the bottom right corner of the title box:



17. Now, your map should look like this:

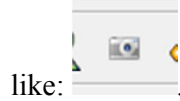


18. There is a box (frame) around the title. We don’t want a box around the title. To remove the frame: under “Item”, click “General Options”, and then uncheck “Show Frame”.

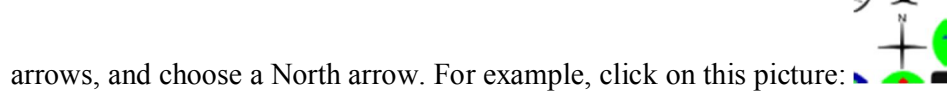
19. We can add a label to the map, for example, a label saying “Map by Alex Zvoleff” (put in your name), using the same process we used to add a title. Add a label to your

map saying “Map by <your name>, October 14, 2011”. Follow steps 11 through 18 to add the label.

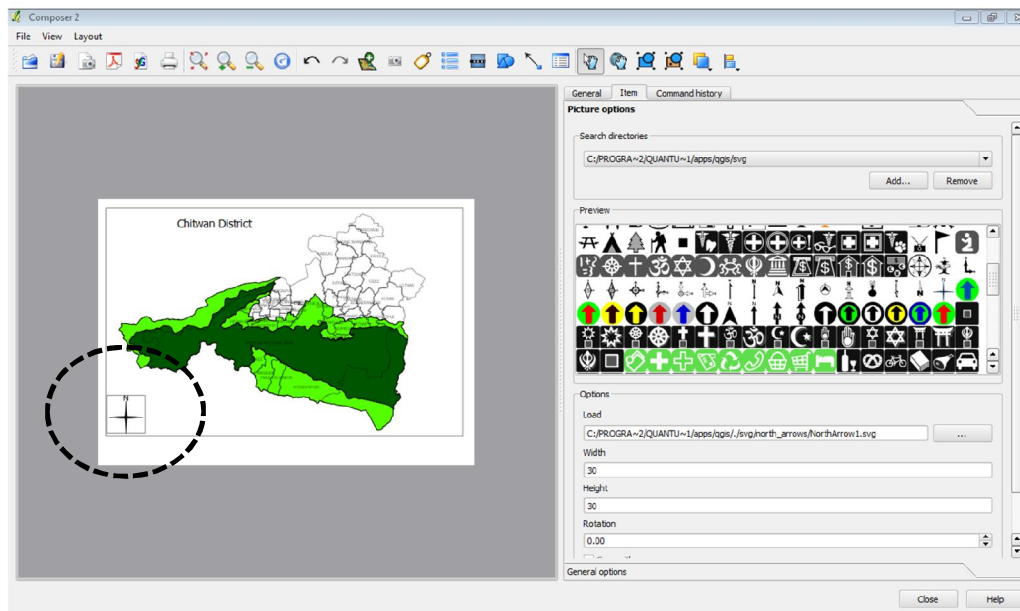
20. A good map should always include a North arrow to show which direction is North. We can add a North arrow to the page by clicking the “Add Image” button, that looks



21. Now click on the map where you want the North arrow to appear. The “Picture Options” window will appear under “Item”. Scroll down until you see the North

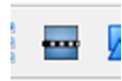


22. Now your map should look like this:




23. There is a box (frame) around the North arrow. We don't want a box around the North arrow. To remove the frame: under “Item”, click “General Options”, and then uncheck “Show Frame”

