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# BETTER BLACK AND WHITE

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Premium Photography Guide  
Written by Kent DuFault





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I have to admit to you, I feel that I have an advantage when it comes to judging a black and white (or any monochrome) photograph.

I say that because for the first six years of my photographic career, I shot nothing but black and white film. Not only did I shoot it, but I processed it, and printed the negatives as well.

In the beginning, black and white photography was everything to me. I would spend hours and hours working on a print in the darkroom trying to get it just right.

What did I consider just right? Well, it might vary based on the subject matter and the treatment. However, in general, I was looking for a full range of tone from a deep black (that still retained detail) to a vibrant bright white (that still retained detail), as well as all the tones in between.

That was difficult to achieve then, and it is still difficult to achieve now.

One thing that I've noticed due to the influence of digital photography, is that many photographers don't have a grasp of some basic photographic skills.

One of those skills would be **how to identify a good color candidate for conversion to monochrome and how to create a full-tonal range monochrome image from that candidate**. That knowledge, or skill, is further complicated by the fact that there are SO MANY WAYS to convert a color digital file to a monochrome image.



01

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## ABOUT THIS GUIDE

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When you complete this Premium Guide, you should be able to do the following:

- Demonstrate an understanding between a black and white versus a monochrome toned photograph
- Demonstrate an understanding of tone value, including a basic knowledge of the Zone System as well as where a tone value might fall within a photograph
- Demonstrate an understanding of the histogram, the values within a histogram, how those values compare to the Zone System, and how all of that affects the conversion of a color file to a black and white monochrome photograph
- Increase your skill at identifying tone range within a color file and creating a plan to capture the appropriate tone range for the conversion to a black and white photograph
- Measurably increase your skills in converting a color file to a black and white photograph using Photoshop, Lightroom, or Photoshop Elements software.

There are also a number of Self-Check Quizzes throughout the guide to help you check your understanding and comprehension. There is no answer key. All of the answers are in the text. If you're unsure how to answer a question, go back and review that section.

Images will also be available to complete practices and section assignments as well as 4 Final assignments.

Photograph by Mathew Hunt





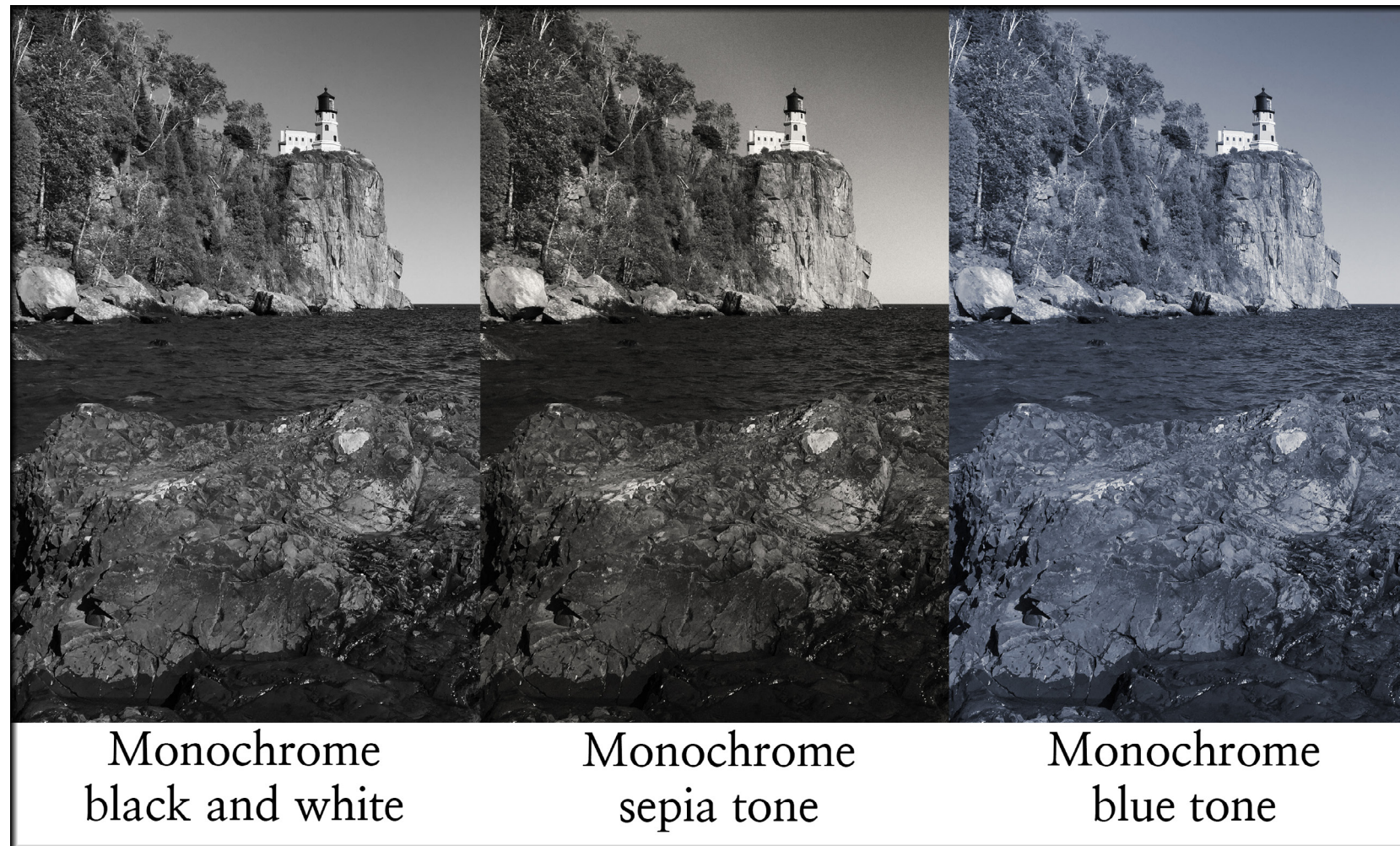
Photograph by Kent Dufault



**I need to clear something up right here at the beginning of this guide.**

All black and white photographs are monochrome. However, not all monochrome images are black and white!

Confusing, huh?



Photograph by Kent Dufault – Reference 001

mon·o·chrome

'mänə ,krōm/

1. A photograph or picture developed or executed in black and white or in varying tones of only one color.

The last part of that definition is what is truly important: A picture developed, or executed, in black and white OR in **varying tones of only one color**.

I know it might seem a bit anal to push that point. However, it's important for you to understand the difference. If you're going to submit an image to a prestigious black and white photography competition, you better not be sending them a sepia toned print!

**For those that don't know the difference, check this out...**

All three examples here are monochrome.





Photograph by Kent Dufault

**Only** the image on the far left is a true black and white photograph. The center image is a “sepia toned” monochrome photograph. The image on the right is a “blue toned” monochrome photograph. Back in the old days, photographers used “toning” to apply mood to a monochrome black and white photograph. The toning process chemically changed a “true black and white photograph” into a “toned monochrome photograph.” For example, the sepia tone might imply a warm sunset, or autumn. The blue tone might imply an impending storm, or a cold day. The point is, the photographic print was forever altered—it was no longer a “black and white photograph.”

Today, we can go back and forth changing the tone of our images all day long without altering the original. However, those terms still apply within the photographic industry.



02

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## THE ZONE SYSTEM

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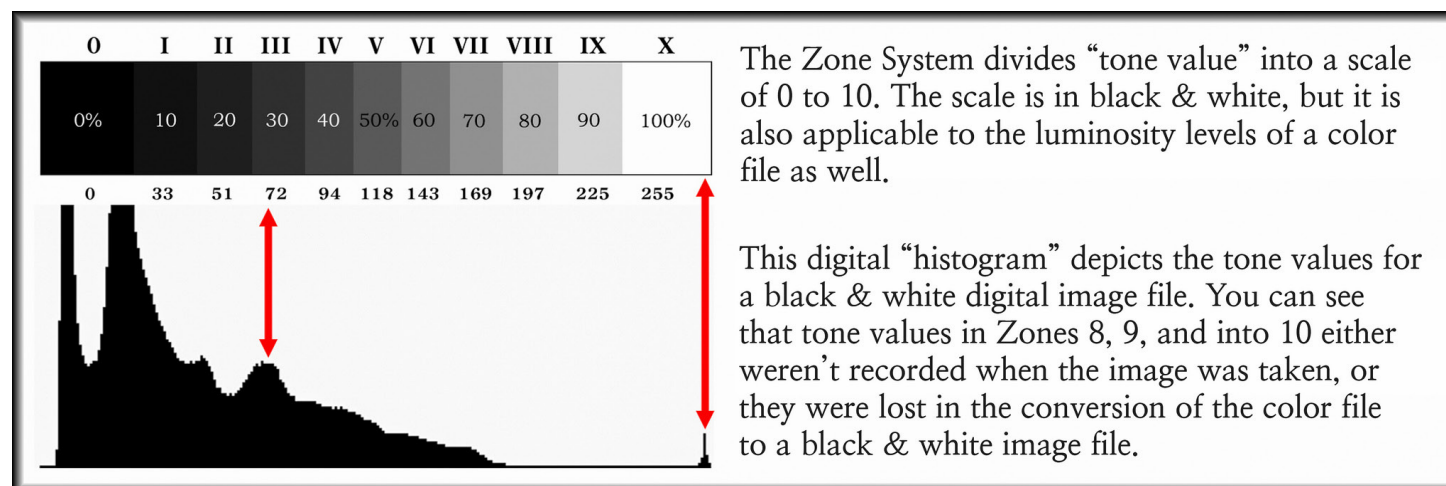


Illustration by Kent DuFault – Reference 002

The Zone System divides “tone value” into a scale of 0 to 10. The scale is in black & white, but it is also applicable to the luminosity levels of a color file as well.

This digital “histogram” depicts the tone values for a black & white digital image file. You can see that tone values in Zones 8, 9, and into 10 either weren’t recorded when the image was taken, or they were lost in the conversion of the color file to a black & white image file.



**KEY LESSON:** “Shadows” are the dark areas in your landscape photograph. “Highlights” are the bright areas in your landscape photograph. “Mid-tone values” are all the levels of tone that fall in between. For example, in a black and white photograph the mid-tone levels are different shades of gray. In a blue-toned monochrome photograph those mid-tone levels would be varying shades of blue. Capiche?

Most of you have probably heard this landscape photographer’s name: Ansel Adams.

He is perhaps one of the most famous landscape photographers in the history of photography.

His images are awesome. But, do you know what really brought him notoriety? He was very concerned about capturing the widest possible dynamic range (detail from shadow to highlight, or, black to white) with his camera and film. He was obsessed with it really. He developed what became known as “The Zone System.” This system was one of the reasons that his images were superior to his competitors at that time.

The Zone System is still important today, but for different reasons than when Ansel Adams created it.

In Ansel Adams’ day, the Zone System was applied through careful metering and exposure, followed by predetermined processing standards for both the film and ultimately the black and white photographic print.

In other words, it was quite complicated, but it is one of the reasons why his landscape photography is so breathtaking. His images retain a range of tone that few other photographers have ever achieved.

By understanding the Zone System (at least a little bit), it will help you to acquire the best tone values that you can as you convert your color image files to a black and white or monochrome photograph.



Since just about everybody in today's world is a 'digital photographer', you are more likely to be familiar with the histogram than the Zone System.

Thus, I created this 'comparison' illustration (Reference 002) so that you can visually see how a histogram would compare to the Zone System chart.

You can see that the Zone System divided "tone" into ten steps, or levels, of black to white. Zone 0 (or 0 on a histogram) represents absolute black, and Zone X (or 255 on a histogram) represents pure white.

Reference 002 shows that the histogram for the photograph (used in the demonstration) did not have a full range of tone. The histogram represents that the demonstration photograph is missing most of the brighter mid-tone to highlight values (between 70% and 100% on the Zone System chart).



**KEY LESSON:** With digital photography, tone brightness value can be lost in one, or both, of these two stages in the creation process of your photographs. The first stage occurs at the metering and exposure of the original file. The second stage occurs in the post-production file preparation and conversion process. In this guide, we will only be discussing the second stage.

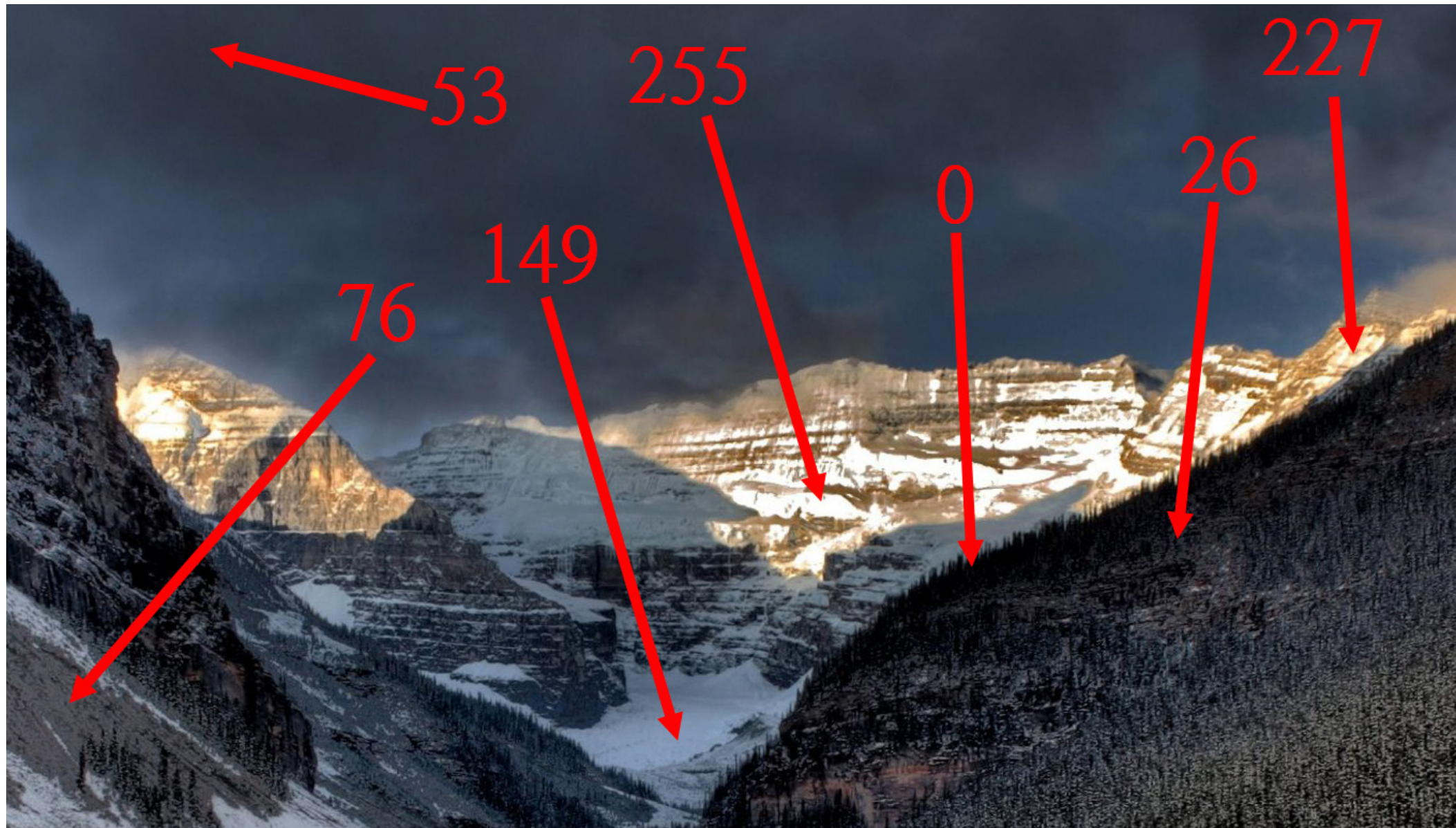


**Recommended Reading:** [Click this link to read Kent DuFault's blog post on Lightstalking.com regarding proper metering for a landscape photograph.](#)

Now that you have some background on the Zone System and how the Zone System compares to the histogram that you see on the LCD panel of your camera (as well as in your post-processing software), let's put this information into a real-world perspective for you, the photographer.

Zone	Zone System Examples – Tone Range in Landscape Photography
0	Pure Black – The deepest shadows with no detail. 0 on a histogram
I	Near Black – Deep shadows, texture, very minor detail. 8 – 15 on a histogram
II	Textured Black – Shadows with defined details. 16 – 22 on a histogram
III	Average Dark – Light shadows clearly defined details. 23 – 35 on a histogram
IV	Average Mid-tone Dark – Foliage, dark clouds. 36 – 80 on a histogram
V	Mid-tone Grey – North sky, 18% Grey. 127 on a histogram
VI	Average Mid-tone Light – Grass in full Sun. 130 – 150 on a histogram
VII	Average Light – Snow in shadows, side lighting. 155 – 200 on a histogram
VIII	Textured White – Highlights with defined details. 201 – 230 on a histogram
IX	Near White – Brightest highlights with texture. 235 – 250 on a histogram
X	Pure White – Specular highlights with no detail. 255 on a histogram

Illustration by Kent DuFault – Reference 003



Photograph by Andrew E. Larsen and Illustration by Kent DuFault – Image 004

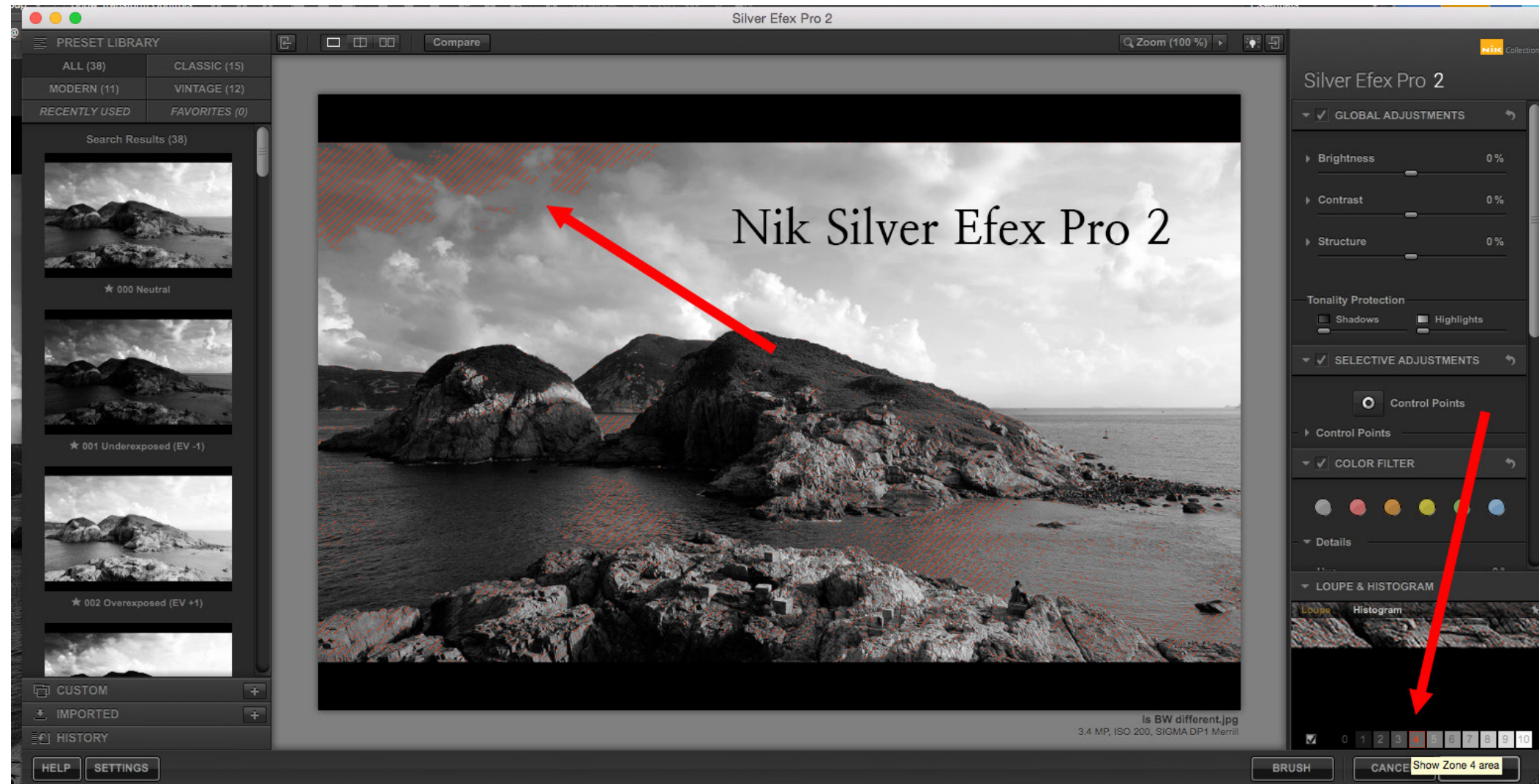
Reference 003 should provide you with a basic understanding of where tone values will fall on a histogram and on the Zone System chart. This is simply a reference to assist you in developing an “eye” for evaluating tone.

