



**Wish I Knew: Enhance**

# Wish I Knew: Enhance

In this lesson, I'm going to teach you all the things I wish I knew when I started learning how to enhance my images in Photoshop.

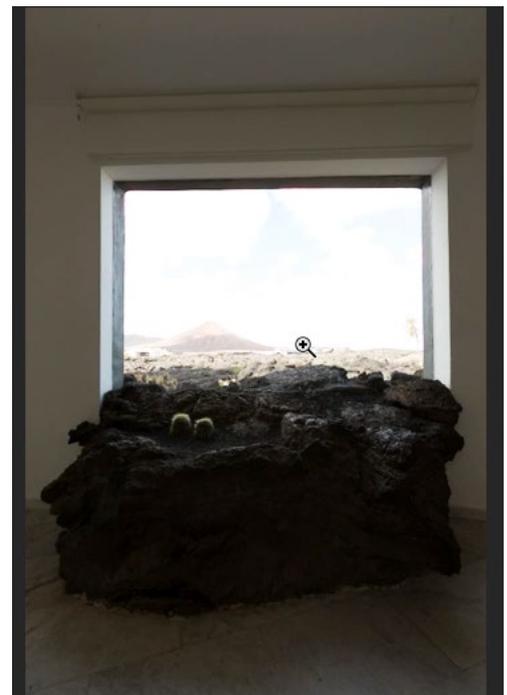
## 3 adjustments to make before leaving Camera Raw

There are three primary things that should be done to raw files within Adobe Camera Raw (ACR) before moving the images into Photoshop:

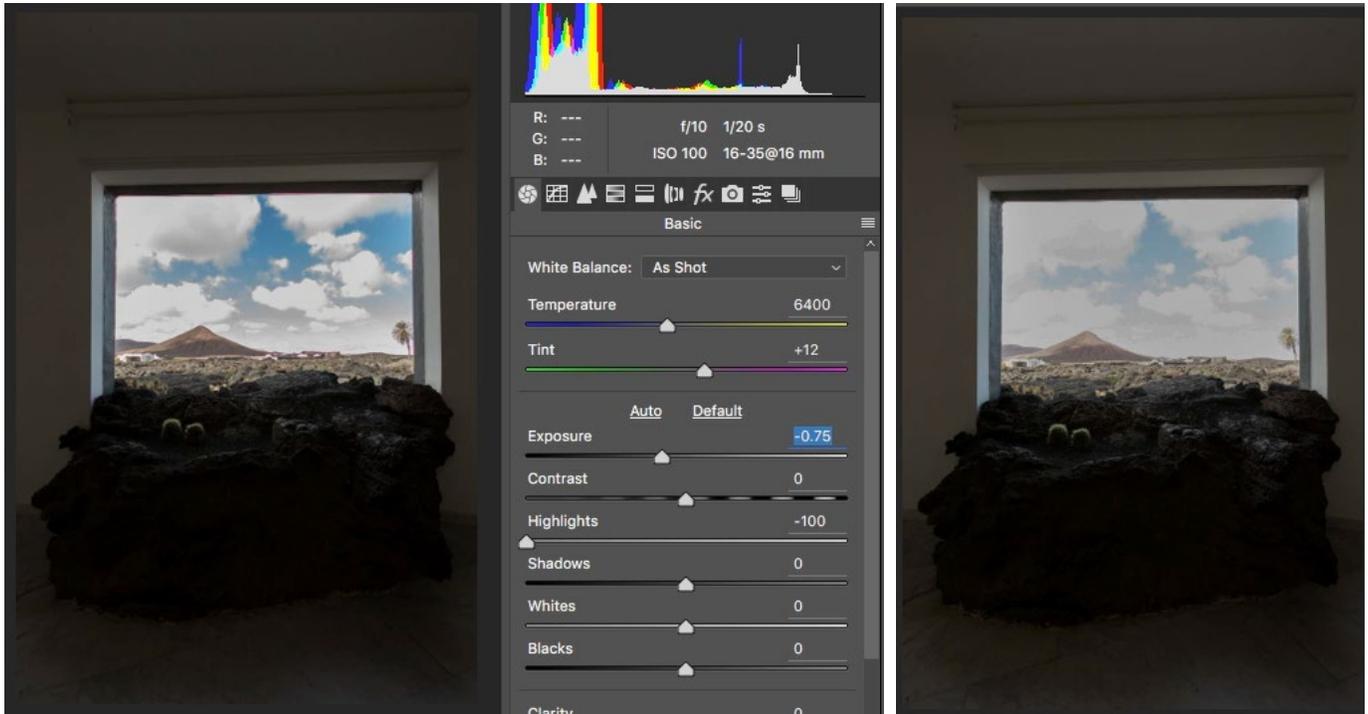
1. Recover any highlight detail in your picture.
2. Recover any shadow detail in your picture.
3. Adjust the white balance.

