

# Lassen Hiking Association

## How to Print Adobe PDF maps

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ReadMe  
December 2008

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### **Quick:**

the maps can be printed on various paper sizes. In the Print menu, go to Page Scaling and select Fit to Printable Area. Also in Print menu, under Properties, select Photo quality.

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### **More details:**

#### **Adobe Reader**

The files are PDF, and you should already have Adobe Reader\* (might want to get the updated version of Reader). Get Adobe Reader free at <http://get.adobe.com/reader/>

#### **Map scale**

The maps fit well onto most paper sizes\*

If you print onto letter paper (8.5x11") the scale will be about 1:28000 (fine if under age ~40)

If you print onto US B (11x17") the scale will be about 1:20000 (nice if over age ~40)

If you print onto Super B (13x19") the scale will be about 1:17000 (close up, good for trail projects)

US Geological Survey printed 7.5 minute quadrangles are 1:24000

\*but not perfectly (because the width and height are of different ratios for different paper sizes).

Also, you are not limited to the sizes listed here.

#### **Printers for 8.5x11" maps**

But before leaving on your hike, put some drops of water on a map to see if the ink runs. Epson DuraBrite inks are waterproof; as of Dec 2008 their standard 8.5x11 printer is the Stylus C88+, and it uses DuraBrite inks.

Conclusion: for 8.5x11" maps Epson Stylus printers with [DuraBrite ink](#) are excellent

#### **Printers for 11x17" and 13x19" maps**

For this size the printers are generally called "Wide Format" or "Large Format".

In 2008, the prices were about \$250 and up.

In 2008, neither of the popular, less expensive models had waterproof ink. Therefore, they are not recommended unless you use waterproof paper (waterproof paper causes non-waterproof ink to become waterproof).

Alternatively, you can print 11x17" maps onto 2 sheets of 8.5x11" paper [in the Epson Stylus]:  
**to print on onto 2 or more sheets of paper (select "current view" and make current view the 1/2 you want to print, then do the same for the next half.**

Hewlett Packard Photosmart printer works well for the printing, but their Viverna inks are not waterproof. The Epson Wide Format 1400 Photo Printer uses Claria inks, which also

are not waterproof. Epson claims that Claria ink is water-resistant, but this is not true in our tests. Laser wide-format printers are probably waterproof, but generally cost over \$2000

Conclusion: if there is no chance of rain, and you are careful to keep the maps away from water, the Epson Wide Format printer is excellent

Conclusion: if there is any chance of rain or carelessness with water: find a waterproof wide-format printer, use waterproof paper, or print a backup copy stored in plastic bag.

Dec 2008 test

Epson Wide Format 1400 Photo Printer

Compared to HP Photosmart Pro B8350, the Epson is:

- easier (has correct paper size on standard drop-down list; on HP it is a custom size)
- faster (upload to printer is faster, printing time is similar)
- better definition/easier to read (based on side-by-side comparison of Butt Mtn map printouts)
- neither are waterproof [on regular paper]

## **Paper**

Photo paper is not recommended. It is too thick for easy folding. And heavy.

Waterproof paper: WeatherJet Paper, National Geographic Adventure Paper, and iGage Weatherproof Paper are waterproof. And they bond with non-waterproof inks to make the ink waterproof. National Geographic Adventure Paper and iGage Weatherproof Paper are both stiff and heavy (they appear to be identical).

WeatherJet waterproof paper (from [www.RiteintheRain.com](http://www.RiteintheRain.com)) is less heavy and folds better. WeatherJet comes in 8.5x11" and 11x17" Our test using WeatherJet with the Epson Wide Format 1400 Photo Printer resulted in nice quality waterproof maps.

Conclusion: WeatherJet is the recommended waterproof paper

Epson Presentation Paper gives good results and is lightweight, but is so absorbent of ink that it tends to dry out the tip of pens when making notes on your maps.

Multipurpose paper is the lightest, folds the easiest, is easy to write on, and makes excellent maps. And costs the least. It is still readable if it gets a little wet, but don't leave it out in the rain.