Image 004 gives you some perspective as to where some of those numbers might fall in a real-world landscape photograph situation.

But consider this; Image 004 is a color file. Is your knowledge of brightness values enough to create a superb black and white photograph? No. You also have to consider the color values.

Now that’s probably a little confusing. Right? Don’t worry about it too much. I will explain that aspect to you thoroughly in the **Conversion Process** section of this guide.



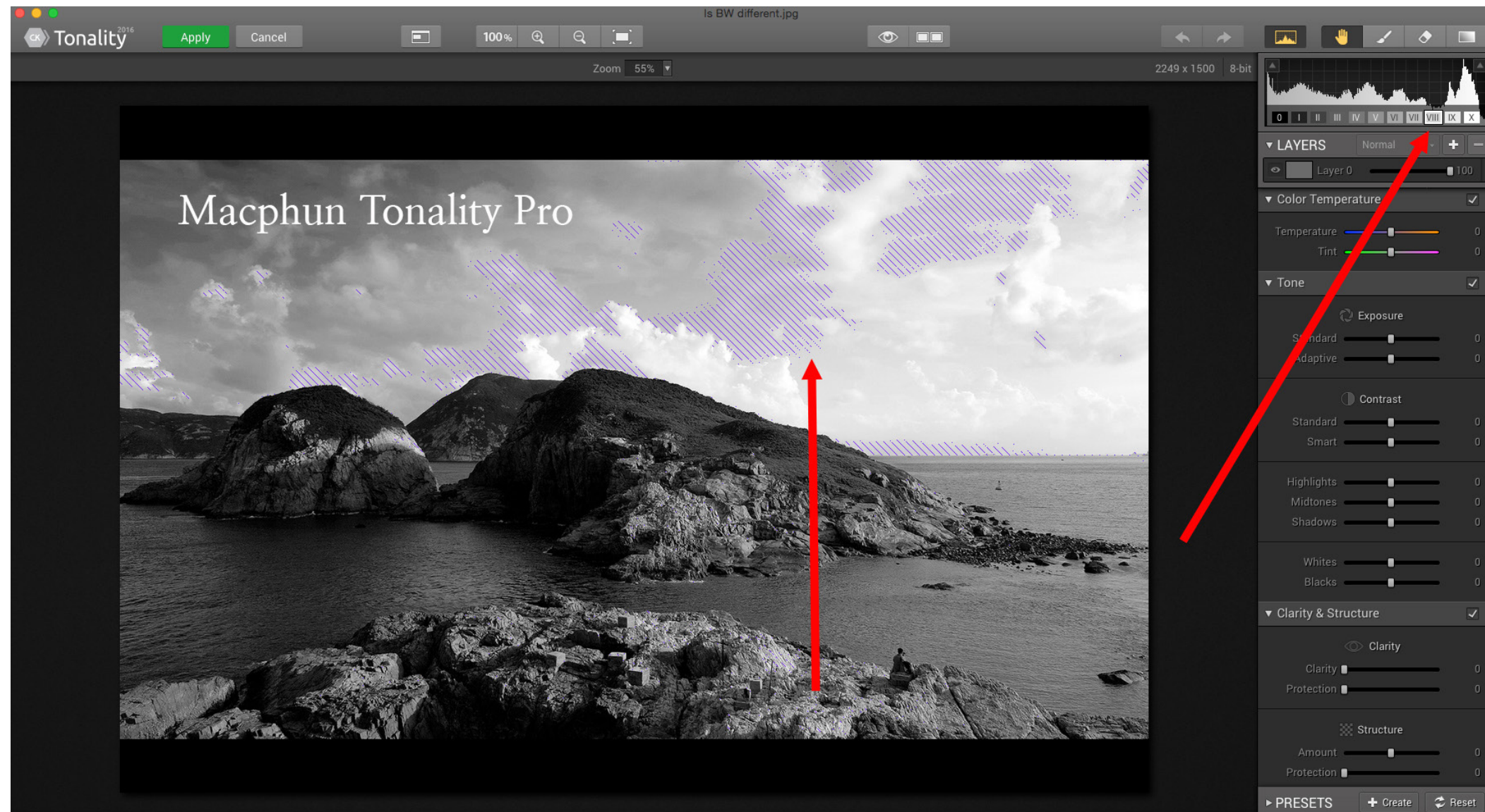


Photograph by iKobe! and Illustration by Kent DuFault – Reference 005a

## Something You Might Consider

I'm going to limit the tutorial portion of this guide to the previously mentioned Adobe products, my feeling being that I don't want you to have to buy something additional to get your value from this guide.

However, I am going to briefly mention two software products that offer a distinct advantage when it comes to converting your color files to a black and white photograph. The advantage is that they show you where the tone values within your photograph will fall on the Zone System scale. **That's pretty sweet.** It literally guarantees full disclosure as to where all of the image tone values will lie.



Photograph by iKobe! and Illustration by Kent DuFault – Reference 005b

The first software package is a plugin for any of the Adobe products mentioned at the beginning of the guide. It works on a PC platform as well as the Apple Mac platform. (Personal Secret – it's my favorite method of conversion.) If you look at the far right red arrow, you will see the Zone System scale. By passing your cursor over each zone, the tone value becomes highlighted in the preview image (see the other red arrow). This is very cool

because it allows you to accurately manipulate the tone values before you do the conversion!

 **Recommended Software:** [You can check out Nik Silver Efex Pro 2 here.](#)



Macphun Software's Tonality Pro is also an excellent choice. It gives you the same Zone System evaluation tools as Silver Efex Pro 2. Here are several important points about Tonality Pro. It only works on Apple Mac computers. It also operates as a **standalone app**. So, if you're interested in doing better conversions of your image files to black and white, and you don't own any of the Adobe products, you can purchase this app and still get the work done to professional standards!

 **Recommended Software:** [You can check out Macphun's Tonality Pro here.](#)

### **Self-Check Quiz**

1. Are all black and white photographs monochrome?
2. In digital photography, does a toned monochrome photograph have to be permanent?
3. How many scales (levels) are there in the Zone System?
4. Which Zone System scale (level) is the equivalent of 18% gray?
5. What are the two stages that can affect the brightness (tone value) of your final black and white photograph?
6. Is there visible detail at 255 on a histogram scale?
7. Name either a software plugin or an app that will display the Zone System scale during the conversion process of a color file into a black and white photograph?

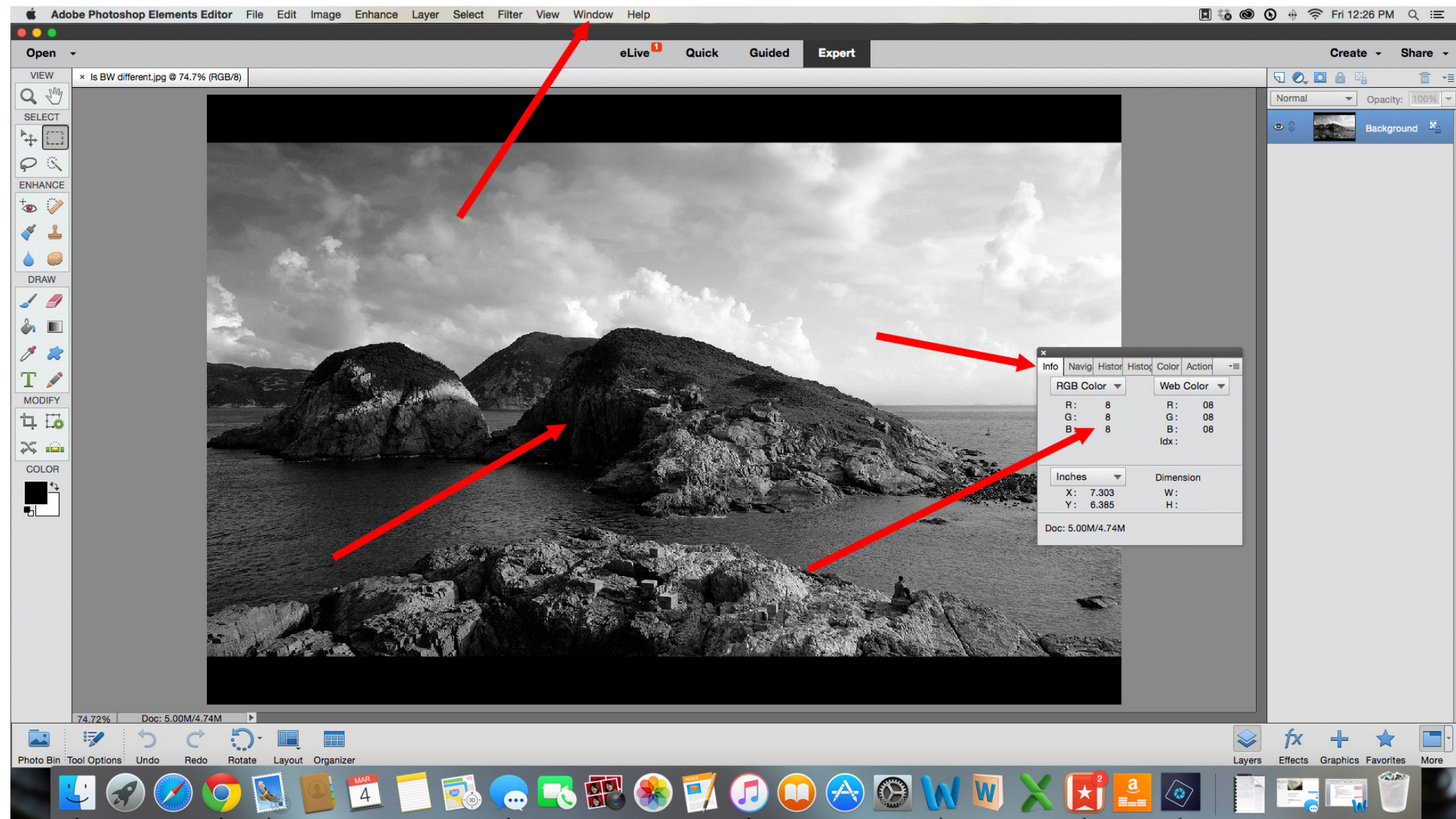


### **Assignment**

1. I want you to select one of your existing black and white photographs.
2. Using your particular Adobe product—Elements, Lightroom, or Photoshop—open your image.
3. Print your image on plain paper.
4. Set up your "Info" palette and using your cursor, check out the various tones (brightness values) in your image. As you do this, write down the numbers on your print. If you don't know how to set up your "Info" palette, see the next section (Setting up the Assignment).

While completing this assignment, you're looking to accomplish two things: train your mind to identify tone scale with the approximate histogram number (for example, what level of gray is the number 150), and secondly, find out how well you did in establishing a full range of tone. Once you're finished, practice some more by choosing other black and white photos if you feel motivated.

## Setting Up the Assignment



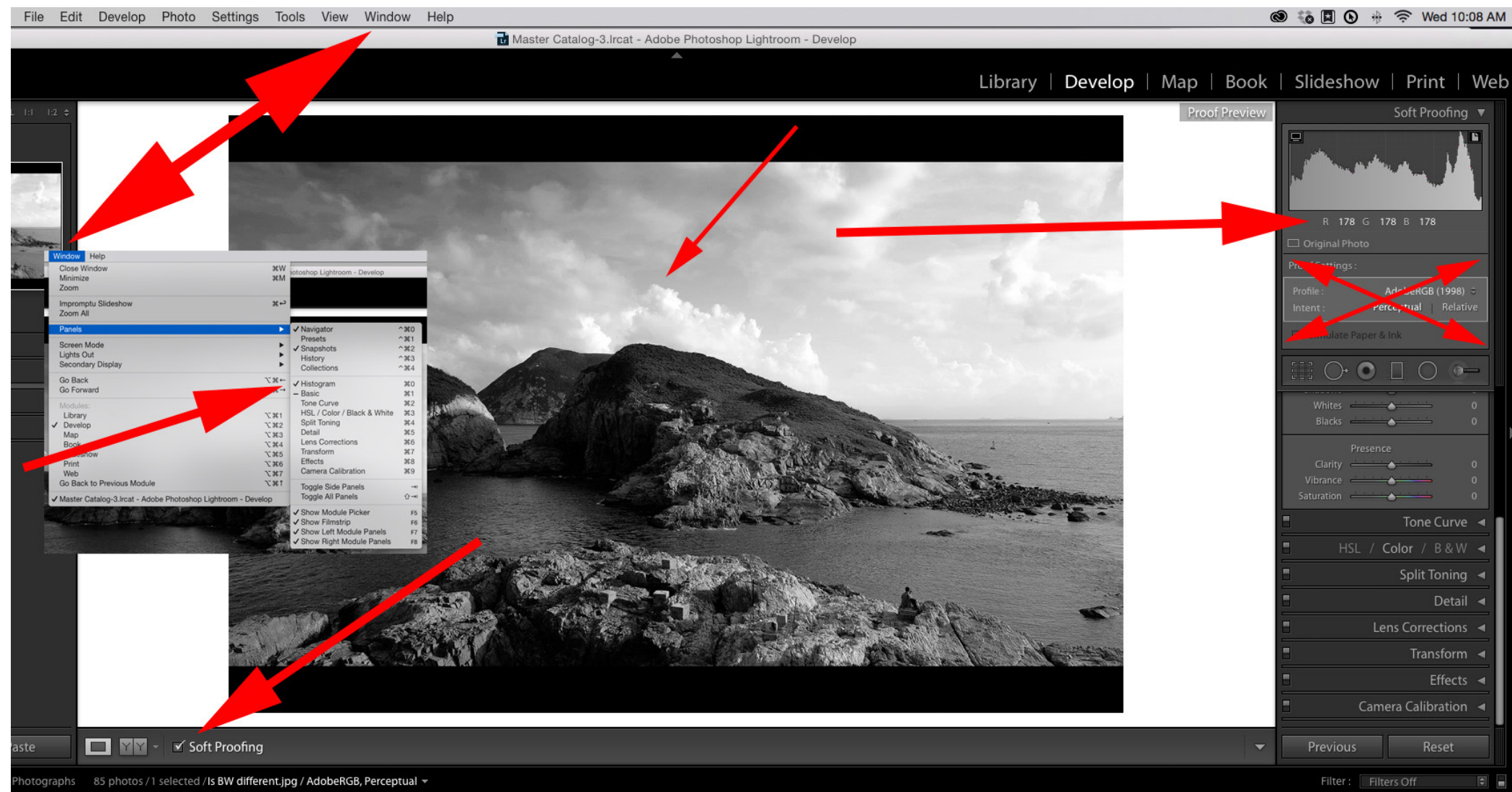
Photograph by iKobe and Illustration by Kent DuFault – Reference 006

### ELEMENTS

In Adobe Elements, open your "Window" drop-down menu and click on "Info." This will open the "Info" palette. As you move your cursor across the image, you will see the three numbers under RGB change. These numbers represent the brightness

level on the histogram scale. Now, because your photograph is black and white, the three numbers will be equal. In Reference 006, I placed my cursor in the deep shadowed area of the rock and a histogram scale of "8" came up. This would be the "Near Black" scale we learned earlier.