**Recover highlight detail** If you need to recover any highlight detail in your image, it's best to do this in ACR. When you work with an image in ACR, it's still a raw file and retains all of the information that the camera captured. This makes it easier to pull out more detail in the shadows and/or highlights. Once you move an image into Photoshop, it no longer has the raw data that your camera captured. It only has a processed version of the image, which is somewhat equivalent to a jpeg.

When working with a raw file, you can usually bring detail back to any areas that have not been blown out to solid white. In ACR, you can tell if an area of your image is solid white by hovering your cursor over the area and looking at the numbers under the histogram. If the values for R, G and B are all 255, that means the area is solid white.



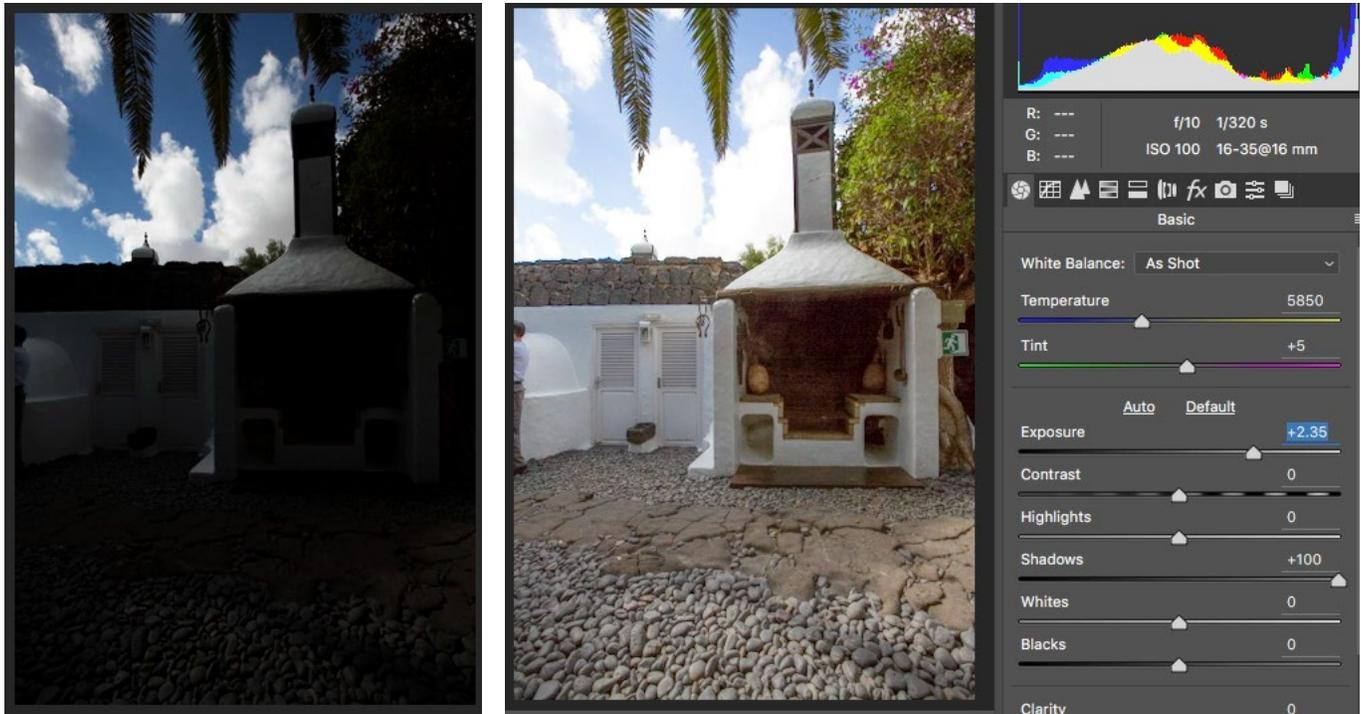
**The highlight detail has been completely blown out in the sky area of this image. It's best to recover that detail within ACR, before moving into Photoshop.**



**Left:** The highlights were recovered in ACR by dragging the Highlights slider all the way to the left and dragging the Exposure slider slightly to the left as well. **Right:** This is the result we would get if we moved the image into Photoshop and THEN attempted to recover the highlight detail. As you can see, the results are much better when this is done in ACR.

