

## **Making Local Adjustments in Adobe Photoshop using Quick Mask Mode**

By Diane Miller

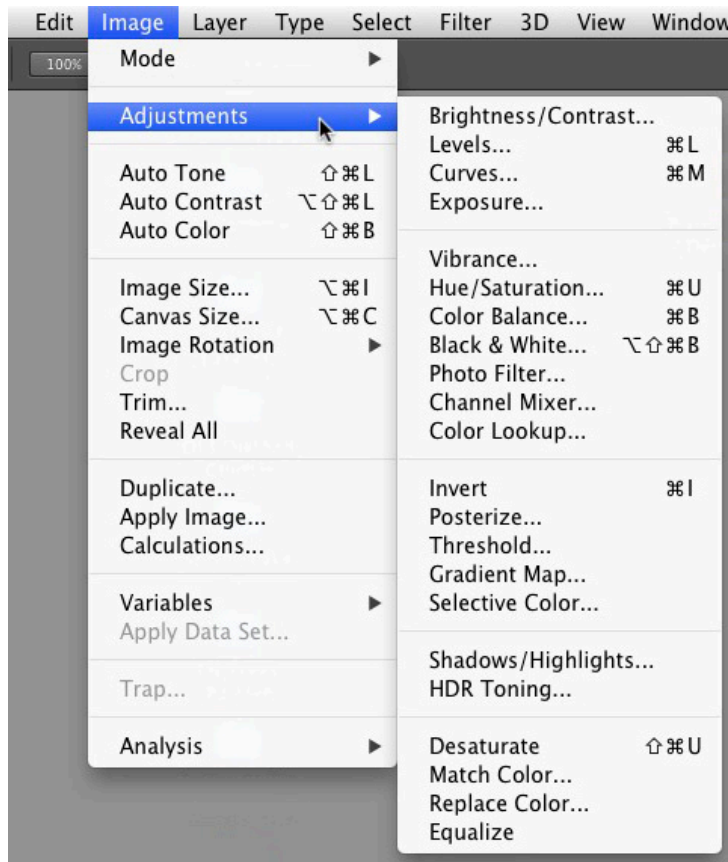
Photoshop lets us make many adjustments to an image, either globally (to the entire image) or locally (to certain areas). Local adjustments let you simulate fill flash or graduated neutral density filters, or make tonal or color corrections to certain areas. This is similar to dodging and burning in the traditional wet darkroom, but on steroids, because the effect in the darkroom was limited to simple lightening or darkening. And that same limitation applies to the old practice you still see widely mentioned of making a 50 percent gray layer, putting it in Overlay mode, and painting areas on it with a white brush to lighten the layers underneath, and a black brush to darken. But now we can do much more sophisticated local adjustments.

Local adjustments are best made in Photoshop with *masked adjustment layers*. They let you make adjustments for Exposure, Brightness and Contrast, Levels, Curves, Vibrance, Hue and Saturation, Color Balance, Selective Color, Black and White conversion. (There are several other special-use adjustments: Photo Filter, Channel Mixer, Color Lookup, Invert, Posterize, Threshold and Gradient Map, but they are beyond what we'll discuss here.)

And you can make these adjustments to very carefully controlled areas of an image. If they are made with adjustment layers they are non-destructive, that is, both the adjustment and its mask remain editable next week or next year. And there is a very easy way to make the mask.