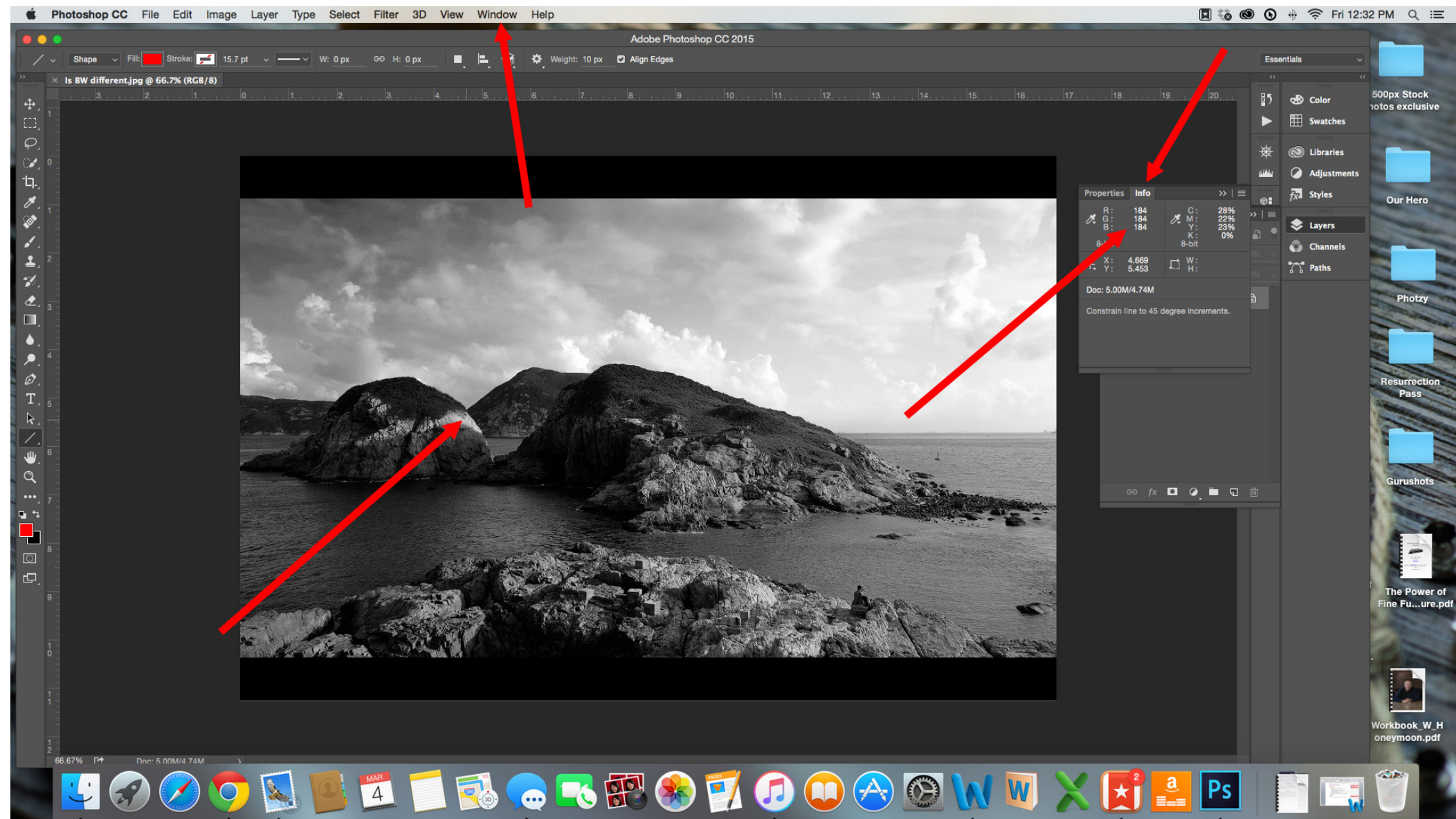


Photograph by iKobe! and Illustration by Kent DuFault – Reference 007

## LIGHTROOM

In Lightroom, you want to open your image in the Develop Module. Open the "Window" drop-down menu. Click "Panels." Make sure that "Histogram" is checked. You should then see the histogram in the upper right corner. Check "Soft Proofing" in the lower left. The histogram numbers are displayed in the RGB display below the histogram scale. (Don't worry about

proof settings) Once again, the three numbers displayed will be equal because you're looking at a black and white image. For this example, I hovered my cursor over the sky just above the pinnacle of a cloud and got a histogram reading of 178. This would put that tone in the mid-high end of the gray scale or Zone 7 on the Zone System scale.



Photograph by iKobe! and Illustration by Kent DuFault – Reference 008

## PHOTOSHOP

With Photoshop, simply make sure that your “Info” palette is open. You can find it under the “Window” menu if it isn’t already open. For this example, I hovered my cursor over a sunlit portion of the rock and it read 184 on the info palette readout (which is the reference point on the histogram scale). That would place that area in Zone 7.



03

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**EVALUATING A COLOR SCENE FOR TONE IS  
A VALUABLE SKILL**

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Everything that we have talked about so far has to do with the “brightness level” of the various components of your photograph.

But, consider this. Not all scenes are going to look good when converted to black and white, no matter how careful you are in your conversion process.

Back in the days when I shot black and white film, we used to have to make this determination before we took the photograph, because the color to black and white conversion was done right there in the camera on the film!


 **KEY LESSON:** Most cameras (if not all of them these days) allow the user to set the camera to a black and white function within the camera. I don’t recommend doing that. In fact, I’ll go so far as to say that I strongly discourage it. Why do I say this? Because the camera is simply doing an automated version of what you are going to learn in this guide. But, the camera can’t evaluate the scene. It is simply going to desaturate the file of color information. I know that some cameras allow you to “filter” certain colors blah, blah, blah, but it’s still an automated process. Beyond that, if you create the original in color, then you also have a color file to work with. For your best original file, you should always set your camera to shoot a raw file, at the maximum resolution, and in color. Remember, it’s always easier to go downhill than it is uphill!



Illustration by Kent DuFault – Reference 009

This is my version of a photography color blindness test. Let’s imagine that your landscape scene has green grass similar to our left panel in Reference 009. It also includes some water and a very dark blue sky because a storm is brewing. And all around the image we have red foliage because it’s an autumn day.

Now, we’re thinking, “You know what? This would be an awesome black and white photograph.”

Let’s see what that would look like.



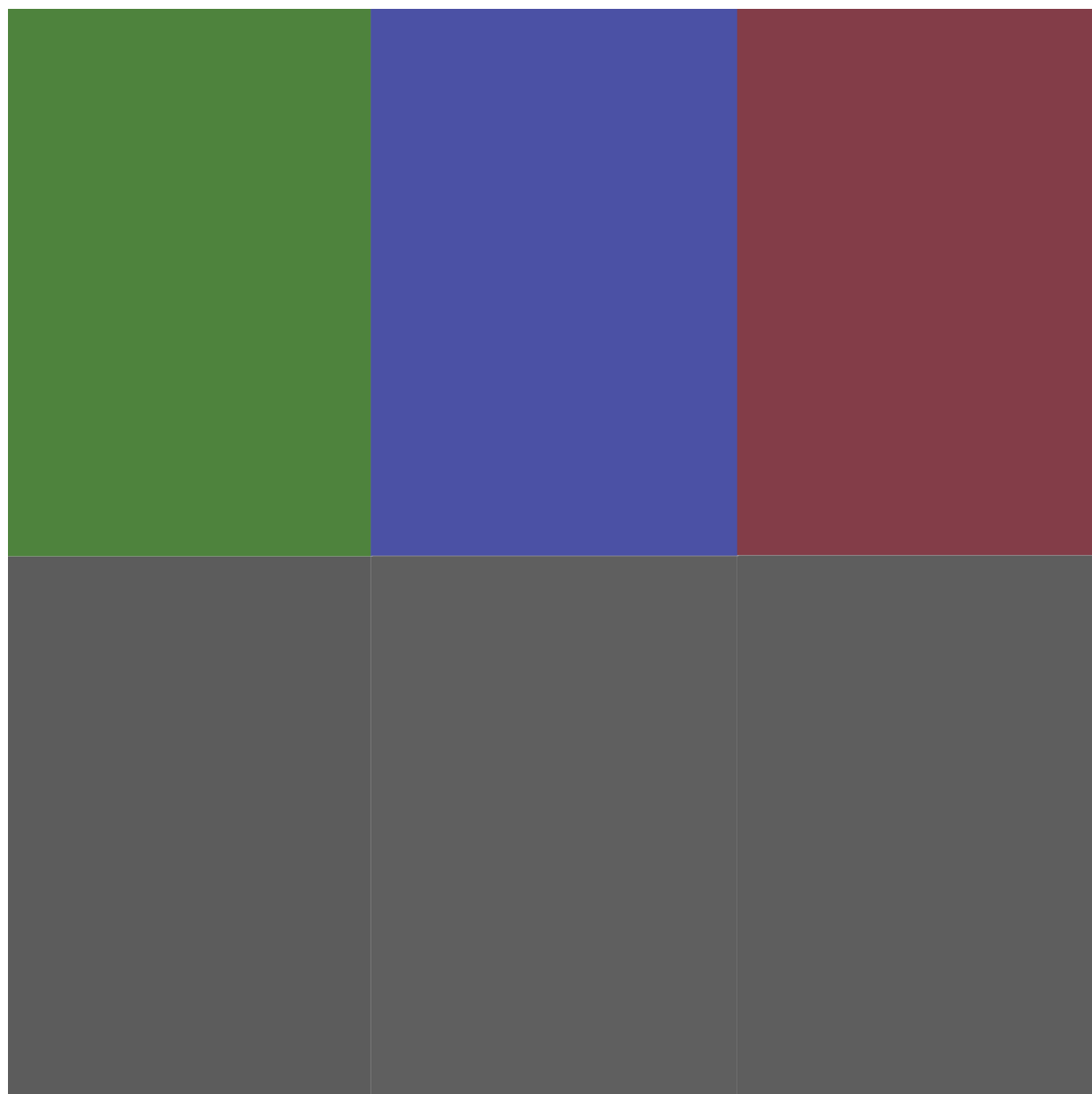


Illustration by Kent DuFault - Reference 010

I converted the three color panels into black and white using a standard conversion process, and look at that... they look almost the same!

Earlier, I talked about the old days of shooting black and white film. With that medium, you had to do this color conversion process in your head, because there was no preview. The film was going to “create” the conversion immediately.

When I first started with black and white photography, I carried a monochrome (or sometimes referred to as a “black and white”) viewing filter with me. You may want to consider buying one of these if you’re serious about your black and white photography. A monochrome viewing glass (again, sometimes referred to as a black and white filter) turns a scene into shades of gray when you look through it. It eliminates the color values so that you can see where different colors will turn into similar shades of gray (as we saw in Reference 010). Thus avoiding a flat lifeless-looking black and white photograph.





Photograph by Kent DuFault – Image 011

There are many of shades of green in the left photograph in Image 011. There are also many red tones. What happened in the conversion process? The entire image went flat in contrast and tone. It's not much to look at, is it? It is certainly not as pretty and compelling as the color version.

Even though you're shooting digital, a monochrome viewing glass will help you develop the skill to pre-visualize how your scene is going to convert to black and white. You won't end up with a flat, lifeless black and white photograph like Image 011.

They aren't very expensive, if you're interested.

 **Recommended Gear:** This is the one that I like - [Tiffen Black & White Viewing Filter](#)

So, what is a photographer supposed to do? You're never going to find a scene where there aren't colors that will convert to a similar shade of grey.



Don't fret. Sometimes it won't matter. It depends on how the scene is laid out in front of your camera. It also depends on the lighting (brightness scale). When we get into the conversion process, I'll show you some ways to tweak the conversion of the different colors so that your image won't look flat in contrast.

Also, once you've gained this knowledge, you'll come to realize that not all images will look good in black and white or in a toned monochrome image. It's just the truth.

Having this knowledge will elevate your eye to picking out good scenes for black and white photography.

Each step in this guide will help elevate your skill level.

### **Self-Check Quiz**

1. What is the advantage of shooting a raw file vs. a .jpeg file?
2. What is the disadvantage of using the automated black and white setting within your camera?
3. What does a monochrome viewing glass do?
4. Will green, blue, and red always convert to the same shade of gray?
5. Can any landscape photograph be converted to black and white and look awesome?



### **Assignment**

In this assignment, you will be selecting four color photographs from your files.

1. Using the knowledge that you've gained so far, select two photos from your files that you believe will convert to black and white effectively.
2. Then select two photos that you believe **WILL NOT** convert to black and white effectively.

Don't cheat and check them out. Simply put them into a folder for us to use later in the guide.

04

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## TAKING CONTROL OF TONE

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Soon, I'm going to walk you through doing a conversion from a color file to a black and white photograph using each of the Adobe products listed at the beginning of the guide.

I would suggest that you **follow along through all three descriptions**, even if you only use one of the products.

I say that because I'm only human. I may leave a tip in one section that I'll forget to mention again in the next section.

You'll discover something as you study the rest of this guide.

It's not that complicated!

Seriously, you can get superb results without turning it into a chore. I say this because yesterday, I watched a 12-minute video on YouTube where a photographer gave his workflow for converting a color file to a black and white photograph.

IT TOOK A 12-MINUTE VIDEO TO EXPLAIN HIS PROCESS!

In the end, I looked at his results and I knew in my heart that you or I could have achieved the same results in two minutes or less.

That being said, read the following line carefully...

**Seriously, you can convert a color image file to a black and white photograph in seconds. Perhaps it will look just fine, and perhaps it will stink.**

Much of what you've already read in this guide is the important stuff. **That's the knowledge that you need to evaluate how your conversion is looking.**

We won't be looking at any presets or actions. I personally feel that a preset or action for a black and white (or toned monochrome) conversion process is ridiculous. There is no way that they can provide good results. They can't evaluate the scene like your eyes and your brain.

After I've taken you through the conversion process with all three Adobe products, we will end the guide by working with several images that we can convert together.

I'll provide you with links where you can download the images. It'll be a little competition... you'll see.

**What should you look for when selecting a color file for conversion to a black and white photograph?**

We have already discussed the attributes of monochrome tone, and the concerns of similar colors converting to a similar shade of gray (or a monotone color).

There are two attributes of a color image file that **"generally"** lend that image to be an excellent candidate for conversion to a black and white photograph.



Left Photograph by fortherock and Right Photograph by Kent DuFault – Image 012

Those two attributes are:

1. Directional lighting with plenty of highlights and shadows
2. Plenty of surface texture

Please note that I said “generally,” because as in all things photographic, nothing is an absolute.

You may have a low contrast foggy scene with almost no visible texture and it will still make a dynamite black and white photograph.

However, if you’re just starting out learning about black and white photography, and I’m assuming that you are because you bought this guide, directional lighting with plenty of highlights

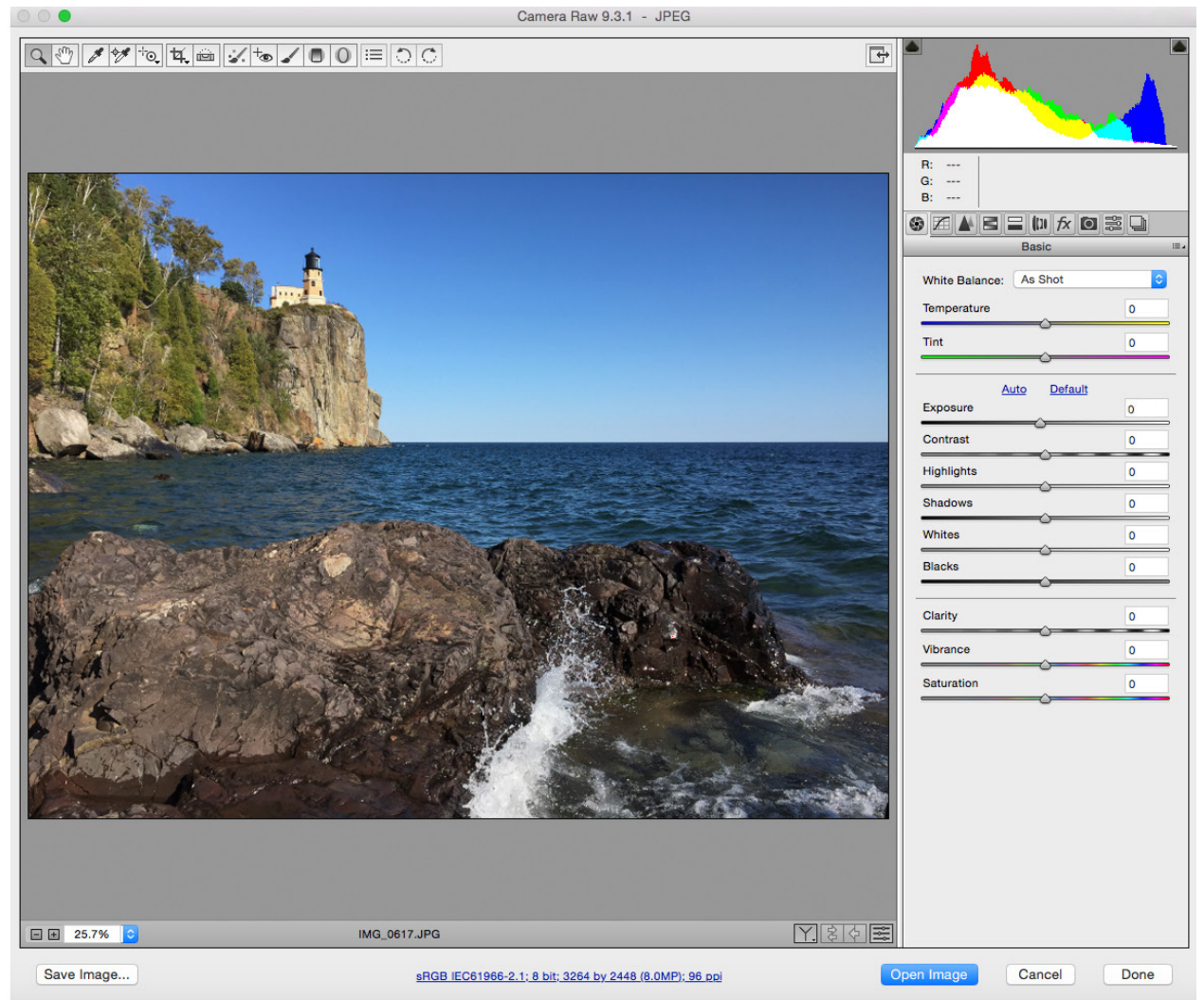
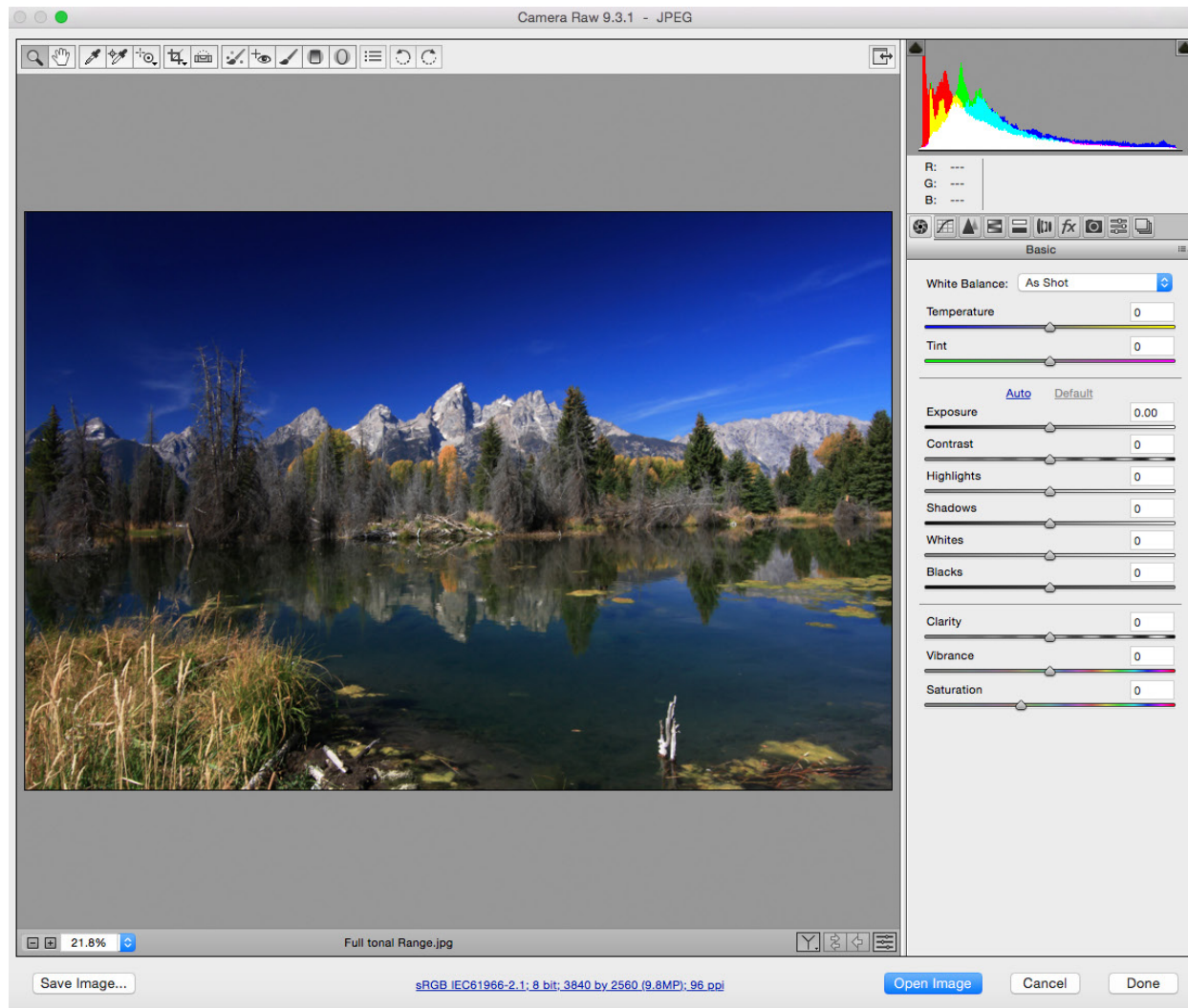
and shadows, as well as an abundance of surface texture, will yield better results more often than not. Once you’ve mastered that, then you’ll feel comfortable about diving into more complicated conversion projects.