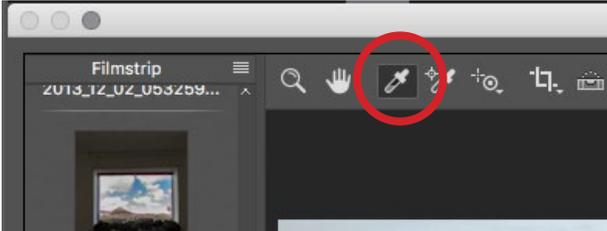
To bring detail back to the highlights in ACR, use the Highlights slider (under the Basic panel) and drag it to the left. If you dragged it all the way to the left and still need to bring back more detail, you can drag the Exposure slider to the left as well. After doing this, you may need to drag the Shadows slider to the right in order to compensate for the darkening in the shadow areas.

**Recover shadow detail** To recover shadow detail, you will instead start with the Shadows slider, which is also under the Basic panel in ACR. If you drag the Shadows slider all the way to the right and still need to lighten the shadows, you can then turn to the Exposure slider, dragging it up until you retrieve the desired amount of detail.



**Left:** The shadow areas in this image are too dark to make out any detail. **Right:** We used the Shadows and Exposure sliders in ACR to bring detail back into the shadow areas.

**Adjust white balance** ACR will do a much better job of adjusting white balance than Photoshop, so this is something you should think about before moving your image out of ACR. The white balance of an image is controlled by the Temperature and Tint sliders in ACR. The Temperature slider controls how warm (yellow) or cool (blue) the image is. The Tint slider controls the color cast and how much green or magenta is in the image. The White Balance Eyedropper, located in the Tool Bar at the top of the ACR interface, can be used to automatically set the white balance. With the eyedropper active, click on an area in your image that should have no color. It can be something that's supposed to be white or 50% gray. This will adjust the rest of the image based on that area.



**The White Balance Eyedropper can be found in the Tool Bar at the top of the Camera Raw interface.**

## ACR adjustments are saved as text files

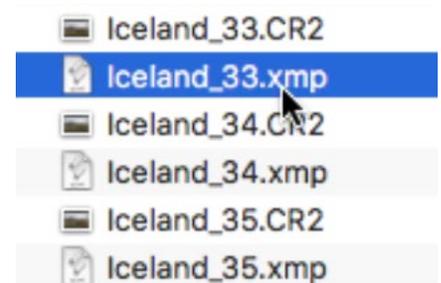
Any time you make a change to your image in ACR, that change is stored as text. This text file can be thought of as a set of instructions for where the sliders should be positioned when displaying your image in ACR (or Lightroom) and is stored alongside, but separate from, the original image file. This means the image file remains untouched.

When viewing your images as thumbnails in Bridge, you may notice a little circle icon above the thumbnail. This icon indicates that the image has been adjusted using ACR and therefore has an additional text file stored along with it (in the same folder) that contains information about the adjustments made to the image. The text file will have the same name as the image file, but it will end in .xmp. It's important to know that if you move or delete this text file, the adjustments made to the image will be discarded. If you move the image file, you need to move the .xmp file along with it.

If you make adjustments to a jpeg file, you will not get an additional .xmp file and that's because a jpeg can store the changes within the file itself. You need to be careful with this. If you take that file and send it to someone else, they will not receive the image along with the adjustments made to it (unless they are viewing it within Adobe software). They will see the original version of the photo. If you want the adjustments to be "baked in" in a way that others will see the final result, you need to save the image in one of two ways. You can open the image in ACR, click on the Save Image button in the lower left and then specify your file settings within the Save dialog that appears. Alternatively, you can open the image in Photoshop and use the Save As command to save the image in any format you'd like.