### **A primer on adjustment layers**

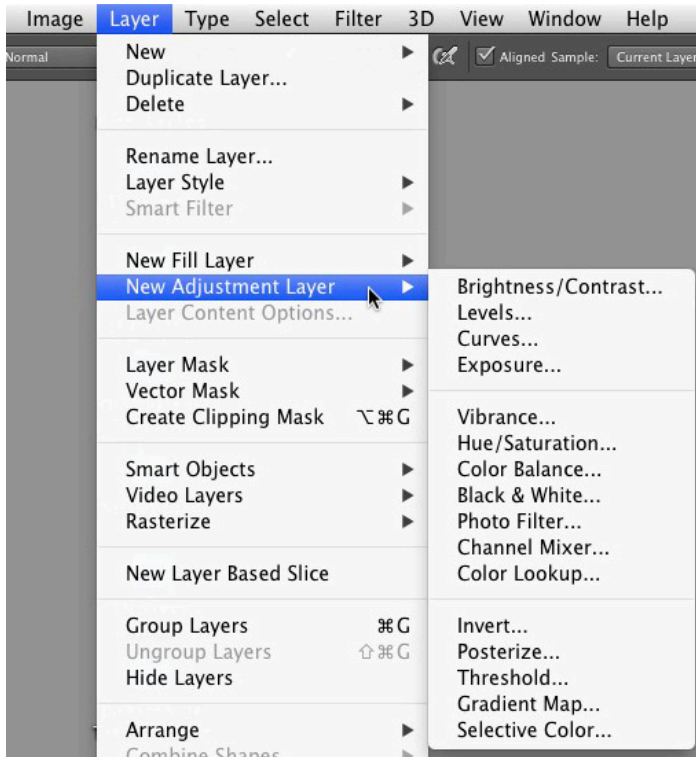
Almost everyone is familiar with making tonal and color adjustments to the entire image, and you can make them in two ways. The least preferable is by selecting a pixel layer such as the Background layer (select it by clicking on it in the Layers panel) and going to the Menu Bar and clicking Image > Adjustments. This will give you a list of possible adjustments.



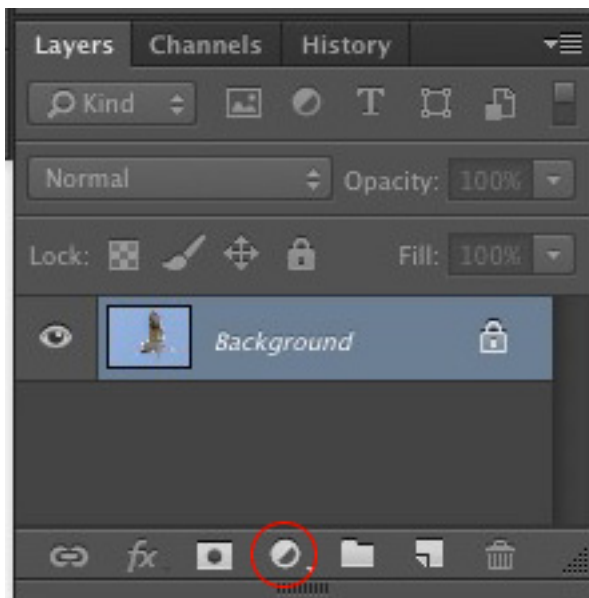
But this will “bake” the adjustment into the pixel layer and if you want to modify it later the process will cause varying degrees of image degradation. A better alternative is to use *adjustment layers*, which are extremely flexible and non-destructive. This can be done with the adjustments in the top three sections in the figure above. Those in the bottom two sections, from Shadows/Highlights to Equalize are only available applied directly to the image, but they are more advanced ones that we don’t often need.

An *adjustment layer* hovers in space above all the layers below it and only changes the *appearance* of the image, somewhat like looking through a filter. You can tweak the adjustments endlessly and non-destructively, long after the layer is created. They will only be baked into an image when you finally need to flatten for some output, and in that case any degradation is extremely small because it is the sum of all the adjustment layers taken together and applied at one time. (See the note at the end of this article about flattening.)

To make an adjustment layer just go to the menu item for Layer > New Adjustment Layer.