Let’s evaluate these two landscape photographs for possible conversion to a black and white photograph. The two examples are very similar in the overall color scheme and lighting.



**Quick Activity:** Before I give you my thoughts, I want you to write down your thoughts on a piece of paper. Using all of the knowledge you’ve gained so far, which image would convert better to a black and white photograph and why?





Left Photograph by fortherock and Right Photograph by Kent DuFault - Image 013


**Let's evaluate both images for the two attributes of lighting and contrast.**

I think they both qualify as a potentially good candidate. Don't you? They both have directional lighting with highlights and shadows. They both have plenty of texture.

Now, despite their similar color scheme, one of these two color files is going to be more difficult to convert than the other one. Which one do you think it is?

**KEY LESSON:** The histogram is one of the most valuable photographic tools that you can master when it comes to metering, exposure, and post-production. Let's compare the histogram for these two color image files.

Now I want you to put that Zone System chart into your mind. What does the histogram for the left photograph tell us? It has almost no brightness values from the mid-tone 127 up to 255, also referred to as Zones V – X.



Brightness values that are spread more evenly in the histogram will usually make an easier conversion to a black and white photograph

Now, look at the histogram for the image on the right. The histogram for that image tells us that the brightness values are spread more evenly, and they are more prevalent throughout the entire image.

Tell me, which image will make an easier (and perhaps better) conversion to a black and white photograph?

That's right. The image on the right!

**Now, this is really important!** Does this mean that the image on the left can't make a decent conversion to a black and white landscape photograph? No, of course not. What it does mean is that it will be more difficult to achieve an "excellent" black and white photograph from that file.

Everything that you have learned up to this point, and the next section, which we are about to discuss, will make you a better photographer, a better post-production editor, and a budding expert in monochrome conversion. When we actually walk through the steps of doing a conversion, you'll notice that all three Adobe products work almost the same way. The information that I'm about to give you **is infinitely important to your success as a budding expert in monochrome conversion.** Here it is.





Illustration by Kent DuFault – Reference 014

Remember our color bar from earlier? We are looking at it again after a “Default Black and White Conversion”. We are looking at it in Photoshop, but ignore that for the moment. The important information in Reference 014 is the six sliders on the right: Reds, Yellows, Greens, Cyans, Blues, and Magentas. Every black and white conversion process (other than the super automated ones that I want you to avoid) will have some method of adjusting

colors. Simpler, automated methods may have “filters” that you can apply: a “red” filter, a “blue” filter, a “yellow” filter, etc. The more advanced methods, such as what I’m showing you in Reference 014, will offer multiple color sliders that offer critical adjustment of tone.

Let me illustrate:



Illustration by Kent DuFault - Reference 015

Look at the red slider. I have moved it all the way to 300. Look at the red box of the color bar. It's almost white with little to no effect on the other two colors.





Illustration by Kent DuFault - Reference 016

Look at the red slider. I have now moved it all the way to -200. Look at the red box of the color bar. It's almost complete black with little to no effect on the other two colors.

Look at all of the sliders. I have moved them around until I achieved a separation of tone (that I was satisfied with) between all three colors in the color bar.

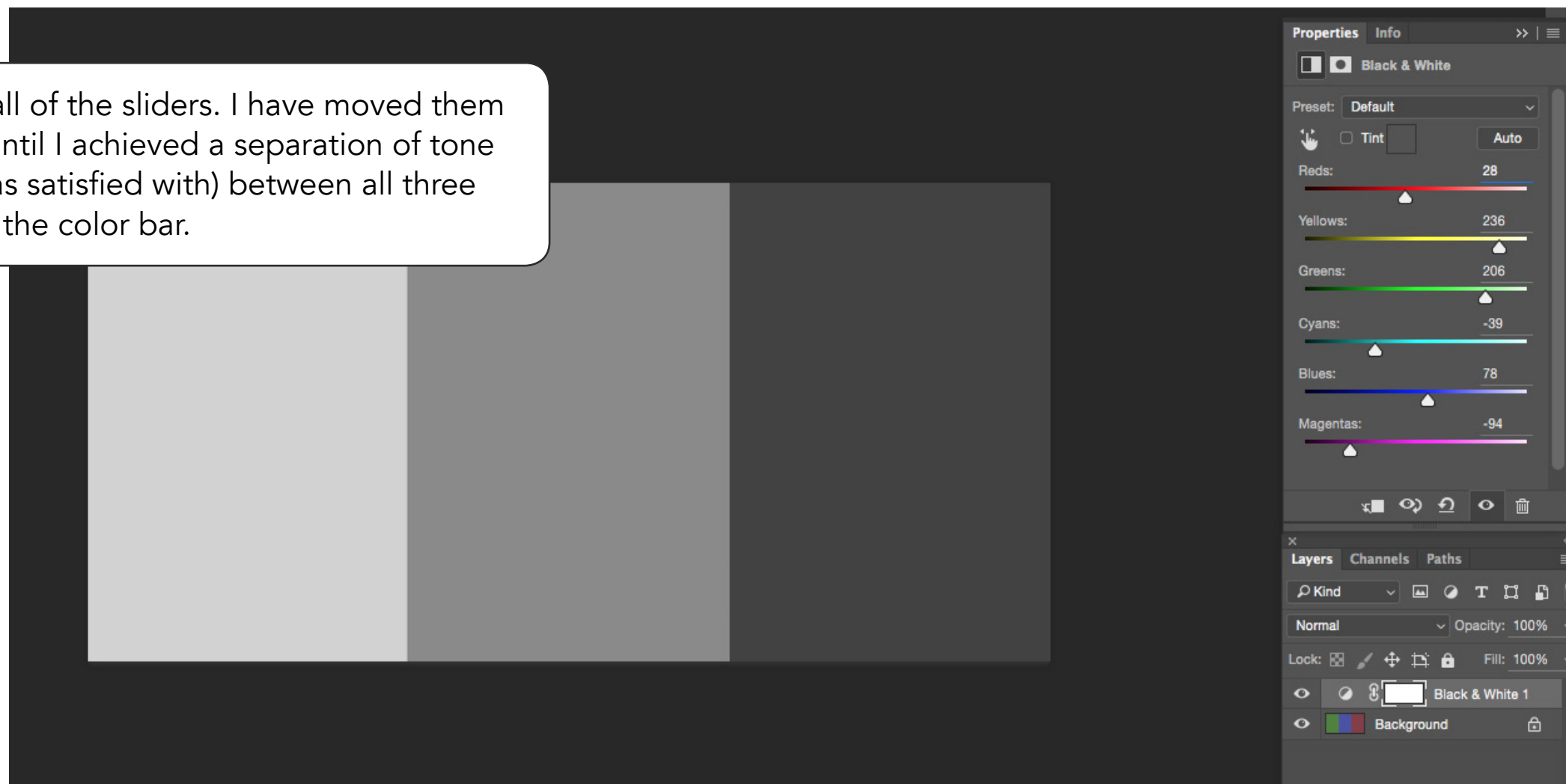


Illustration by Kent DuFault - Reference 017

**THIS IS THE SECRET SAUCE FOLKS!** Adjusting the color sliders allows you almost infinite control in separating the gray tone values as they convert from a color file! But you need to be aware of one thing. A full tone scene will have infinite colors. Many of those colors will reside near each other on the color wheel. For example, let's say you've adjusted the "Yellows" to your satisfaction in one part of your image and then you decide that you want to adjust the tone of a different part of your picture. It also contains "Yellows." The second adjustment may alter your first adjustment!

When you're first developing your skills as a black and white conversion expert, always consider the two colors on either side of the one you're adjusting. For example (as stated above), we adjusted the Yellows. Then we wanted to try and adjust a second area of Yellows without affecting our first adjustment. Look to the Reds and the Greens (the two adjacent colors to the Yellows) by changing one of those colors; you may get the change of tone you're looking for without affecting your previous Yellows setting. When you become more advanced, you'll begin working with "Masks." That will be another guide down the road.



So, what happens if you simply apply a “color filter” in the simpler, more automated conversion process?

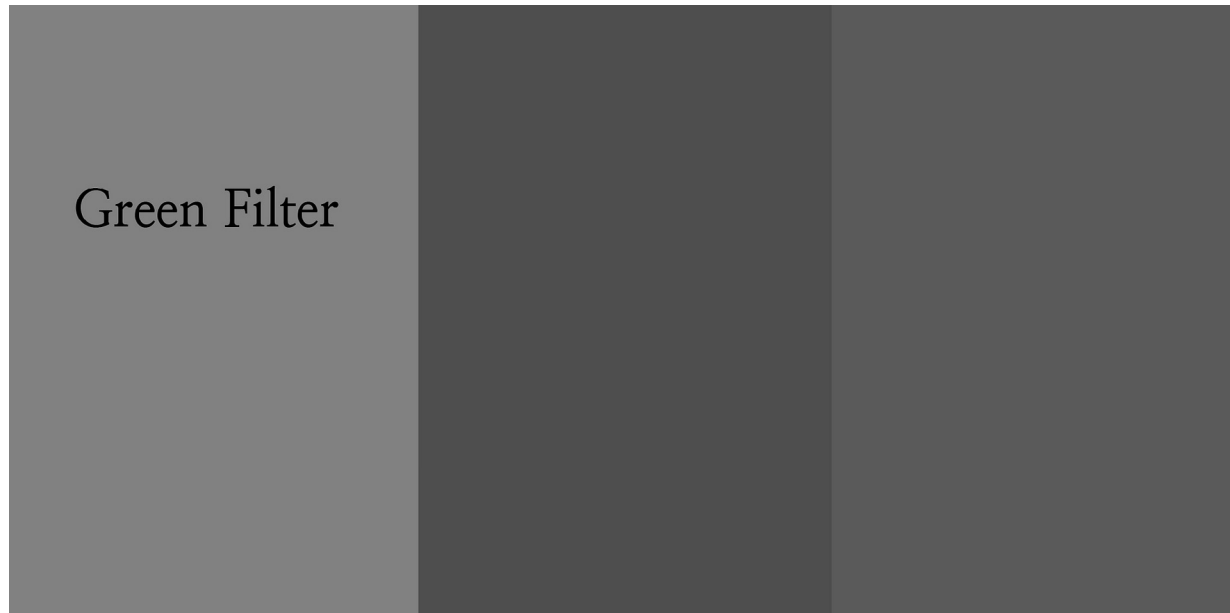


Illustration by Kent DuFault - Reference 018

A preset filter application will affect all colors to some degree. It has less control. Glass colored filters were often used by black and white film photographers (on the lens) to help create contrast. For example, a green filter would lighten the grass and darken the sky.

When converting to black and white in any of the Adobe products, I **highly recommend** that you eschew the more automated methods and give yourself full control.

### **Recommended Reading:**

- [Short Guide to Landscape Photography](#)
- [The Complete Landscape Photography Guide](#)

### **Self-Check Quiz**

1. Name two attributes to look for in a color image file that would indicate a good possibility for conversion to a black and white photograph.
2. How does the histogram help you evaluate whether a color image file will convert well to a black and white photograph?
3. When converting a color image file to a black and white photograph, do the default settings usually yield excellent results?
4. What will happen to the red colors in your color image file when converting to a black and white photograph if you move the red slider to -200?
5. What will happen to the blue sky in your color image file when converting to a black and white photograph if you apply a green filter?



## Assignment

Go back to your four landscape images (that you selected in the previous assignment). You should have two that you felt would convert well to black and white as well as two that you felt would not convert well to black and white.

Using your new knowledge of image attributes and evaluating the histogram and color to tone conversion, reevaluate those four photographs.

If you change your mind about your initial selections, you can swap them out now. Again, you want two that you believe will make excellent conversions to black and white as well as two that you believe won't, or will be difficult to achieve excellent results.



**05**

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## **THE CONVERSION PROCESS**

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## PHOTOSHOP

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Adobe Photoshop offers numerous ways to convert a color file to a black and white monochrome image. There are so many ways, that chances are good that I'll forget to list one.

However, in my mind, I don't think that matters. I believe there is really only one good way, and that's the way that I'm going to show you.

Here are all the ways that I can think of:

- In camera raw – Basic Tab – Desaturate
- In camera raw – HSL / Grayscale Tab – Color Sliders
- In Photoshop – Image Menu – Adjust Sub-menu – Desaturate
- In Photoshop – Image Menu – Mode Sub-menu – Grayscale
- In Photoshop – Image Menu – Adjust Sub-menu – Black and White
- In Photoshop – Image Menu – Channel Mixer – Monochrome – Color Sliders
- In Photoshop – Layers Palette – Adjustment Layer – Black and White – Color Sliders

Hopefully, you're not feeling confused and bewildered. I want you to ignore everything on that list except the last bullet point.

That's the method that I'm going to show you today. Why have I chosen that method?

- ✓ It offers almost infinite control over tone adjustment.
- ✓ It is a non-destructive edit as we will be working on a separate layer.
- ✓ It is my personal preference to do this work within Photoshop versus the raw window as that way my original raw file remains untouched in the color version.





Left Photograph by fortherock and Right Photograph by Kent DuFault - Image 019

Before we start the process. Check this out...

Image 019 shows you the standard default conversion for the two photographs that we previously analyzed in Image 013. Remember? The image on the right had a broad sweeping histogram with levels almost across the entire scale. The image on the left had almost no levels at Zone V up to Zone X.

As you can see, the default conversion on the right looks pretty good just as it is. The image on the left has some areas that look good, but others are flat in contrast causing an unbalanced look to the image.





Photograph by Kent DuFault - Image 020

Here is the photograph that we will use for the Photoshop conversion.

↓ [Use this link to download the image](#)

Let's begin by opening the file and taking it into the raw processing window.



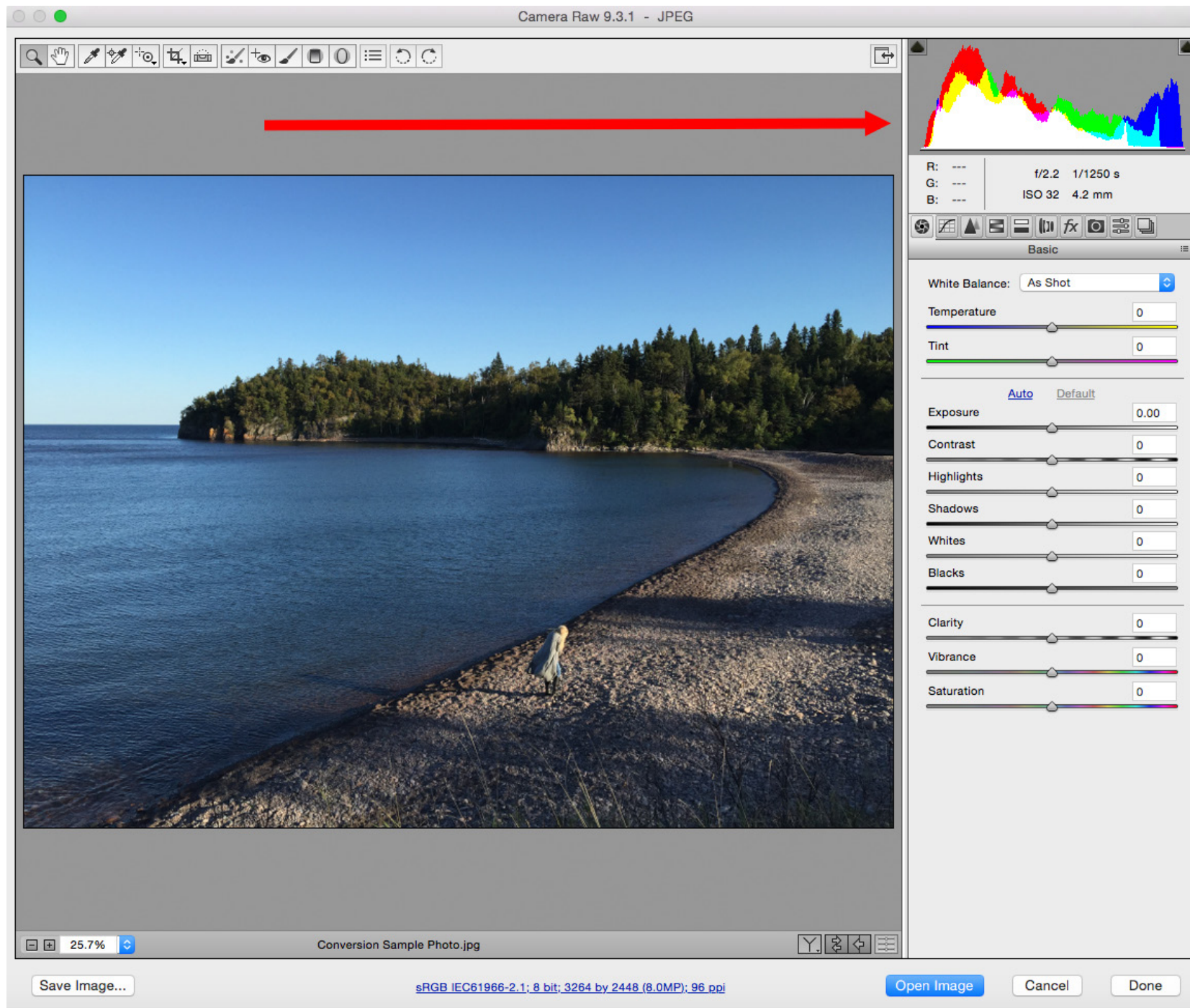


Illustration by Kent DuFault - Reference 021

Let's evaluate this color file based on the three criteria that we've already discussed.