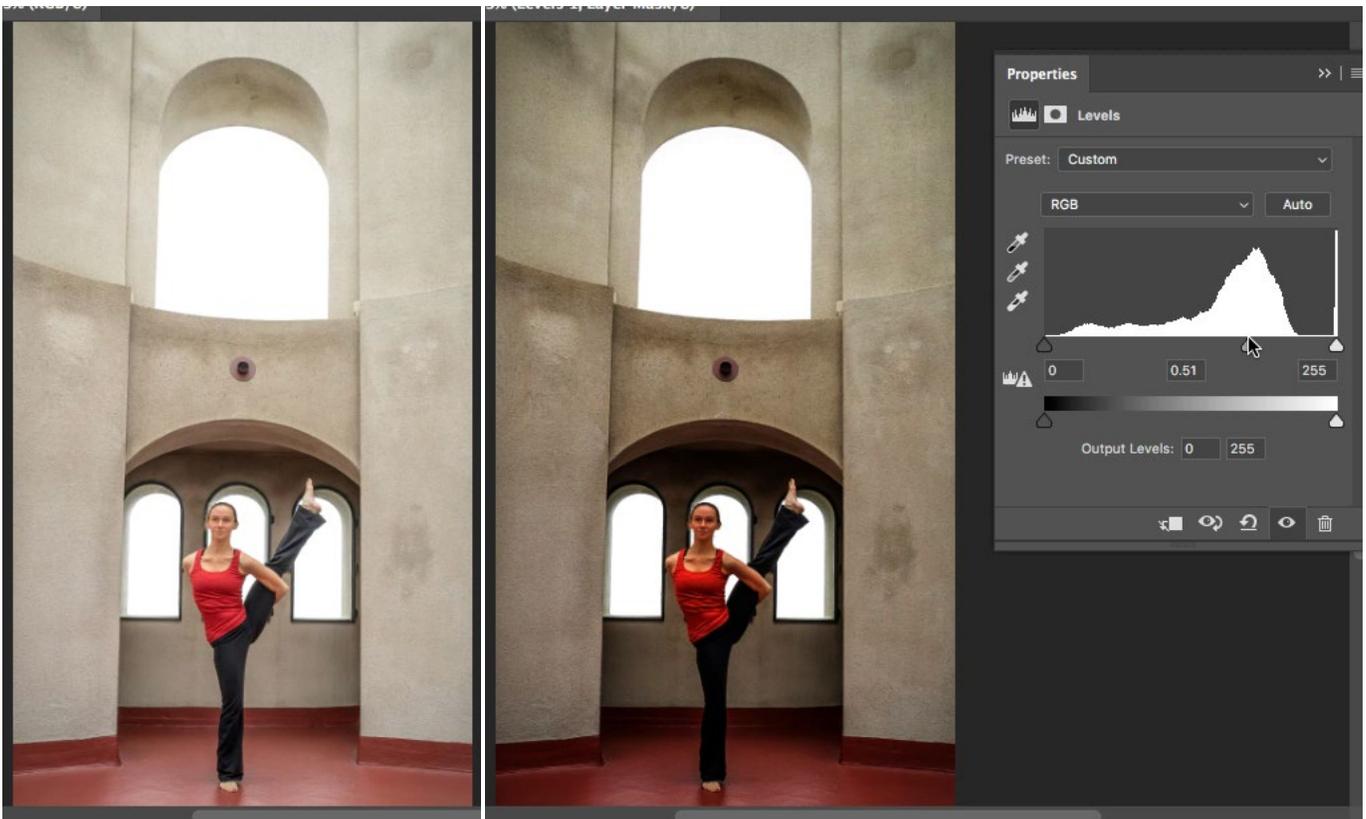
**When this icon appears over an image in Bridge, it means that image has been adjusted and includes an .xmp file.**



**Looking at a folder of images on your hard drive, you can tell an image has been adjusted because it will have an .xmp file to go with it.**

## Use blending modes to prevent brightness or color shifts

**Preventing too much saturation when darkening an image** Any time you darken a picture, it's going to become more colorful (regardless of the darkening method). When you make an image more colorful, know that there is a limit as to how saturated the colors can become before you start to get saturation clipping, which is a loss of detail in the most colorful areas of your picture. Let's look at how you can prevent saturation clipping when darkening your image. First, make sure the darkening effect is done on a separate layer. An adjustment layer is ideal. Then, use the Blending Mode menu at the top of the Layers panel to change the blending mode of the darkening layer to Luminosity. When you set a layer to the Luminosity blending mode, it will only allow the layer to change the brightness of the picture, but not the color. Because of this, you can apply the desired darkening effect without in turn making the colors more saturated.