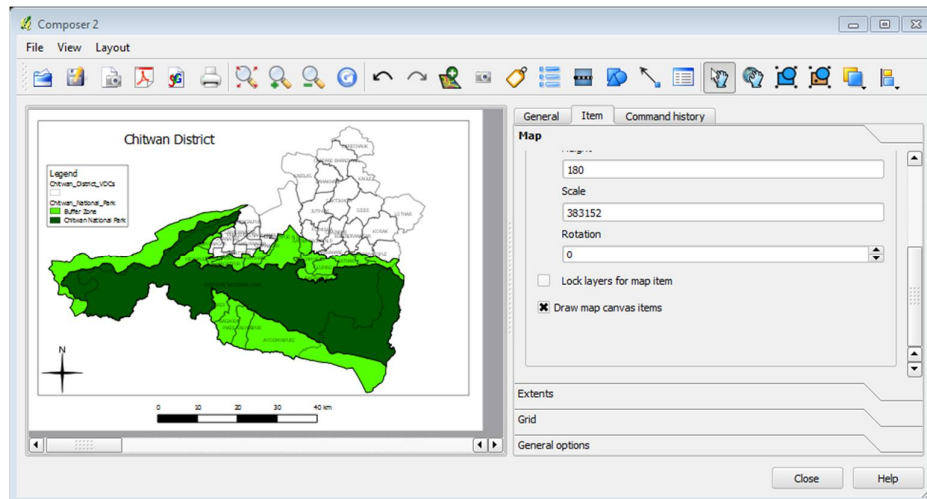
24. A good map should also always have a scale bar to show the scale of the map. Add a scale bar to the page by clicking the “Add new scalebar” button, that looks like:



25. A new scalebar will appear. We need to setup the scalebar for it to look right.

- a. For a map of Chitwan District (like this map) we will want our scalebar in units of 10 kilometers

- i. For “Segment Size” enter 10000
 - ii. For “Map units per bar unit” enter 1000
 - iii. Choose “4 right segments”
 - iv. Choose “0 left segments”
 - v. For unit label enter “km”
 - b. For a map of a single VDC, we will want our scalebar in units of kilometers
 - i. For “Segment Size” enter 1000
 - ii. For “Map units per bar unit” enter 1000
 - iii. Choose “4 right segments”
 - iv. Choose “0 left segments”
 - v. For unit label enter “km”
 - c. For a map of a very small area, you might want the scalebar in units of meters
 - i. For “Segment Size” enter 100
 - ii. For “Map units per bar unit” enter 1
 - iii. Choose “4 right segments”
 - iv. Choose “0 left segments”
 - v. For unit label enter “m”
26. There is a box (frame) around the scalebar. We don’t want a box around the scalebar. To remove the frame: under “Item”, click “General Options”, and then uncheck “Show Frame”.
27. Now we will add a legend to our map. Click the “Add legend” button that looks like:
. The icon is a small square button with a light blue background and a white border. It contains three horizontal blue bars, each with a small white circle at its left end, representing a legend.
28. Now click on your map where you want the legend to appear.
29. Our finished map should look like:



30. We are now finished making our map layout. First we will save our map layout as a template so we can use it again in the future. On the menubar click “File”, and then choose “Save as template”.
31. Navigate to where you want to save the template, and, in “File name”, enter a name. For example, “Day_2_Workshop_Template”.
32. Click “Save”. We will use this template later.
33. Now we will save our map to a PDF file so we can print it or email it to someone else.



Click the “Export as PDF” button, that looks like:

34. Navigate to where you want to save the PDF, and, in “File name”, enter a name. For example, “Day_2_Workshop_Map”.
35. Now we will save our map to a jpg file that we could post on the internet. Click the




“Export as Image” button, that looks like:

36. Navigate to where you want to save the image, and, in “File name”, enter a name. For example, “Day_2_Workshop_Map”. Under “Files of type”, choose “jpeg format (*.jpeg, *.jpg)”.
37. We are done! Make sure you choose “File” and then “Save project as” before you quit Quantum GIS, so that you do not lose the changes you made in the print composer window.

2 Making a New Map from a Map Template

Now that we have made a map template (that we made in the above process), we can use this template in the future to make a new map – without having to go through the whole process of setting up the layout all over again. To do this, we will load the map template into a new Quantum GIS project.

1. Start Quantum GIS.
2. Setup your map first, adding any layers you want to include. Set the layer colors, symbols, and labels as you want them to appear in your map.
3. Because we are making a flat, paper map, we want to use a *projected coordinate system*. By default, Quantum GIS uses a *geographic coordinate system* (WGS84). We need to change to a projected coordinate system. See step number 3 above to see how to remember how to do this.
4. Once you have all of your layers setup, click “File” on the menubar, and then choose “New Print Composer”.
5. The print composer window will appear as before. Now, click on the “Load from template” button, that looks like: .
6. Navigate to where you saved your map template, and load it by double clicking on the name of the template.
7. Your map will appear with the saved layout you used before.
8. You can now save your map as a jpeg or PDF, or continue to edit it until it looks like how you want it to look.