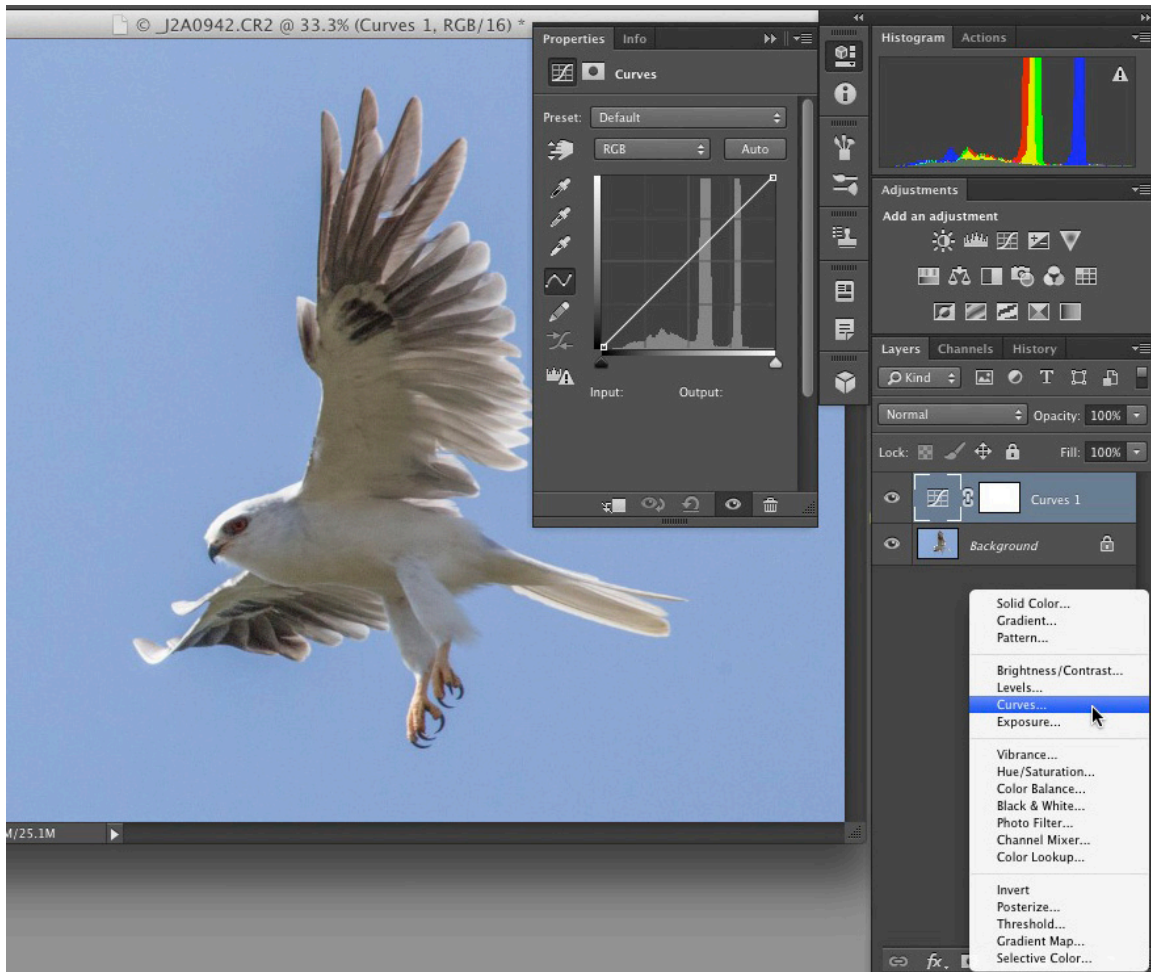
Or you can also make an adjustment layer by clicking the circle icon at the bottom of the Layers panel, as shown below, and choosing from the popup list shown in the second figure below.



Side note: The Layers panel is something you should always have open; you will use it often. Photoshop's default panel layout is not the best for digital darkroom work. If you click the dropdown in the far upper right of the Photoshop screen you will see

several workspaces. Or you can click the menu item Window > Workspace and make a choice there. The one for Photography is the most suitable to start with. If you customize your workspace, as I do, you can also save it in that menu. You can see my customized workspace in the figure below.

When you make a new adjustment layer it will appear in the Layers panel above whatever layer had been selected. Below is a Curves adjustment layer I made this way. (This figure is a composite; the Curves layer and its adjustment dialog didn't appear until I clicked on the Curves item in the list.)



## Masks on adjustment layers

On the Curves layer I made in the figure above you will see that there is a white rectangle and to its left is a thumbnail for the adjustment itself. When you make the adjustment layer it becomes the active layer and its *adjustment* thumbnail will be active (it has a sort of frame around it) and the adjustment dialog appears.

The white rectangle on the adjustment layer is the thumbnail for the *mask* for the

layer. It is empty (all white), meaning that the adjustment applies equally to all areas of the image. The mask can contain black or gray areas to limit the adjustment to certain defined areas. Black conceals, hiding the adjustment in the areas it covers, and white reveals. Gray areas are partially concealed, depending on how dark it is. You can make the mask thumbnail active by clicking on it; we'll get to that in a minute.