This image was darkened using a Levels adjustment layer. You can see by the difference in skin tone that the darkening effect also made the colors more saturated.

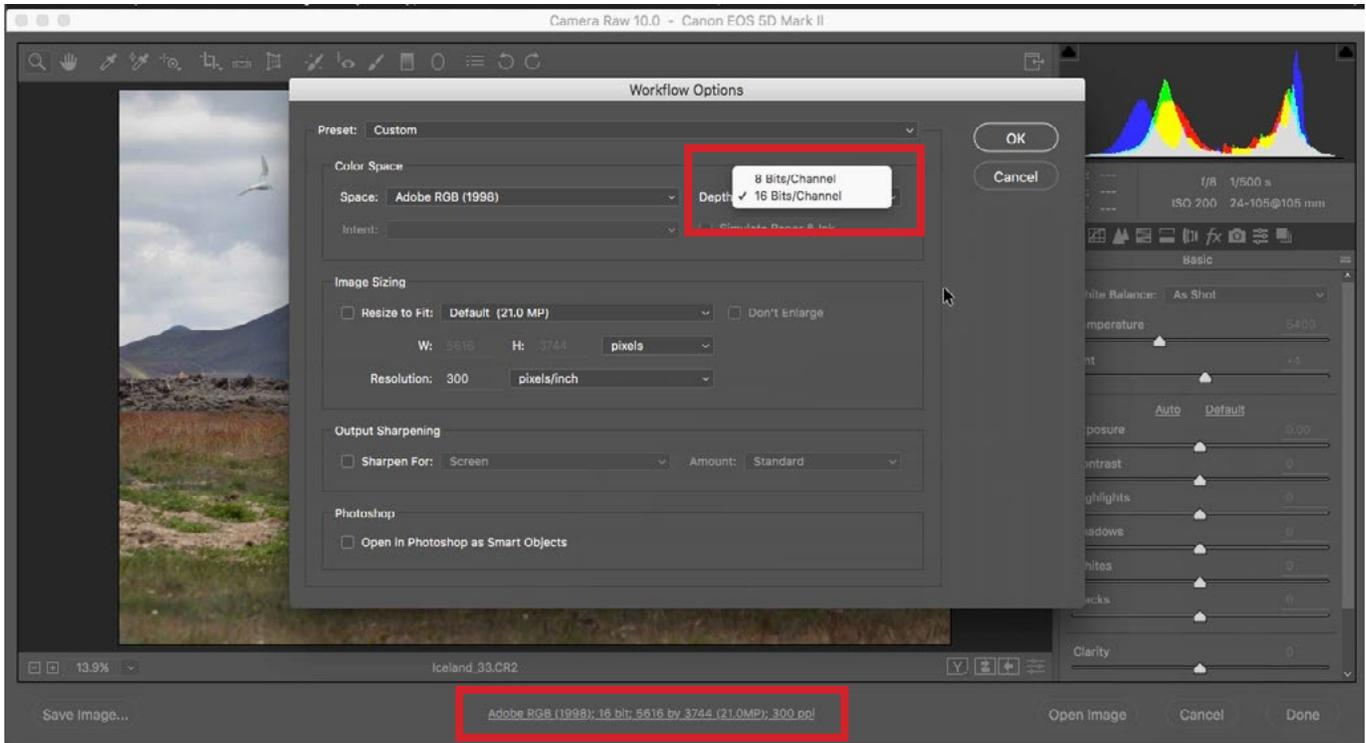


**Left:** The red skin tone is a result of darkening the image. **Center:** We're using the Blending Mode menu at the top of the Layers panel to set the blending mode of the adjustment layer to Luminosity. **Right:** The Luminosity blending mode prevented the color shift in the image.

**Preventing brightness shifts when adjusting color** Just as a darkening effect will tend to make an image more colorful, a color adjustment may alter the brightness of an image. Often times, I want to make a change to the colors, but not the brightness. To ensure a color adjustment does not affect the brightness, change the blending mode of the adjustment layer to Color. When a layer is set to the Color blending mode, it is only capable of changing the layer's color. It will not be able to affect the brightness, or luminosity, of the image.