1. Do we have directional lighting with highlights and shadows? Yes.
2. Do we have ample texture? Yes.
3. Do we have a histogram that indicates a broad, sweeping level of brightness value across all of the Zones? Yes.

Let's open the image up in Photoshop.



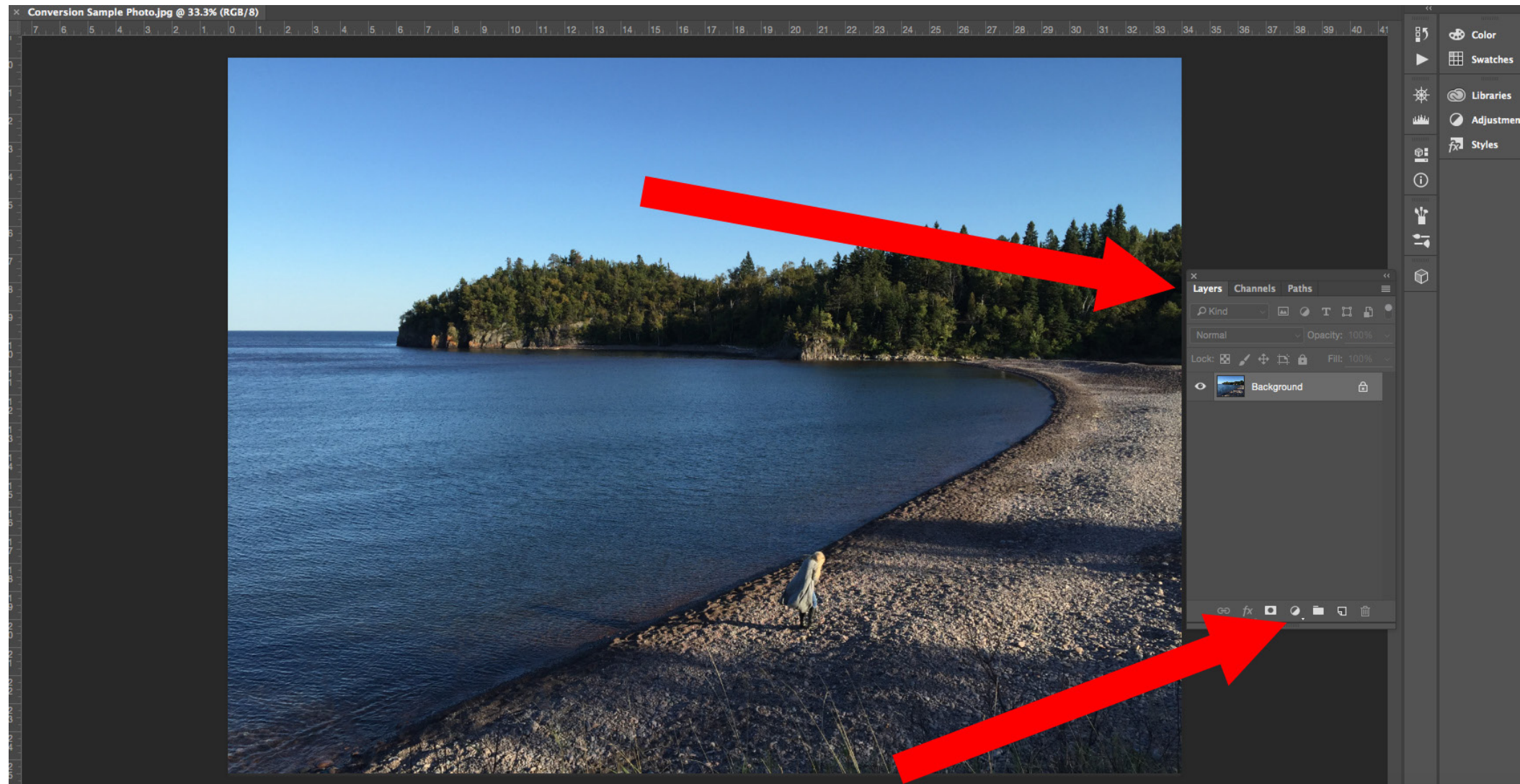


Illustration by Kent DuFault - Image 022

Open the "Layers" palette. Click on the "Adjustment Layer" icon at the bottom.



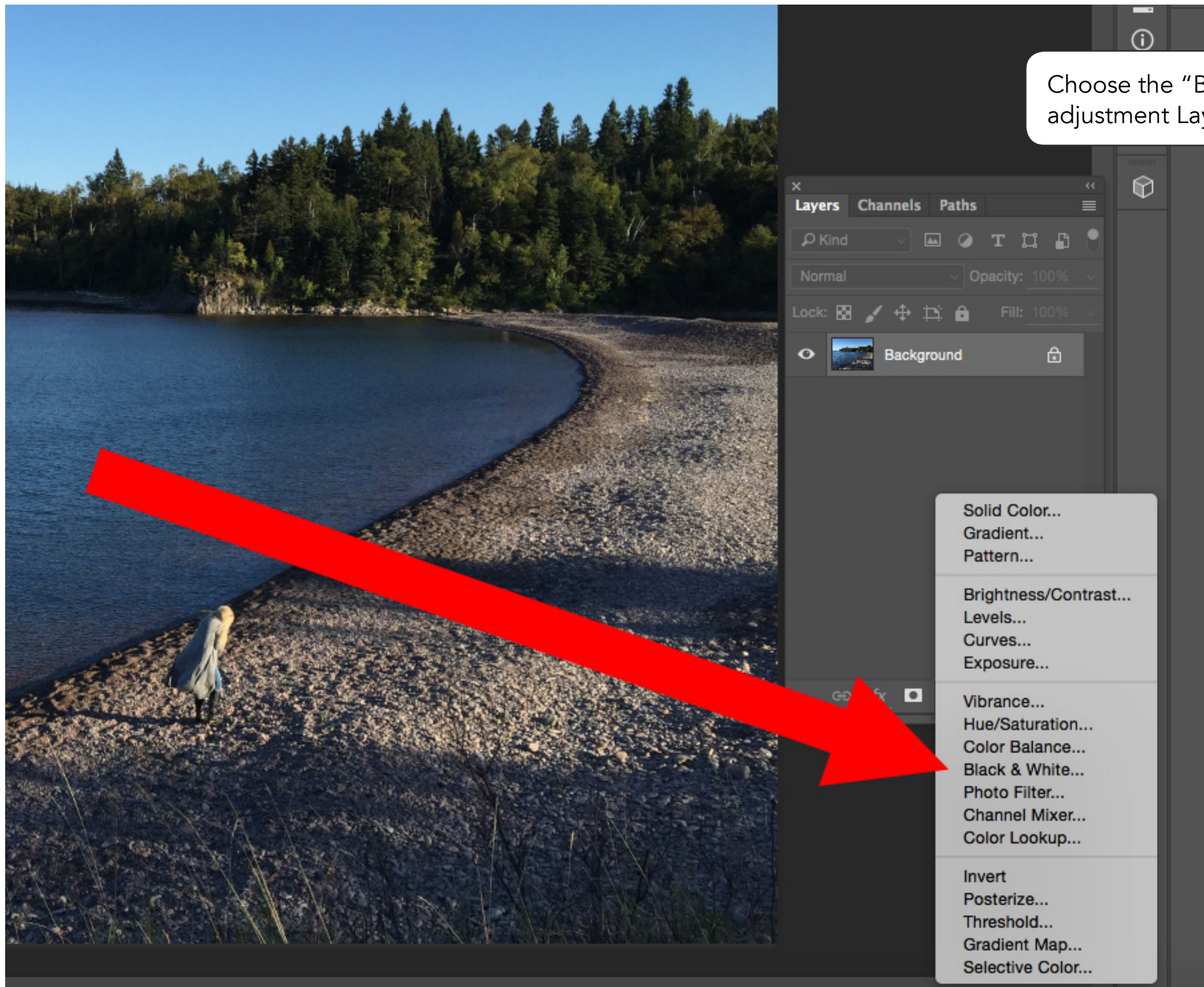


Illustration by Kent DuFault - Reference 023



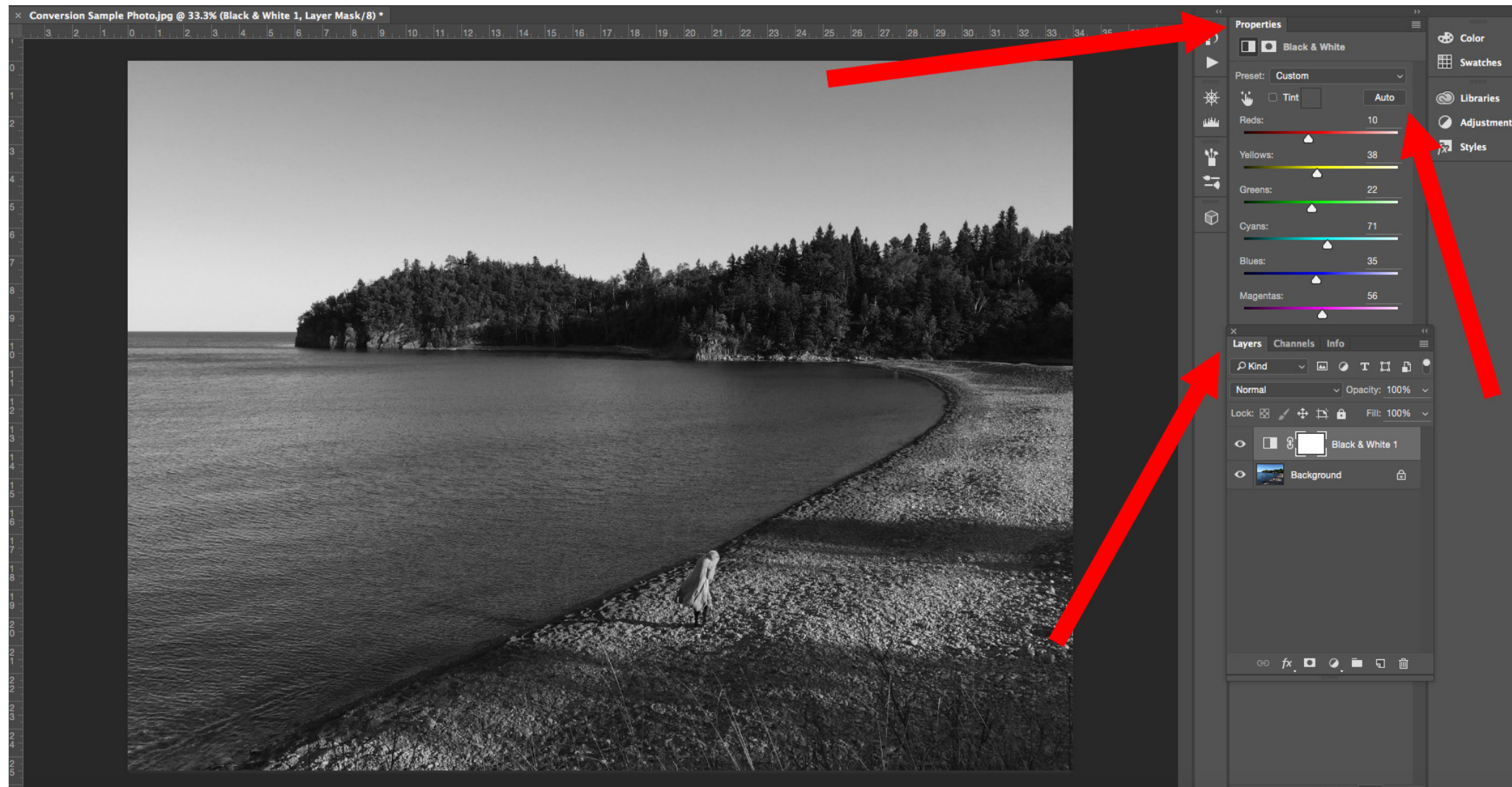


Illustration by Kent DuFault – Reference 024

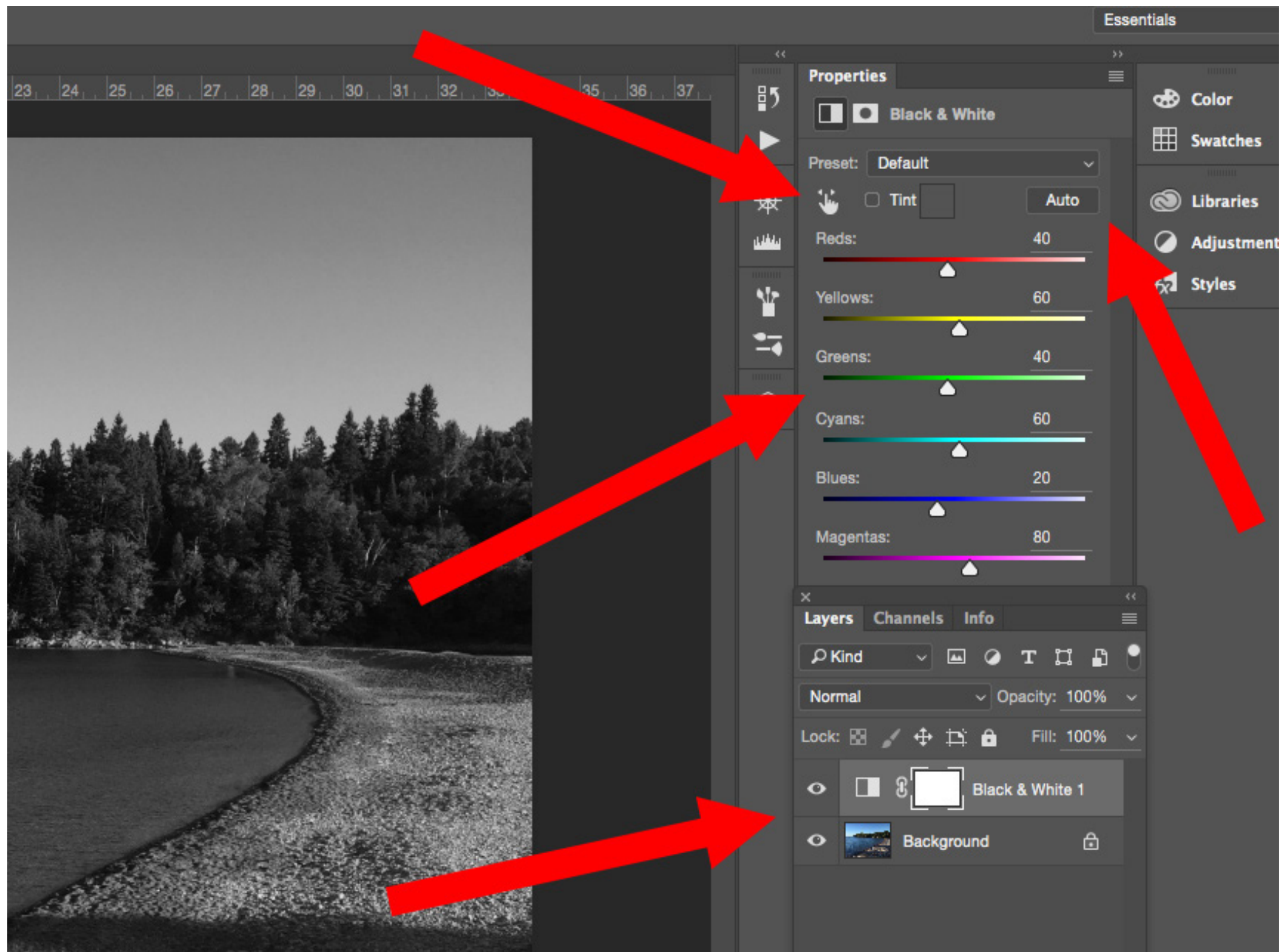
You want to make sure that your “Layers” palette, your “Info” palette, and the “Properties” palette for the Black & White Adjustment Layer are all open. Set up your palettes on the screen so that you can see the Layers and the Properties.

Here is where the Nik and Macphun software programs help give you an edge. As you saw earlier, you could hover your cursor over the various parts of your photograph and see what parts of your image are in what Zone.

This is not available in any of the three Adobe products.

Let’s take a quick look at the “Properties” palette.





At the very top, where it says "Black & White," there are two radio buttons. The left one is to do a conversion of the entire image. The right one is used to create a "mask" and only apply the conversion effects to the unmasked portion of the image. Masks are an entire different deal. I'm not covering that in this guide.

Illustration by Kent DuFault - Reference 025

The top left arrow is pointing at an icon that looks like a finger pointing. By clicking that, you turn on an eyedropper that works as a color sampler. I keep my sample size to 5x5 pixels in most cases. There is a place to change that setting at the top of the screen. Here is the important aspect to that tool. Remember when I showed you the Nik and Macphun software? Remember how you could hover your cursor and use the Zone System scale? This is Adobe's answer to those competitors' features. It's not as user friendly or accurate for tone evaluation, but it's still useful. Once you click the finger to turn it on, hover your cursor over an area of the photograph and left click your mouse. You will see a blue box highlight on one of the color sliders. This is telling you that the "tone" of the area that you clicked on falls into that color category; then by moving your cursor left or right—or manually moving the slider left or right—you can adjust the tone brightness value of that area.

Be aware, this is not a perfect system. For example, I raised the "Yellows" slider significantly to brighten up the tone value of the trees.

At the same time, I wanted to lower the tone value of the woman and her jacket. The eyedropper was telling me that she was also in the Yellows category. (REMEMBER MY EARLIER TIP!) However, I experimented with lowering the "Reds" slider. That change reduced the tone value of the woman while leaving the trees alone.