Now, finally, to the meat here. To make a masked adjustment you have two strategies. You can make the adjustment to the entire image and then "paint" a mask with the Brush tool set to black in order to block the adjustment in certain areas of the image (or with various shades of gray to partially block it). You will see that mask reflected in the mask thumbnail of the adjustment layer as you paint it. This is a good strategy in some cases but a more common scenario is that you want to make an adjustment to a fairly small area of the image. A better way to do that is to make an approximate selection of the desired area first, which will become a mask as soon as you make the adjustment layer. That lets you make the adjustment more accurately, because it will apply only to the area you selected.

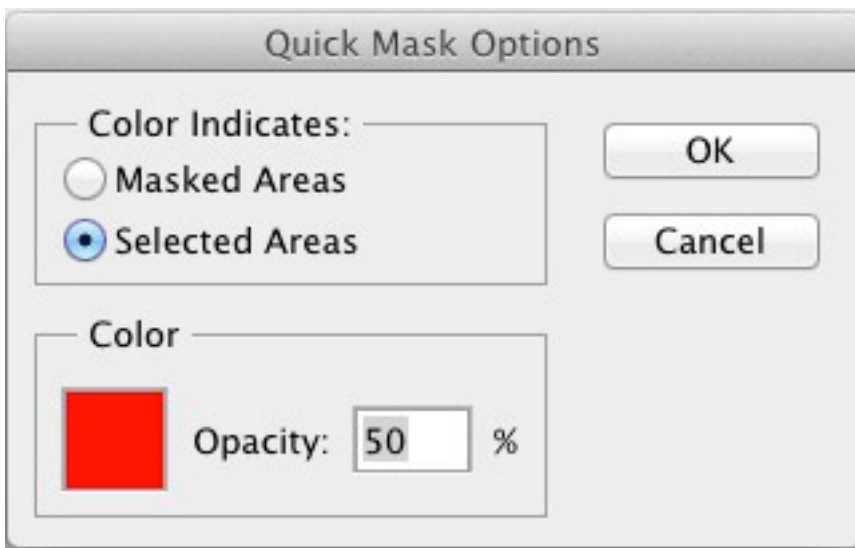
Notice I have sneaked in the word "selected" here. A mask and a selection are simply the same thing, in different forms. You can turn a selection into a mask and a mask into a selection. And here's the key for masked adjustment layers: *Whenever a selection is in effect and you then make an adjustment layer, that selection will become its mask.*

So, let's make a selection. You often see mention of using some kludgy tool like the Lasso to make a selection. It will be difficult to draw, especially with a mouse, and it will be hard-edged, and you will then need to feather it. That is clumsy and inelegant. You can make a much more precise approximation of your desired selection using *Quick Mask mode*. But don't get intimidated by terminology here. There is actually no such thing as a Quick Mask; it is simply the name of a mode that allows you to use the Brush tool to paint an area for your masked adjustment (or anything else for which you need a selection). It will be called a quick mask, and that is a good term, but it just means a quick way of making a mask. Once you have the area painted you can then convert it to a selection with a single click. Then when you make the adjustment layer, the area will automatically be incorporated as a mask. That's what I call easy.

To begin making a Quick Mask, click the Quick Mask icon at the bottom of the Toolbar, or hit the Q key. (You will need to have an image open.)



The first time you use this I recommend that you double-click the icon in order to change the default setting, which is that the painted area will be the masked (non-selected) area. Just click Selected Areas instead of Masked Areas, as shown below. Generally you will want to paint a small portion of the image that you want to be the selected area. (You can change the default any time you wish.) You will get this dialog box, where you can also change the opacity and color of the mask if that makes it easier to see on a given image. You want it to be translucent so you can see the underlying image enough to guide your painting. To change the color, click the colored square.



Double clicking the icon to change the defaults will put you in Quick Mask mode. You can tell you are in it because the active layer in the layers panel becomes gray. If you don't want to continue with the mask as the next step, single-click the icon again or hit the Q key, to get back out of Quick Mask mode.

To paint a selection with this method, it doesn't matter which layer is active. But when you make the adjustment layer it will go above whatever the active layer was. If it isn't where you wanted it, you can move it in the layers stack by drag and drop.