## Use 16-bit for retouching skies and other smooth areas

In Camera Raw, there is a line of text that runs along the area directly beneath your picture and this text includes certain information about the image, including the color space, resolution and bit depth. If you click on that text, the Workflow Options dialog will appear and this is where you can specify the properties of the image when it's moved into Photoshop. For many images, using a bit depth of 8

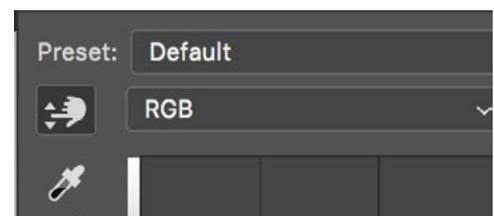


You can specify what bit depth an image should use in Photoshop by clicking on the line of text at the bottom of the ACR interface and then using the Depth menu in the dialog that appears.

bit will be fine. If, however, you plan on doing retouching work on a sky or another similarly-smooth area, consider changing the bit depth setting to 16 instead. Setting your image to 16-bit will double the file size, but the results will look much better when you retouch the sky or another smooth area that doesn't contain much detail.

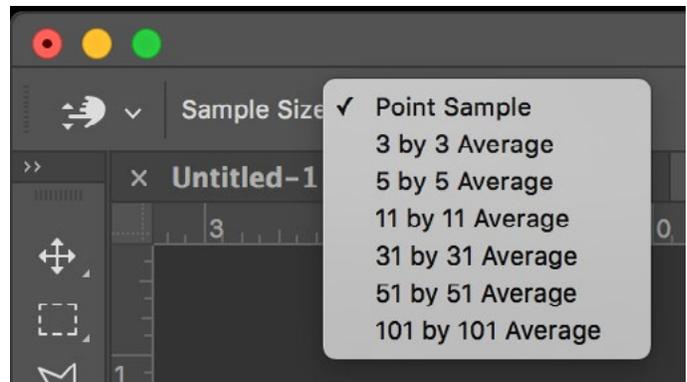
## Sample Size Settings

There are some adjustments in Photoshop that allow you to use a direct selection tool, which looks like a little hand icon, to click and drag directly on your image. For example, when you create a Curves adjustment layer and activate the direct selection tool, you can click and drag up or down on an area



The direct selection tool within the Curves Properties panel.

in the image and the adjustment will target the exact tone that is under the cursor. It will create a point on the curve for that tone and then move the curve up or down (depending on which way you drag). By default, the sample size for this tool is one pixel. This means that the tool will only look at the color and/or tone of the single pixel you place your cursor on. If you would like the sample size to be slightly larger, use the Sample Size menu that's located in the Options Bar. (Note that the direct selection tool must be active in order for this menu to appear.) I find that the "5 by 6 Average" setting works well for most images.

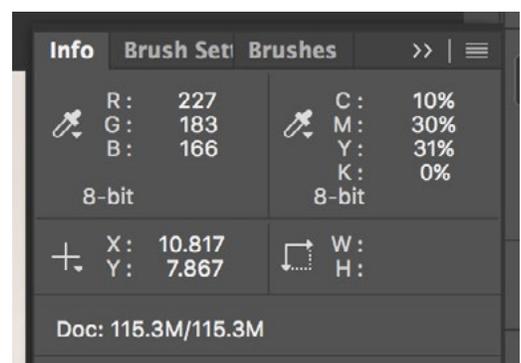


**The Sample Size menu can be found in the Options Bar.**

The Sample Size menu can also be found in other areas of Photoshop. For example, you'll notice the menu in the Options Bar when the Eyedropper Tool is active. Note that when you change the sample size setting while using one tool, the setting will also be changed in all other tools that contain the sample size setting.

## Looking at the numbers

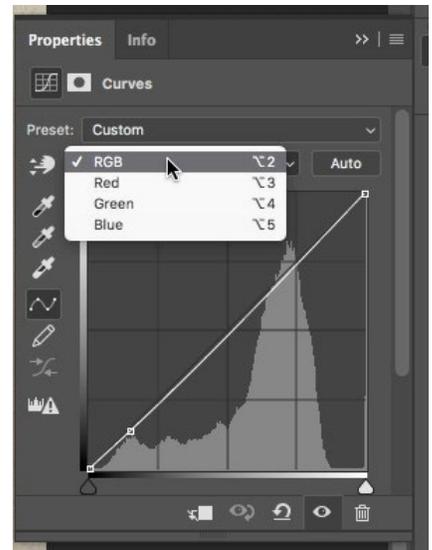
When I started working in Photoshop, I wish I had a better understanding of what the numbers represented. You can see the numbers within the Info panel and if that panel is not already visible on your interface, you can access it by going to the Window menu and choosing Info. Within the Info panel, there are values for red, green and blue. If these numbers are all the same, that means that the area of your image where your cursor is hovering is gray. Equal values of R, G and B indicate that the targeted area has no color. If one of the