**KEY LESSON:** When using the eyedropper to show you what color slider to move, to change the tone of a particular area of your photograph—and then it gives you that same slider for another part of your photograph—check the sliders on either side of the one it's telling you to move. For example, the eyedropper was telling me that to adjust the tone of the woman, I needed to move the Yellows slider. I didn't want to move the Yellows slider as that was set for the trees. I knew the Greens slider would also affect the trees. So I checked the Reds slider. It reduced the tone values of the woman while leaving the trees alone.

I know that I'm being redundant here, however this is really important for you to grasp. I'm hammering it home!

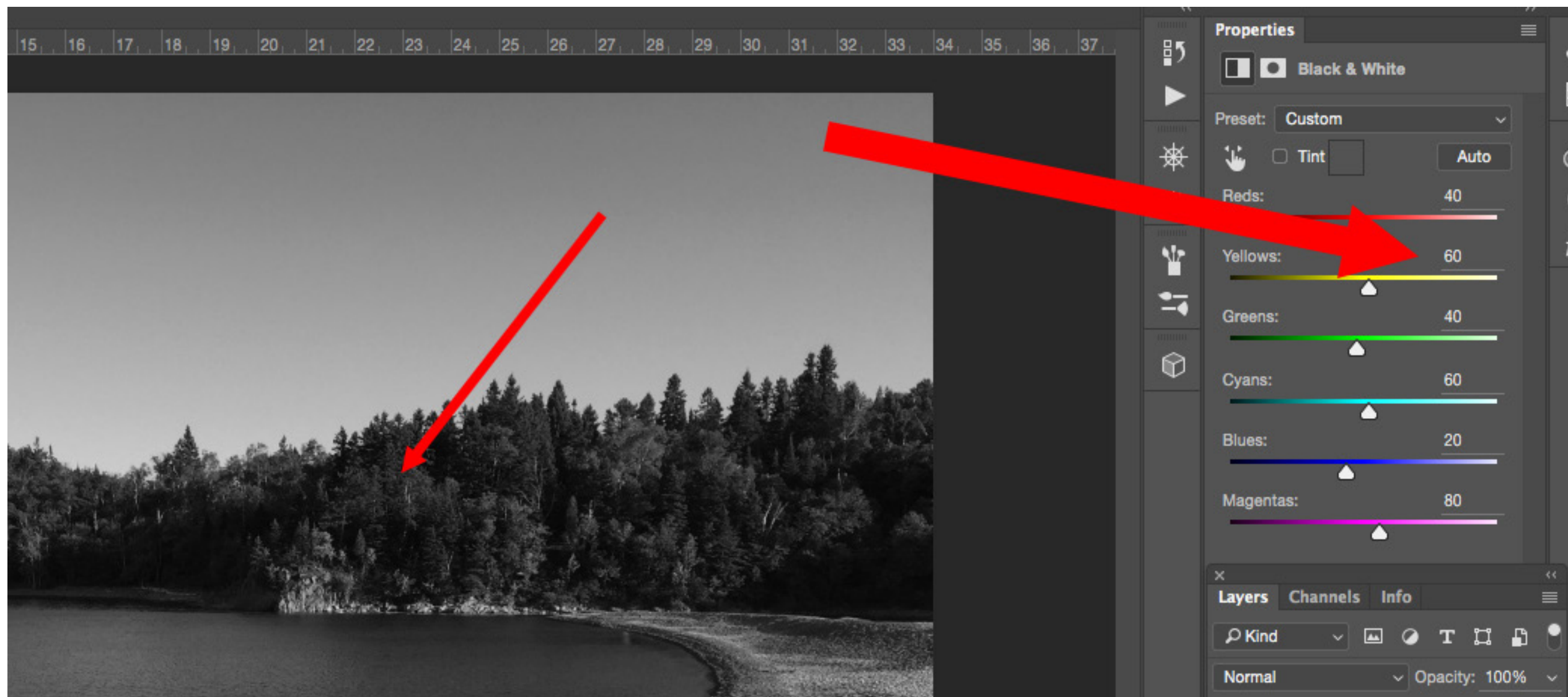


Illustration by Kent DuFault - Reference 026

I hovered the eyedropper over the forest where the smaller red arrow is pointing. I left-clicked the blue box highlighted on the Yellows slider, which was set at the number 60.



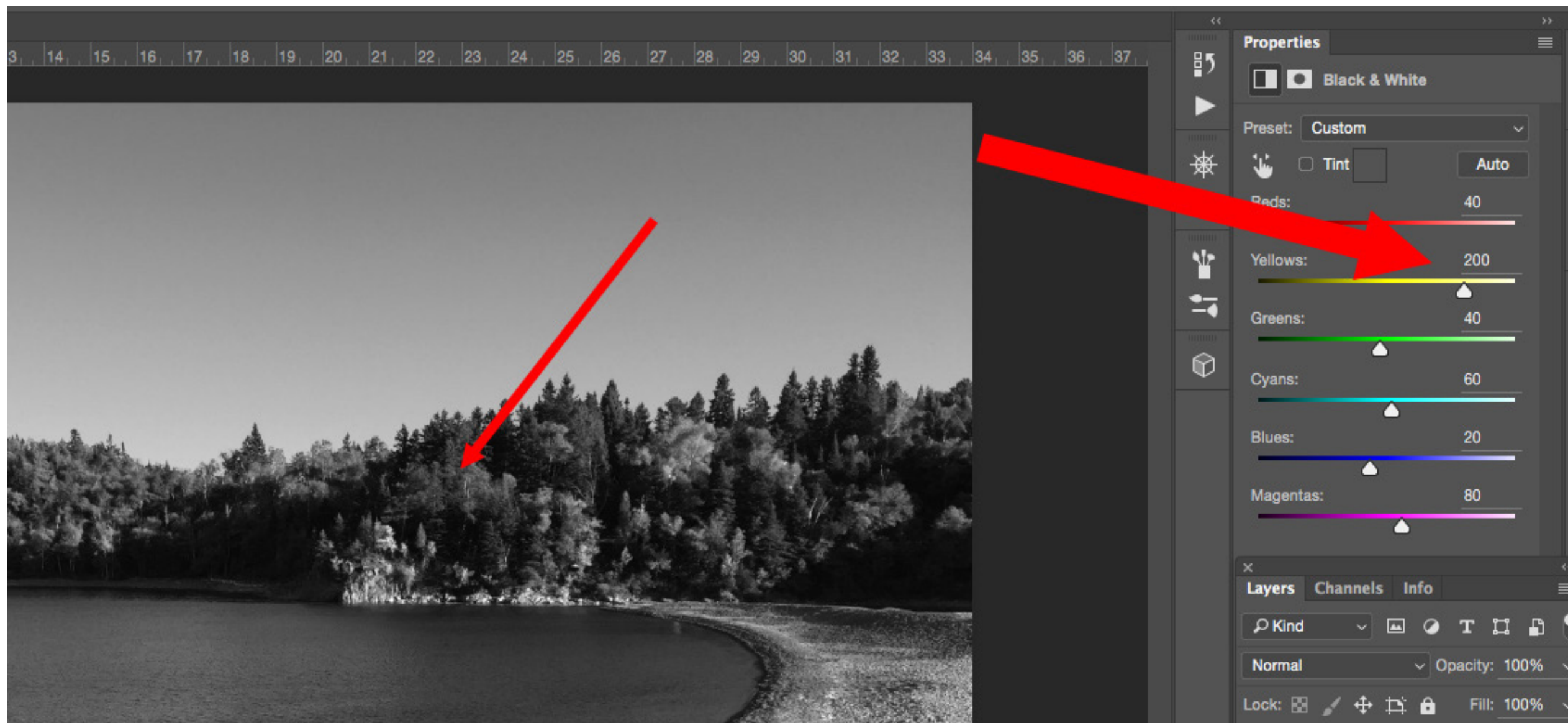


Illustration by Kent DuFault - Reference 027

I raised the Yellows slider to 200. What happened to the forest area? It's now much brighter in tone.

Are you beginning to see the possibilities of all the control you can have in “adjusting” the tone values of your black and white conversion?

Look back at Reference 025. The “Tint” selection should be checked if you want to create a monochrome image that isn’t a true black and white photograph. Remember the difference? If not, go back and look at Image 001.

In Reference 025, you’ll see a radio button to the right of the “Tint” selection called “Auto.” Clicking this button will let Photoshop evaluate your image and adjust all the color sliders for you. Sometimes, using this feature gives great results, and sometimes it doesn’t. I will often click the “Auto” button to see if I like the effect. If I don’t like it, I can do a “Command Z” or (for PC users) a “Control Z” to undo the effect.

Many times I like the effect of the “Auto” button, but that is never the end of the process. There is always some fine-tuning that needs to be done.

I want you to adjust all the tones in your copy of my photograph that you’re working on.

When you’re done, compare what you did to what I did.

This is where the very subjective aspect of personal vision comes into play. There is no right or wrong when it comes to photography.

Work the photograph until it appeals to you.

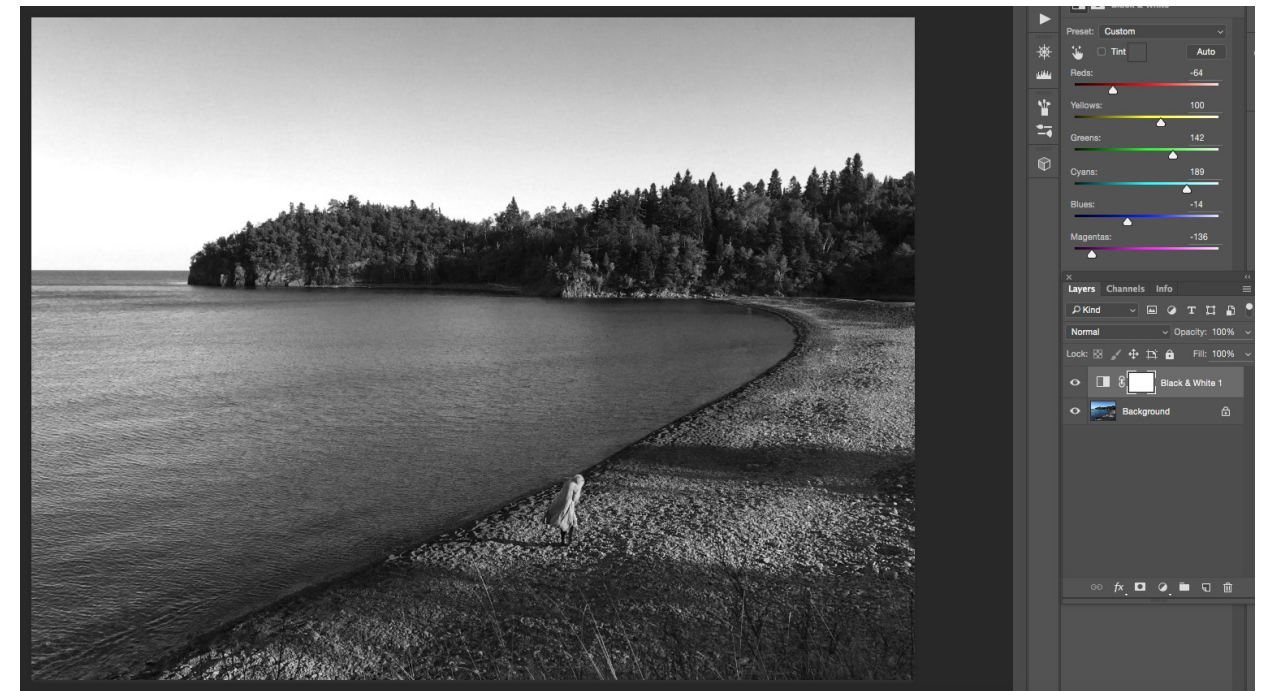


Illustration by Kent DuFault - Reference 028

Here is where I ended up setting my color sliders. My main goal was to raise the tone values of the trees and rocks that were in shadow, so I had more detail. I also lowered the values that affected the highlighted sand and the highlighted side of the woman. Again, my goal was to even out tone and bring detail to those areas.

How did my adjustments compare to yours?

There are a couple of more things to do before we can say we’re done.

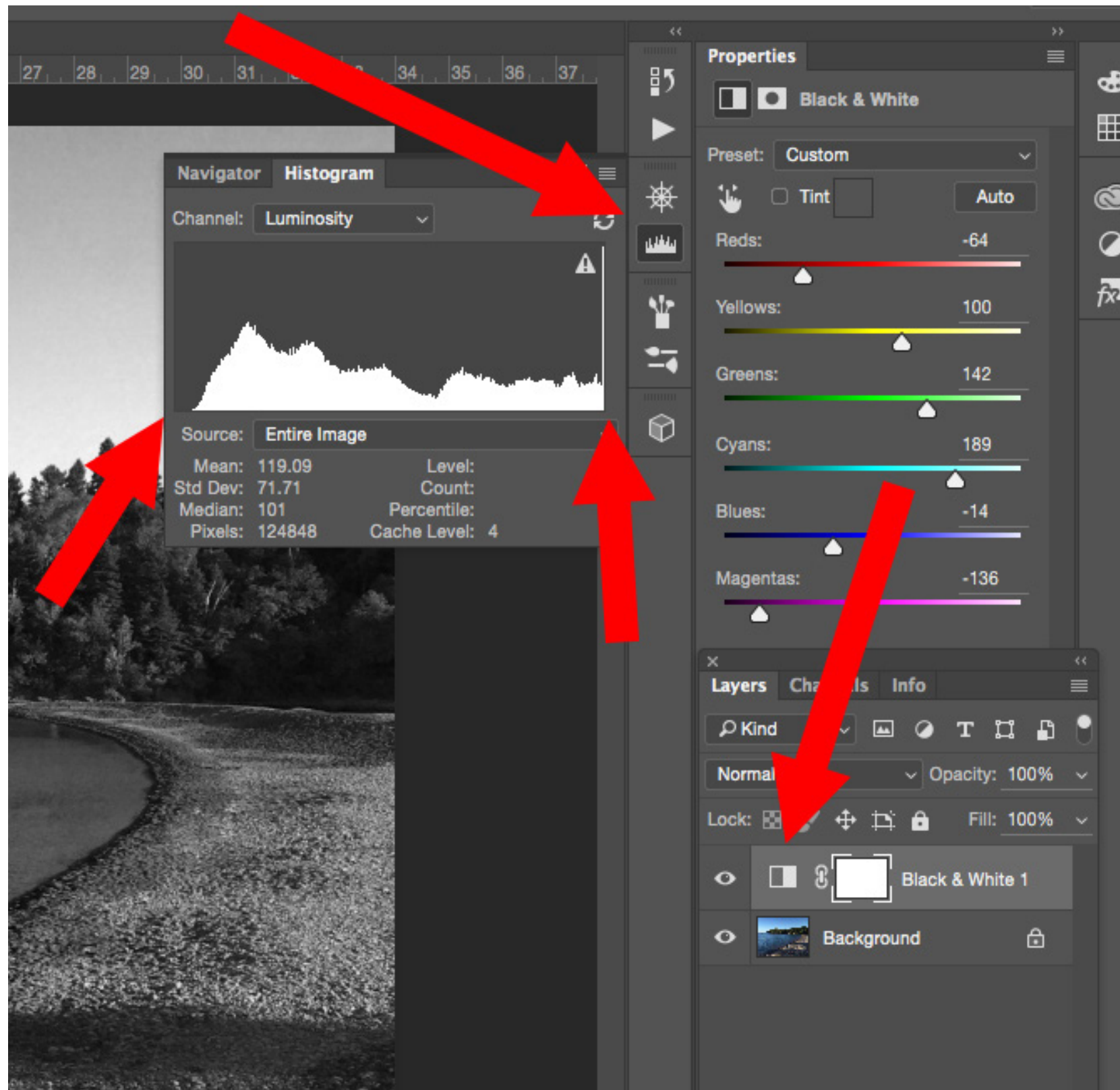


Illustration by Kent DuFault – Reference 029


Before we consider our conversion to a black and white photograph complete, we want to check the histogram. (You can see just how important the histogram is!) When we moved the color sliders around, the histogram changed to reflect our adjustments.

Looking at Reference 029, you open the histogram by clicking the radio button that the top red arrow is pointing to.

Set the "Channel" drop-down menu to "Luminosity." Whenever you're looking at a monochrome image, it should always be set to "Luminosity."

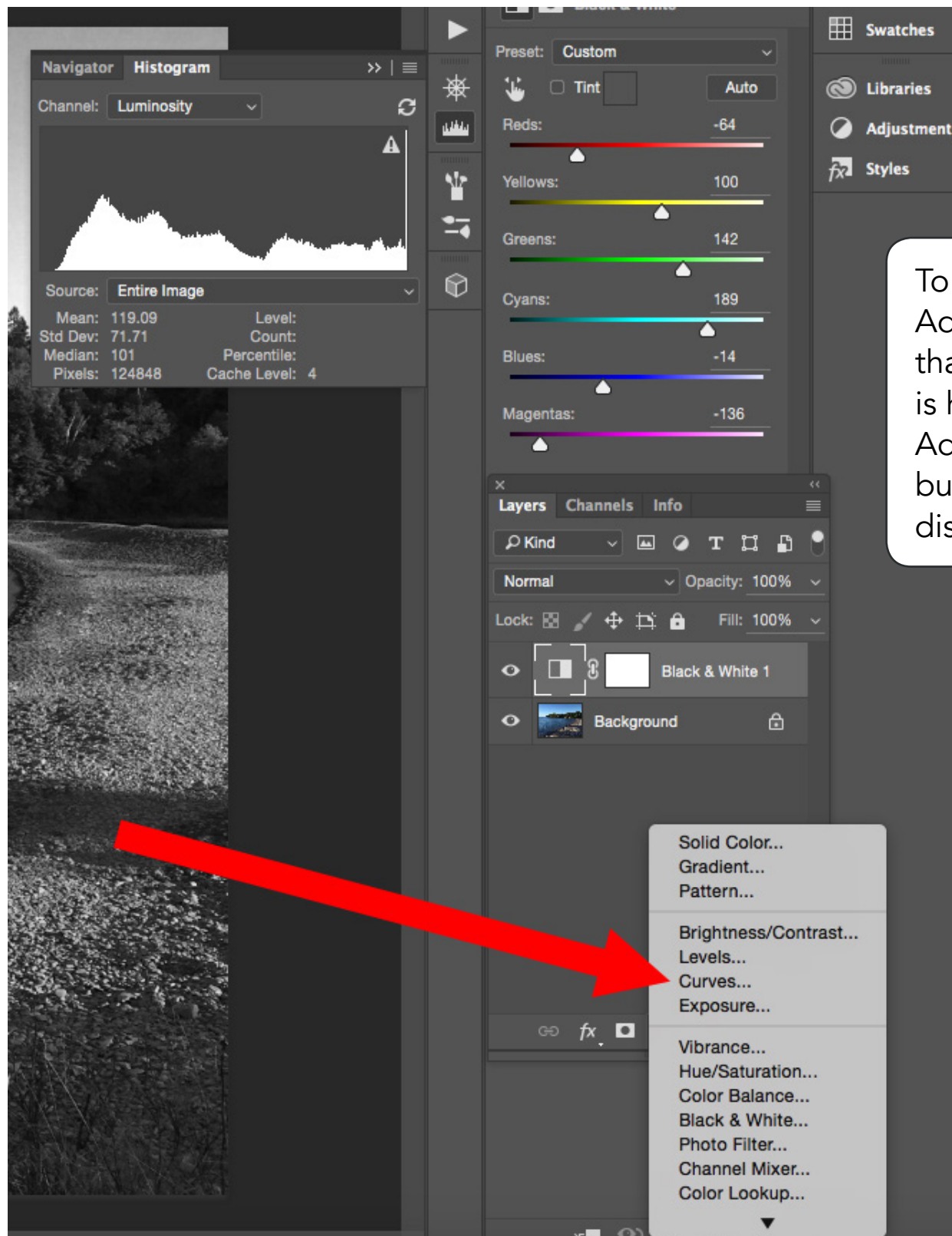
Take note that my adjustments have caused the highlights to be clipped. Plus, I no longer have a deep black shadow area. We're going to fix this with another adjustment layer.