For the subsequent times you use Quick Mask mode, you only need to single-click the icon, or hit the Q key. Once you're in Quick Mask mode you simply paint the area or areas, right on your image, which you want to be selected. Set the foreground color, near the bottom of the Tool panel, to black. Choose the Brush tool and set its size, hardness and opacity as desired. Start with the brush opacity at 100 percent and reduce it only as needed for partially selected regions, where you want a lower amount of the adjustment. You usually want the soft edges you will get with a soft brush (Hardness set to 0). The "reach" of the feathering is usually best controlled by choosing the size of the brush.

I use this technique on most of my images that go into Photoshop, and it is much easier to do the painting with a Wacom tablet and stylus.

When you have painted the area you want to adjust, toggle back out of Quick Mask mode by clicking the Quick Mask icon or hitting the Q key again. You will now see the "marching ants" of a selection. Your selection will have soft, feathered edges, but the ants can only show the 50% level.

Now that a selection is in place, choose your desired type of adjustment layer and its mask will automatically have black areas where the adjustment will be blocked and white areas where it will be revealed. Your adjustment will be applied only to the areas you painted (selected). This way it's easier to make the adjustment optimally, since it shows only in the approximate areas where you want it.

Toggle the adjustment on and off with its eyeball icon to see if the mask edges look good. If they need tweaking, you can paint with black or white (or gray, by choosing black and reducing the opacity of the brush). You can see the mask while you paint on it, or leave it invisible, in order to better see the changes in the adjustment as you paint.

Make sure the adjustment layer is the selected one, and that the mask thumbnail is selected (it will have a small frame around it), not the adjustment thumbnail.

To see the mask, hit the front slash key (under the question mark on the keyboard) and you'll see the mask as a translucent overlay on the image. You are *not in Quick Mask mode* here; you are just seeing the mask to make it easier to paint on it. It will be reversed from my recommendation for resetting the Quick Mask default to Selected Areas, with the *protected* areas now appearing in color, corresponding to the black areas in the mask thumbnail. A black brush will paint red (or whatever color you have set for the mask). A white brush will erase the color and a gray brush (black at lower opacity) will make the color more translucent. It may seem a little tricky at first because a 100 percent masked (blocked) area is showing as a

translucent color. You'll get used to it. Hit the slash key again to toggle back out of that view.

Or for very precise refinements you can see the mask in black and white. Just Alt-click its thumbnail (and do the same to toggle back out of that view). This is the best way to see flaws in the mask such as missed areas, but small ones often won't have a major impact on the adjustment.

Or you can paint on the mask while viewing the image directly. Be careful that the adjustment layer is selected and that the mask thumbnail is active (with a small frame around it). If you are working on a mask that is on a pixel layer and inadvertently have the image thumbnail (or any other pixel layer) selected you will be painting directly on it instead. Choose a brush and paint away as above. You will need to be able to visualize where an edge needs to be tweaked, but that's not difficult if you toggle the adjustment visibility on and off as you work, by clicking its eyeball.

### **Summary:**

Hit the Q key to go into Quick Mask mode  
 (The first time you go into Quick mask mode, I recommend changing the default to "Color Indicates Selected Areas")  
 Choose a black brush and paint where you want a selection  
 Hit the Q key again  
 Choose an adjustment layer and make the desired adjustment  
 Toggle the visibility of the adjustment to assess both the adjustment and the mask  
 Hit the slash key to see the mask in red and paint on it to tweak the area  
 Or hold the Alt key and click the mask thumbnail to see it in black and white and paint on it to tweak it  
 Toggle back out of either mode with the same key

### **Footnotes:**

You can tweak a mask with the Mask panel, to feather or sharpen the edges. The panel will pop up when you click the mask thumbnail in the adjustment layer. With a little practice painting masks, this is rarely necessary.

You can use the gradient tool (which is just a fancy brush) or a very large soft brush to mimic a graduated neutral density filter.

Sometimes instead of painting the selection, it works well to use the Quick Selection tool or the Magic Wand. In this case you will want to refine the hard edges with the Mask panel and fill in spots it missed with the Brush.