**The Red, Green and Blue values can be found in the Info panel and will display the values for the area where your cursor is hovering.**

values is much higher than the others, that means the corresponding color is dominant in the targeted area. If the Red value is high and the Green and Blue values are low, it means that the area is mostly made up of red. In other words, the closer the R, G and B values are, the less colorful the targeted area is. The more spread out the R, G and B values are, the more colorful the targeted area is.

You can change the balance of the individual colors with certain adjustments. Some adjustments allow you to work with the reds, greens and blues individually. For example, when you are working with a Curves adjustment, there will be a color dropdown menu above the Curve chart. If you change this menu from RGB (the default) to red, green or blue, then the changes you make to the curve will only affect the selected color.

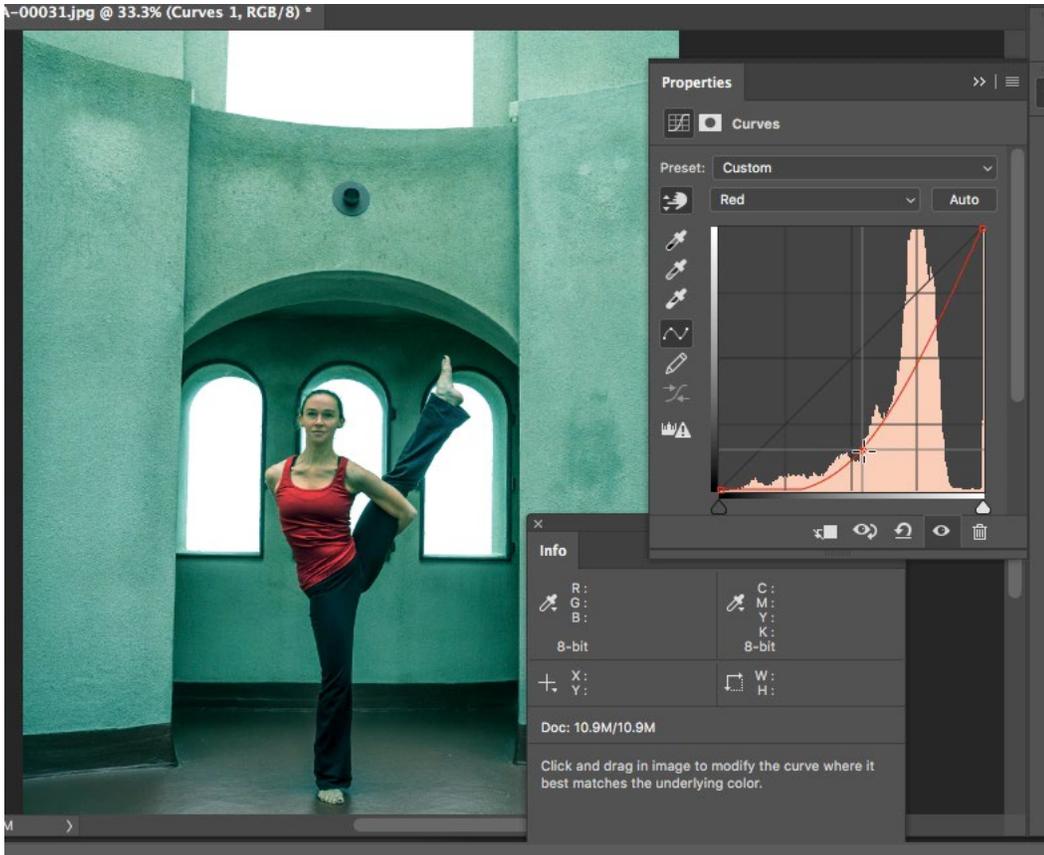


**You can change the balance of the reds, greens and blues by working on the colors individually. Many adjustments allow you to work with just the reds, greens or blues.**

## Understanding each color's opposite

When an adjustment contains the RGB color menu, it's clear that you can work with the red, green and blue colors individually. What's not obvious is that you can work with each color's opposite as well. The opposite of red is cyan, the opposite of green is magenta and the opposite of blue is yellow. If you ever forget what each color's opposite is, look in the Info panel. To the right of the RGB values are the CMYK values.