 **KEY LESSON:** The term “clipped” means that the brightest values within your image (the highlights), or the least bright values within your image (the shadows), are no longer within the range of showing detail. This is generally a bad thing. If you look at the histogram in Reference 029, you’ll see how the histogram scale is bluntly cut off on the highlight side. That indicates a clip, but don’t worry. If your post-production settings have caused the clip, you can recover them before you save the file. If your exposure within the camera caused the clip it might be a different story, depending on how bad the clip is. We know that my post-production settings caused the clip because we looked at the histogram before we started!

Before we fix the clip, look at the lower far-right arrow. In the Adjustment Layer, you see two icons separated by what appears to be a chain. The left icon should be highlighted when you do this work. The right icon is a mask. We’re not dealing with masks in this guide.

However, it’s important that you know what that is, because if you inadvertently click on it, your palettes will change and your tools may not work, and you won’t know why.



To fix the clip, we are going to add another Adjustment Layer. We want to make sure that the Black & White Adjustment Layer is highlighted. Then we select a Curves Adjustment Layer. You can also use "Levels," but I prefer "Curves" as it creates a more even distribution of change.

Illustration by Kent DuFault – Reference 030



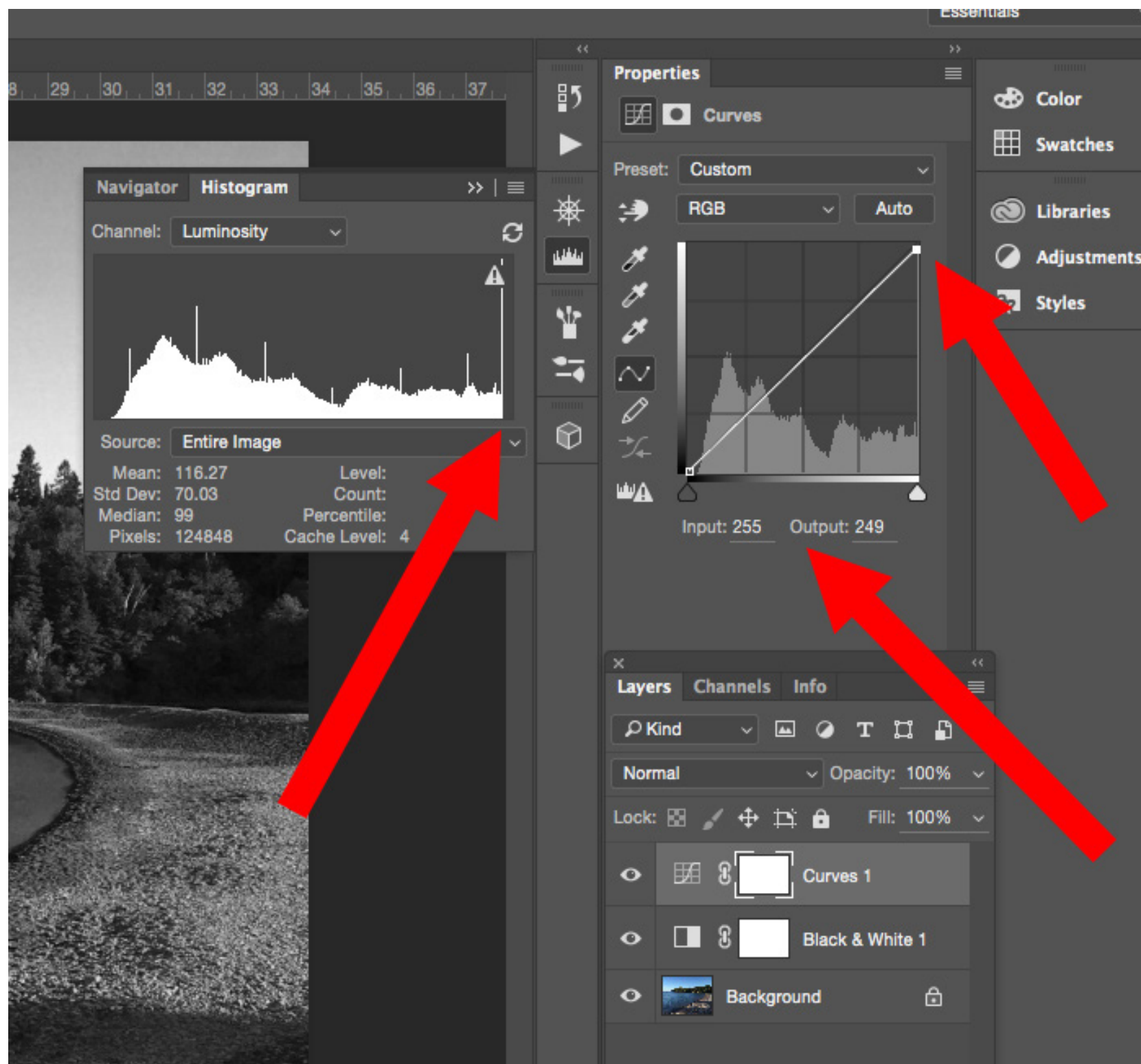


Illustration by Kent DuFault - Reference 031

You can see the Curves Adjustment Layer sitting on top of the Black & White Adjustment Layer. The far right-top arrow shows you where I used the curve to pull back the brightness value of the highlights. The arrow just below it shows you that the highlights were sitting at 255, which is absolute white with no detail. We don't want that. The output number is the brightness value that I've lowered the highlights to (removed the clip), which is 249. If you remember back to Reference 003, a value of 249 puts our highlights into the "Texture White" category of Zone 10. That's perfect! The far left arrow shows you that the highlights are no longer clipped.

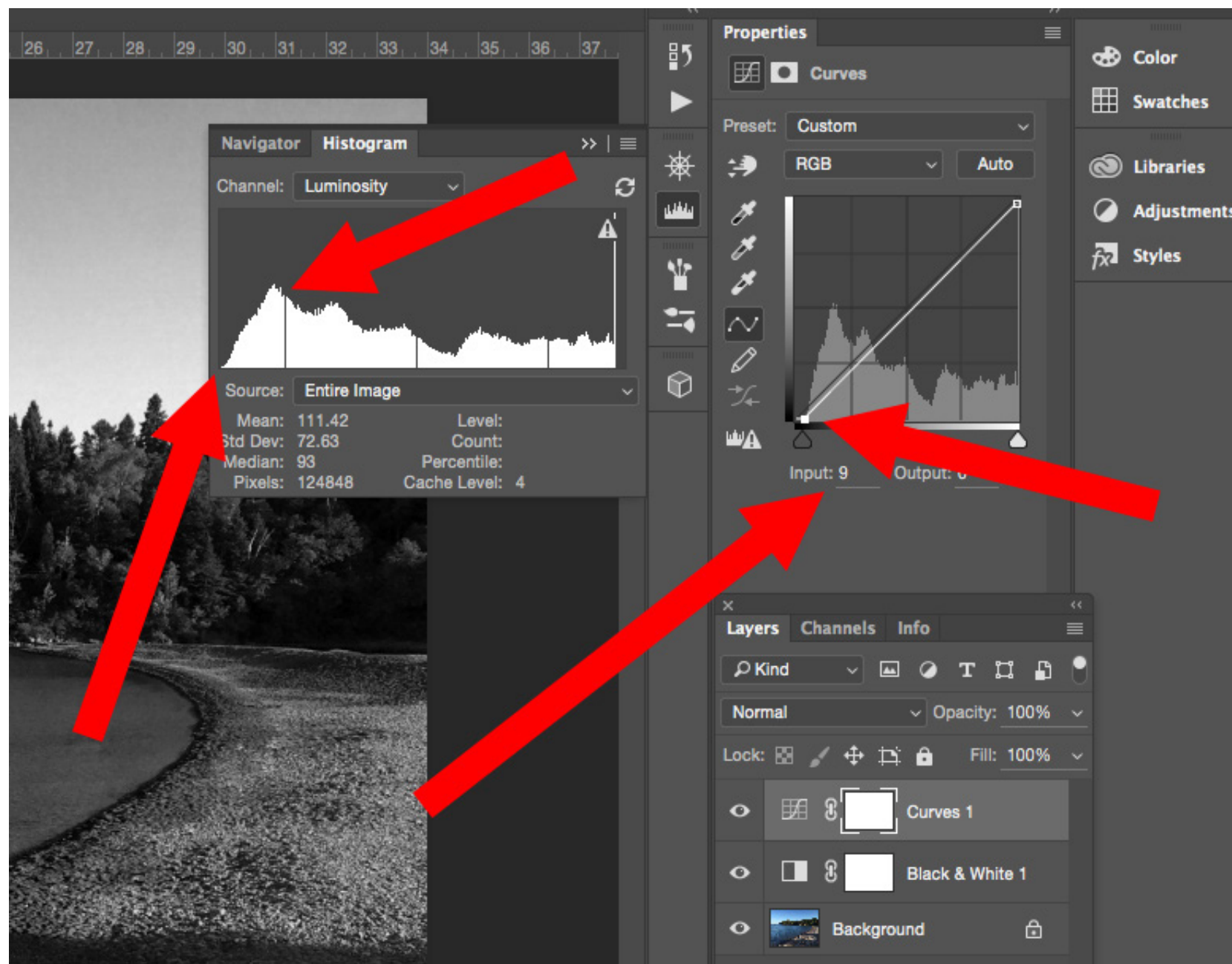


Illustration by Kent DuFault – Reference 032

Now we are going to adjust the shadows back to a deeper black. The far right arrow shows you where I've dragged the shadow end of the scale to the right. This action pulled the deepest shadows back to a histogram level of 9. If you go back and look at Reference 003, that setting is "Near Black with Texture."

Take note of the far left arrow. You can see that the shadows are now right where they should be on the histogram scale.

Look at the very top arrow. Do you see that line that developed in the histogram? When you stretch a histogram, or compress it, it's like squishing or pulling on a piece of rubber. At some point, if you pull hard enough, the rubber is going to crack and break. That's what those vertical lines are. If you go back and look at the histogram in Reference 031, you'll see singular vertical lines pushing upward. That's where we squished our highlights back onto the scale. A few lines (in either direction), like in this example, are no problem. However, if you have to REALLY stretch your histogram, or really compress it, and you have lots of breaks in either direction, your photograph is going to look funky. That's why metering and exposure are (within your camera) so important!





Photograph by Kent DuFault – Image 033

Here is our final converted black and white photograph. I invite you to [click this link](#) to go look at the photograph on Flickr. Look into the deep shadow areas and you'll see plenty of details. Look at the highlights on the woman's blonde hair and jacket; you'll see details there as well. Look at the image overall, and you'll see a full range of tone in every Zone. If you can master everything that we've discussed so far in this guide, you will be light years ahead of most of your competition!





## Self-Check Quiz

1. What is the preferred method for converting a color image file to a black and white photograph in Photoshop: Desaturate, Grayscale Mode, or B&W Adjustment Layer?
2. What three elements should you be looking at when choosing a color file for conversion to a black and white photograph?
3. In which Photoshop palette will you find the "Adjustment Layer" icon?
4. In the "Properties" dialog box of the B&W Adjustment Layer, what does the extended finger icon do for you?
5. If you've already adjusted a color slider (for example, the Yellows), and you want to change the tone of another part of the photograph (that also happens to fall onto the Yellows), what technique can you employ to attempt your edit without affecting the first edit?
6. Once you've adjusted all of your color sliders, what do you need to go back and check?
7. What does it mean if there is a "Crack" in the histogram?

## LIGHTROOM

The first thing you will notice about making a black and white conversion in Lightroom is that it works “basically” the same way as Photoshop. The main difference is that you can’t work in “Layers.”

Once again, there are several ways to accomplish the task. I will recommend only one to you. My recommended method in

Lightroom works by adjusting tones with color-coded sliders (just like we did in the Photoshop tutorial).

The main difference between Photoshop and Lightroom is in how the tools are organized, and Lightroom isn’t as specific with histogram information; it relies more on a “visual” interpretation of the image.

Let’s take a look at the workspace.

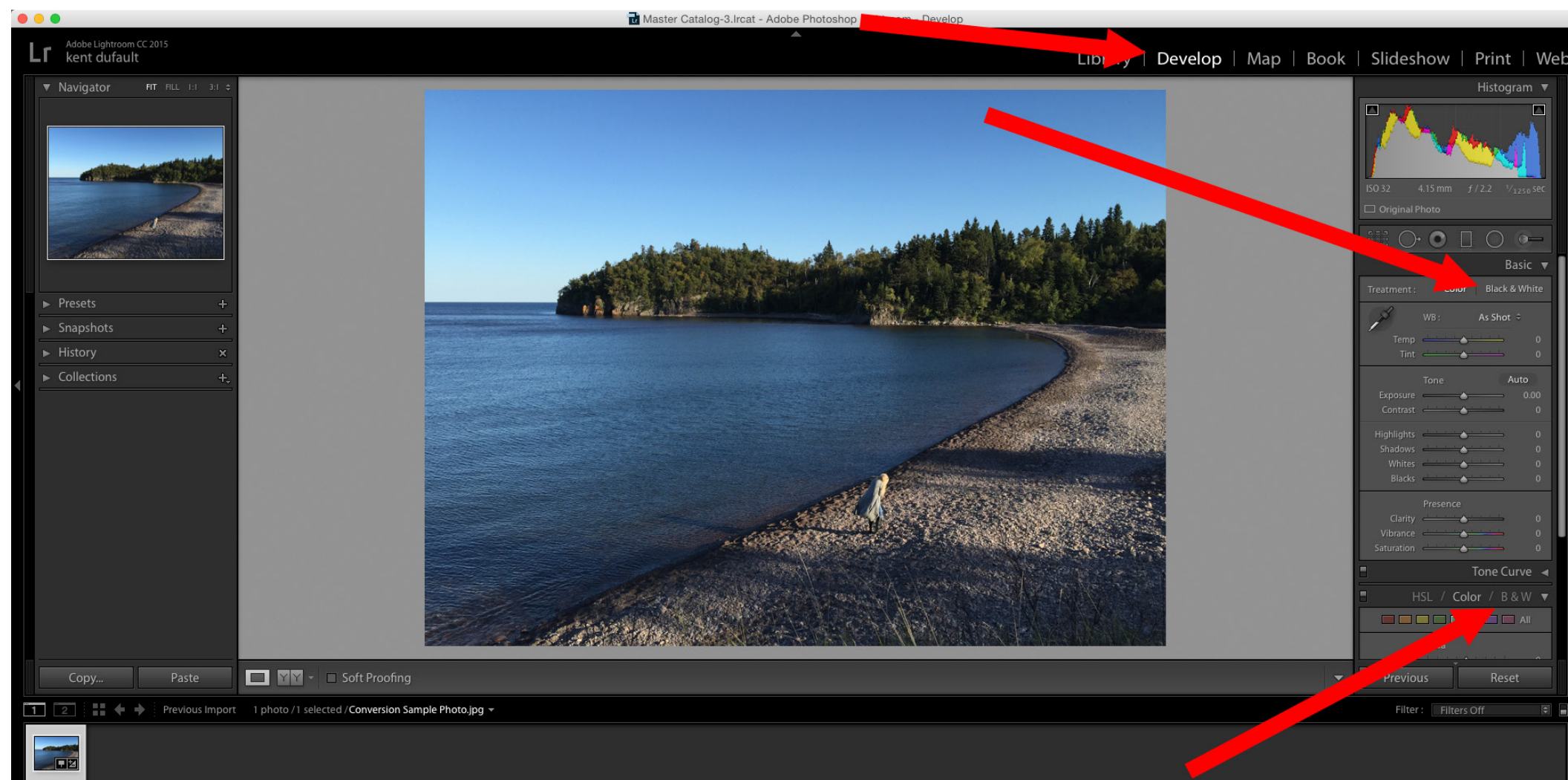


Illustration by Kent DuFault - Reference 034



I'm going to assume that you're familiar enough with Lightroom to import files and that you know how to get an image into the develop module.

I'm going to point out the more obvious way to convert a color file to a black and white photograph within Lightroom; I'm not recommending you use this method, unless you're interested in an easier method with slightly less control. If that's your choice, click either place where the two red arrows are pointing on the right, and then make your adjustments using the color sliders where the lower arrow is pointing. The upper arrow is where you would make global adjustments to exposure, contrast, and clarity.