If you have a complex adjustment layer, such as a complex-shaped curve with adjustments to some of the color channels, and you want to reduce its strength, you can do so by simply reducing its opacity with the Opacity slider, in the upper right of the Layers panel.

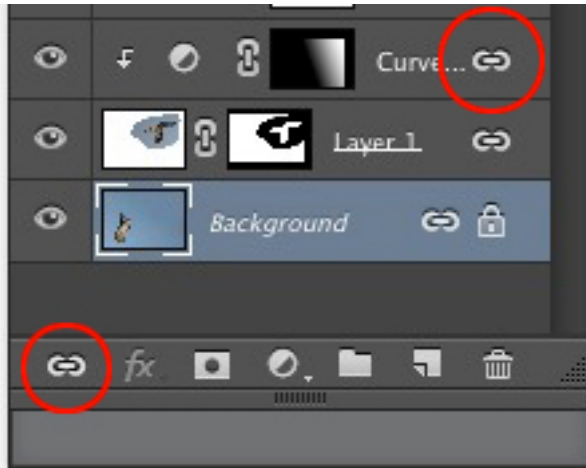
Flattening: Always save the layered file (at the original file size from the camera) as your master file. In web tutorials and articles in photo magazines you will often see an offhand mention that your last step is to flatten your image. It is mentioned so casually that you get the impression that it almost goes without saying that it is always the thing to do. That is the worst advice you'll ever get about Photoshop, and it should make you question the rest of the article.

The most common reason for flattening an image is for output such as web posting or sending to a printing service. Occasionally you may want to flatten to proceed with an artistic treatment such as a filter. In either case, keep your original layered file and open a copy or save under a different name to flatten and proceed. (If your original is a PSD file, you can save it as a TIFF or JPEG with the same name and it won't overwrite the original.) Your master PSD file should always retain all the layers indefinitely, for future editing. Trust me, you'll get better, your monitor will get better and the software will get better, and you'll find you want to go back and correct adjustments on some older images, sometimes dramatically. The newer you are to the digital darkroom, the more important it is not to burn bridges.

If your file was opened from Lightroom, and thus imported back into it as a layered PSD file, you can simply go to File > Export, with no need to flatten, resize or convert to a different profile, and all the work will be done for you according to the parameters you specify in the Export dialog. (And of course you can save frequently used settings as a preset.) Or if you want to make a JPEG or other output file directly from Photoshop, you can resize, flatten, change from 16 to 8 bit (flatten first!) convert to the appropriate profile and then do a Save As and specify JPEG or TIFF (assuming you were working in the PSD format). For posting to the web, convert to sRGB and check the box to embed the profile.

Linking layers: Whenever you have a layer with something on the mask, or another pixel layer, always link them to the Background layer. That prevents them being inadvertently moved by a careless swipe of the Move tool. If a mask is moved slightly, its correction is no longer in register with the image and you may not notice the flaw until you have sent out a version for web display or printing.

To link a layer to the Background, highlight it and Control-click the Background (or any other layer already linked to the Background), and click the chain-link icon in the lower left of the Layers panel. A link icon will appear on the linked layers.



Sometimes the Background layer can lose its special identity and become a regular layer, which means it, too, could be inadvertently moved. If you see that it isn't named Background, highlight it and go to the Menu bar and click Layer > New > Background from Layer. That will undo any linking and you'll have to repeat it.

Applying a mask to several adjustments: Sometimes you want to create two or more different adjustments that use the same mask. The straightforward way is to create an additional adjustment layer but before you make any adjustments, Alt-click the mask thumbnail and drag it to the new layer, which will copy it there, then make the adjustment.

However, the downside of this approach is that if you want to tweak the mask later you will need to tweak all copies of it. A better approach is to click the New Folder icon at the bottom of the Layers panel, to make a folder. If your masked adjustment layer was the active one, the folder will be above it. First drag the mask to the folder, and then drag that adjustment layer into the folder. (You don't want to copy the mask in this case, but to drag it.) Now you can make subsequent adjustment layers within this group that will use the same mask. If the active layer is the one in the folder, the new one will go into the folder as well. If it doesn't go into the folder, you can drag and drop it there.

It looks like I have covered a lot of material here, but it is really just a few basic and related things that can improve every image you create.