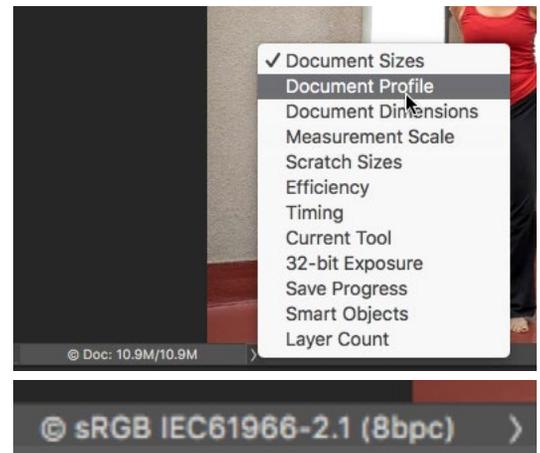
The RGB menus found within various adjustments can be used to affect the reds, greens and blues as well as the cyans, magentas and yellows. For example, if you set the RGB menu within the Curves dialog to Red, then dragging the curve up will add more reds, but dragging it down will remove the reds and therefore add more cyan. When you add more green, you will remove some magenta. When you decrease the blues, the yellows will increase. And so on.



Here, the color menu in the Curves dialog was set to red. Dragging the curve up would add more red to the image but in this case, we're dragging the curve down. This is making the image more cyan, which is the opposite of red.

## RGB values and color spaces

Every image you open uses a certain color space. Examples of color spaces are sRGB, Adobe RGB, ProPhoto, etc. There are several ways of determining what color space your image is using. One method is by clicking the little right-pointing arrow next to the text in the bottom left corner of your Photoshop interface. When the pop-up menu appears, choose Document Profile. Then, the text in that bottom corner will include the image's color space. You can define a color by the three color values that make it up, so if you wanted to use a color from your image in another document, you could copy the R, G and



Use the menu at the bottom of the interface to determine what info is displayed there. Here, we're choosing to view the Document Profile.

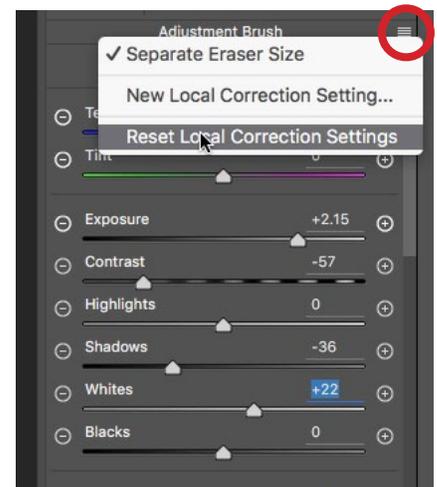
B values and use them in the other document to create the same color. However, the same color will look different across different color spaces. If you copy the R, G and B values from a document using the sRGB color space and then enter them into a document using a ProPhoto color space, that color will look different. What does this mean? It means that it's important to record the R,G and B values in addition to the color space used when attempting to recreate a color.

## Quickly open an image in Camera Raw

To open a jpeg image from Bridge into ACR, go to the main menu and choose File > Open in Camera Raw. Alternatively, you can simply hit the R key. To open a raw file in ACR, double-click on the image thumbnail and it will automatically open in ACR.

## The Adjustment Brush in ACR

The Adjustment Brush can be found in the Tool Bar at the top of the ACR interface. When you activate the brush, you might notice that there are already some settings dialed in within the panel on the right. In other words, some of the sliders are not in their default positions. Here is how you can return one or more sliders to their default settings. To set a single slider back to its default position, simply double-click on the slider or the slider name. To reset all of the Adjustment Brush sliders, click on the little menu in the top right corner of the slider panel and choose “Reset Local Correction Settings” from the menu that appears.



**We're resetting all of the Adjustment Brush sliders by clicking on the menu at the top of the slider panel and choosing to “Reset Local Correction Settings.”**