The method that I'm going to demonstrate for you is called the HSL Method. The reason that I like that method is this:

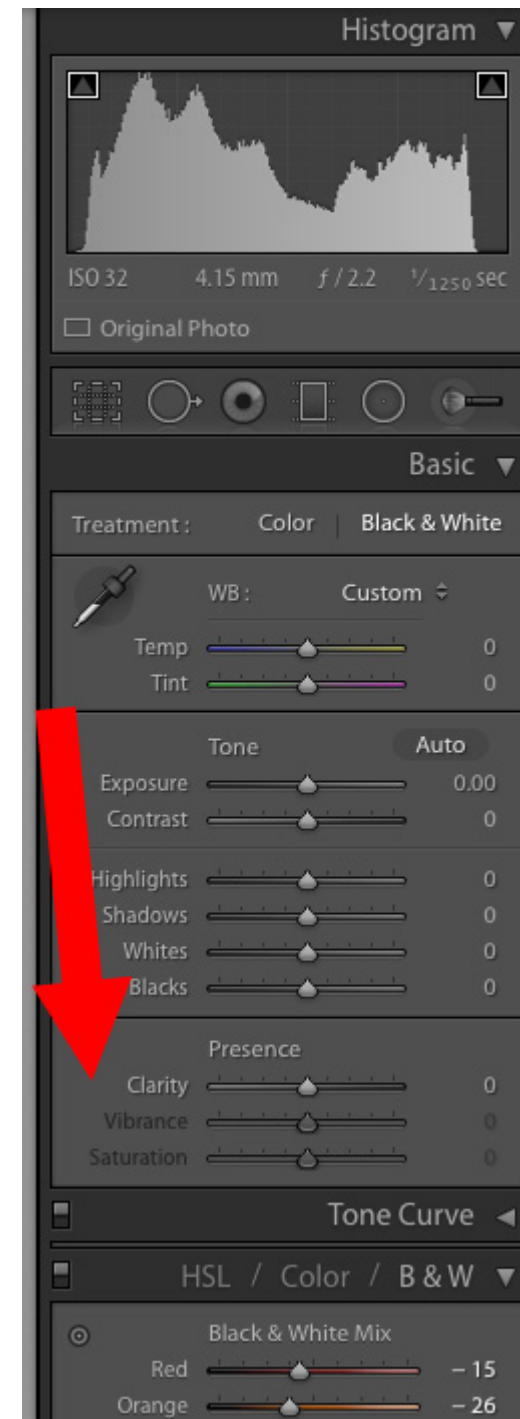
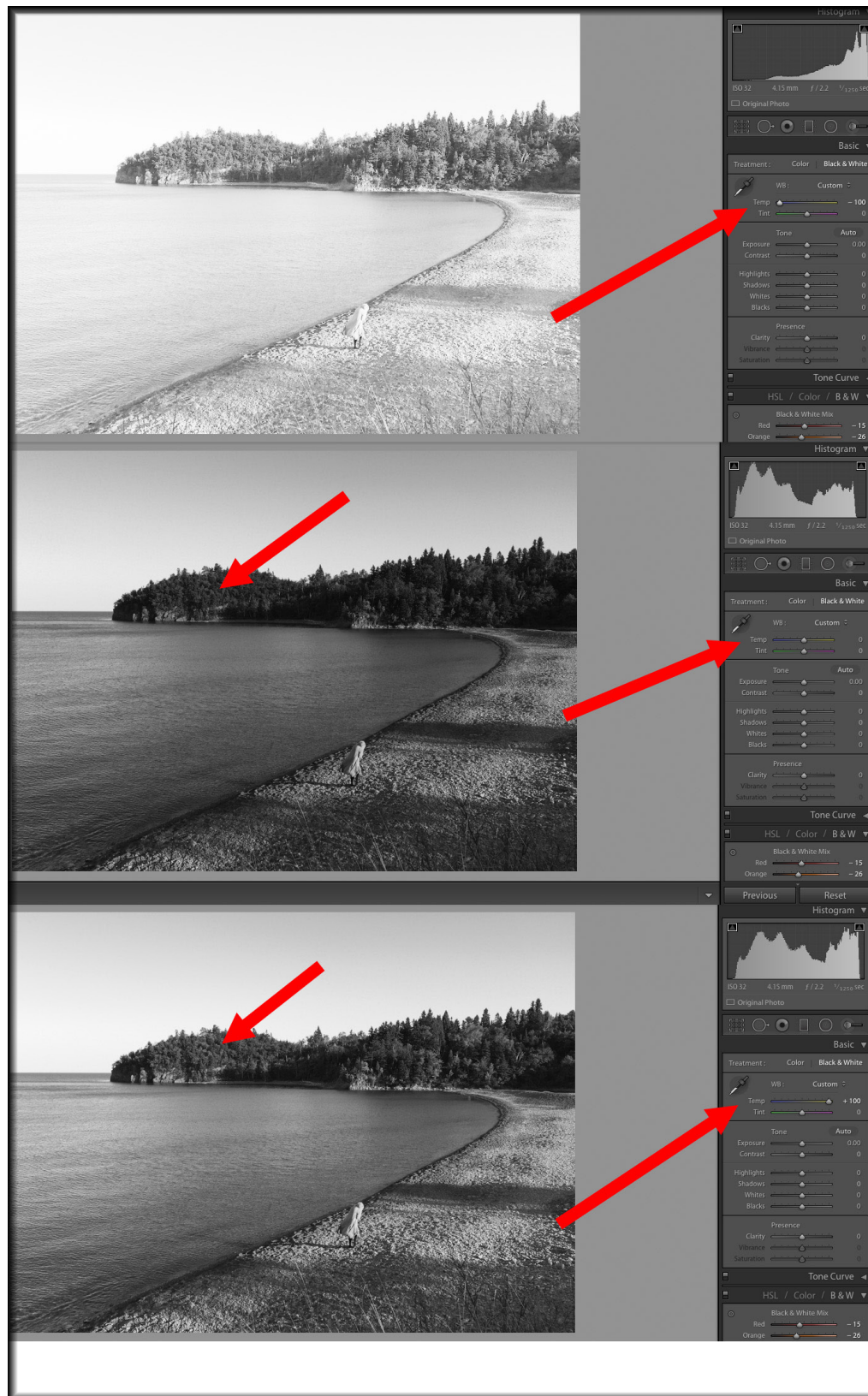


Illustration by Kent DuFault - Reference 035

In the Black and White developing tab, the Vibrance and Saturation sliders are not active in the first conversion process that I shared with you. In the HSL Method, they remain active. Using them will allow you a slight advantage to processing tone.



Shifting the Color Temperature toward the Cool Blue end of the spectrum did not work with this conversion.

This is with the Color Temperature set at Neutral. Pay special attention to the trees.

In the third example, the Color Temp has been shifted toward the yellow (warm end) of the slider. Notice how the trees are lighter. I prefer this setting. We will start there and maybe pull back on the “Yellow” Color Temp later in the process.

Before going through the black and white conversion process, I want to point out a lesser-known trick for doing a black and white conversion in Lightroom. Changing the “Color Temperature” of your original color file can have a significant effect on the final outcome of the black and white conversion process. I will usually push the “Color Temperature” far to the left, and view it in black and white. I will then push the Color Temperature slider far to the right and check the black and white image again. Finally, I’ll return the slider to the center position. Whichever version looks best to my eye is where I will set the “Color Temperature” slider before I start the conversion process.

Illustration by Kent DuFault - Reference 036



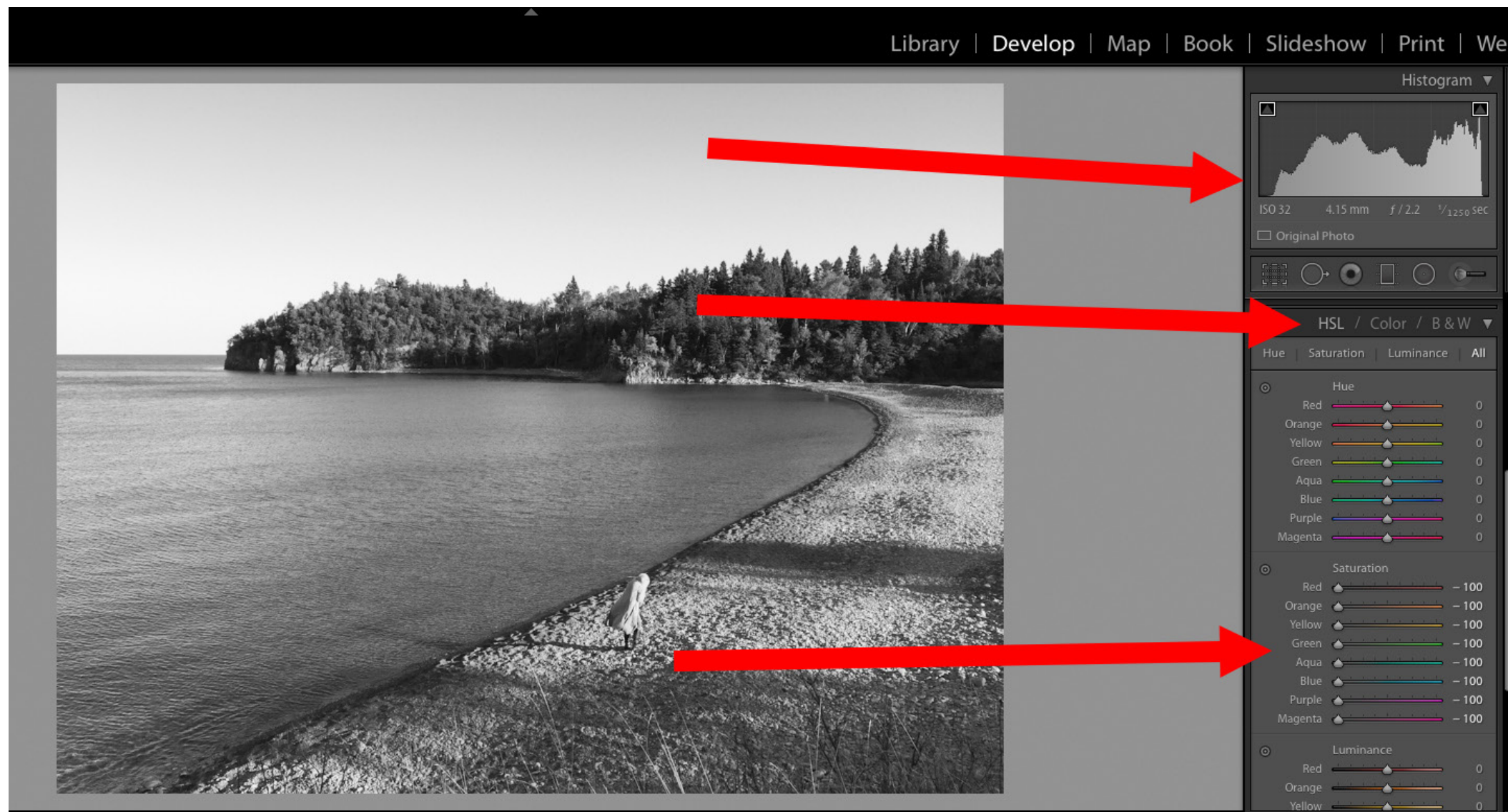


Illustration by Kent DuFault - Reference 037

## Step one in the HSL Method of conversion

Click the HSL / Color / B&W Tab. Click the HSL radio button. Click the "All" radio button. Navigate to the "Saturation" section of sliders. Reduce them all to -100. Check the histogram. In this case, our histogram looks pretty good.

Unless you are doing monthly monitor calibrations, try to rely more on what your histogram is telling you than what your eyes are telling you. Let me rephrase that; use both, but

trust the histogram more! If you're interested in calibrating your monitor, it's super easy and kind of fun knowing that you've taken that next step toward professionalism. Monitor calibration equipment ranges from inexpensive to very expensive. Throughout my entire professional career I've only used one inexpensive brand, and it's always served me well. If you want, you can check it out here:

 **Recommended Software:** [Datacolor S5P100 Spyder5PRO](#)



Illustration by Kent DuFault - Reference 038

## Step two in the HSL Method

Navigate to the “Luminance” section of the “HSL” section. Here we will adjust the various color sliders just like we did in the Photoshop tutorial. Adjust them until the image looks good to you. In Reference 038, you will see what I ended up with. Take note of the histogram with the red arrows. This is a screenshot of the original histogram before I made the changes to the Luminance levels. Compare the two histograms. What do they tell you?

I pushed the mid-tone bright values (Zones 6, 7, and 8) down, and I pushed the mid-tone dark values (Zones 2, 3, and 4) up. My brightest highlights stayed close to the same, and my deep shadow areas stayed almost exactly the same.

At this point, I’m very happy with my details and range of tone.

Now we will go back to the “Basics Tab” and make some final adjustments.

First, let’s look at the changes I made in my “final touches.”



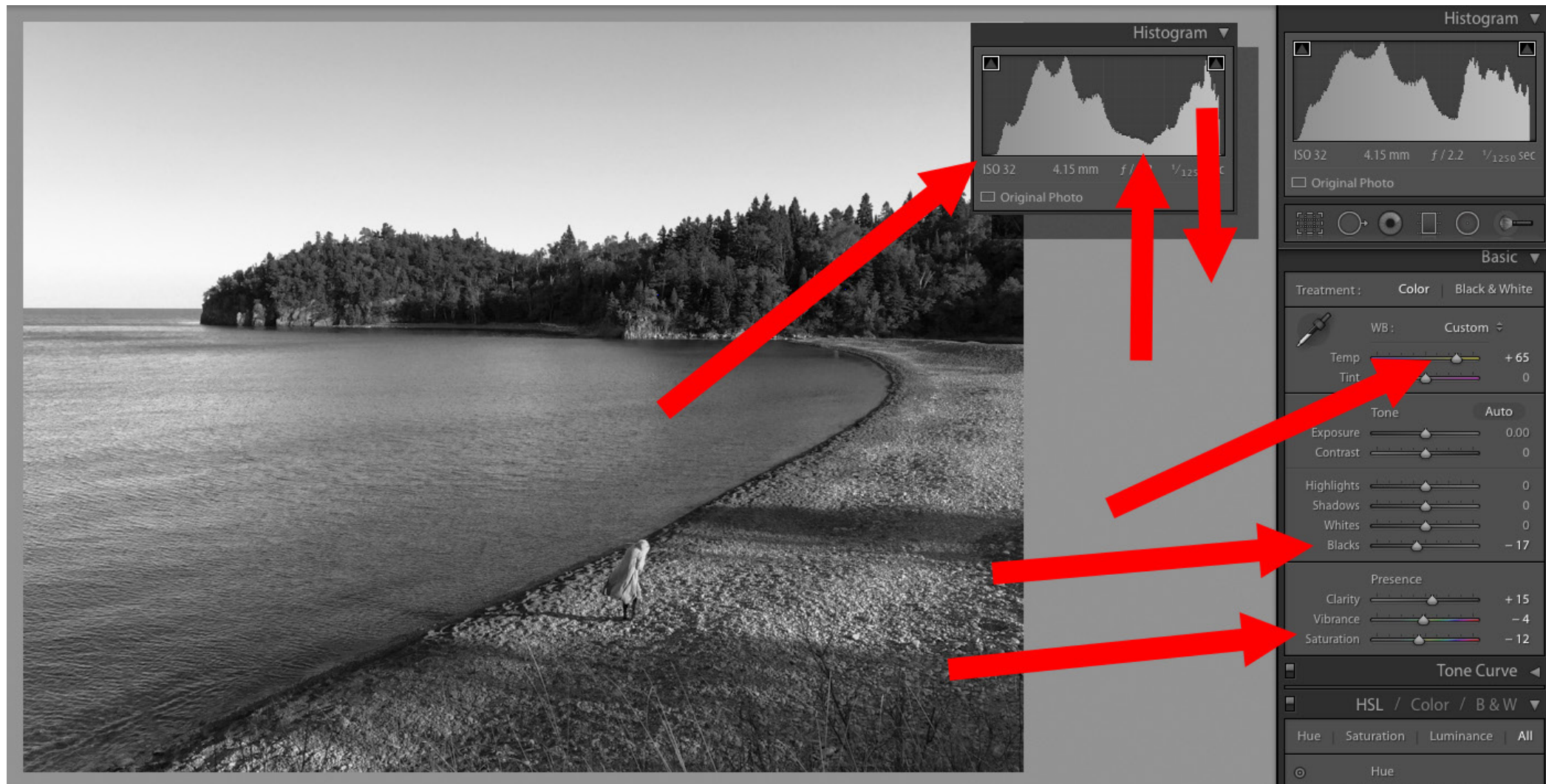


Illustration by Kent DuFault – Reference 039

Look at the bottom arrow. The Vibrance and Saturation sliders are active. This is the “Secret Sauce” of the HSL Method. Minor adjustments of those two sliders can perfect the tonal range of your final product. I also adjusted the Clarity, Vibrance, and Saturation slightly.

Just like Reference 038, I pasted a screenshot of the histogram from the previous version (prior to these changes). Look at the “Deep Black” end of the scale. By adjusting the “Blacks” slider to a -17 I have moved the shadow end of the histogram to the end of the scale.

Remember earlier, when we talked about clipping? Lightroom has a “Clipping Indicator” feature. To turn it on, click the triangles at the upper side of the histogram box. The left triangle turns on the shadow-clipping indicator. The right triangle turns on the highlight-clipping indicator. The indicators are colored patches that will show up on your preview image (if you have clipping). I clicked the shadow side, clipping indicator, before adjusting my Blacks slider downward. I did so I could see when I was achieving maximum black without going into clipping. As I mentioned earlier, it’s best to let just a few bits of the clipping





Photograph by Kent DuFault - Reference 040

indicator “light up.” That won’t hurt your image, and you know you’ll have maximum black. You can also use that technique for the highlight side.

My adjustment of the three “Presence” sliders mostly affected the mid-tone light values by pushing them down slightly.

However, the major change was in the brightest end of the histogram (Zone System). The very brightest values dropped by about 20%. I accomplished that by pulling back on the Color Temperature slider. Remember, it was set at Yellows +100. I pulled it back to +65. (Look at the third arrow up from the bottom in Reference 039.)

My reasoning for doing that was that the sky (visually) looked a little too bright to my eyes. By pulling back on that Color Temperature slider in the final stage, I was able to “tweak” the tone value of the sky downward without any significant effect to the rest of the image.





## Self-Check Quiz

1. What is the main difference between Photoshop and Lightroom during the conversion process of changing a color image file into a black and white photograph?
2. Does Lightroom rely more on a “visual interpretation” or a “numerical interpretation” during the conversion process?
3. What is the preferred method when converting a color image file to a black and white photograph in Lightroom?
4. Does adjusting the color temperature of the color image file before going through the conversion process to a black and white photograph ruin your image?
5. In the HSL Method, where should the “Saturation” sliders be set?
6. Using the HSL Method, do you adjust your tone values in “Hue” or “Luminance”?
7. What is the “Secret Sauce” of the HSL Method?

## ELEMENTS

The first thing that all the Adobe Photoshop Elements users need to know is that you don't get to be so critical.

The entire reason for Elements to exist is to make things easier. That equates to less control.

Still, there is a method that gives you the most control if you want to achieve more with your black and white photography.

Just like Photoshop and Lightroom, Elements provides several ways to get the job done. In Reference 041, take a look at the inset image. One method that Elements provides is to convert the file to Grayscale mode. This method has no control, and I don't recommend it at all.

The left red arrow points to a sub-menu that is located in the "Enhance" drop-down menu, called "Convert to Black and White." This method offers some control, but at the same time it handicaps your efforts.

Let me show you why.

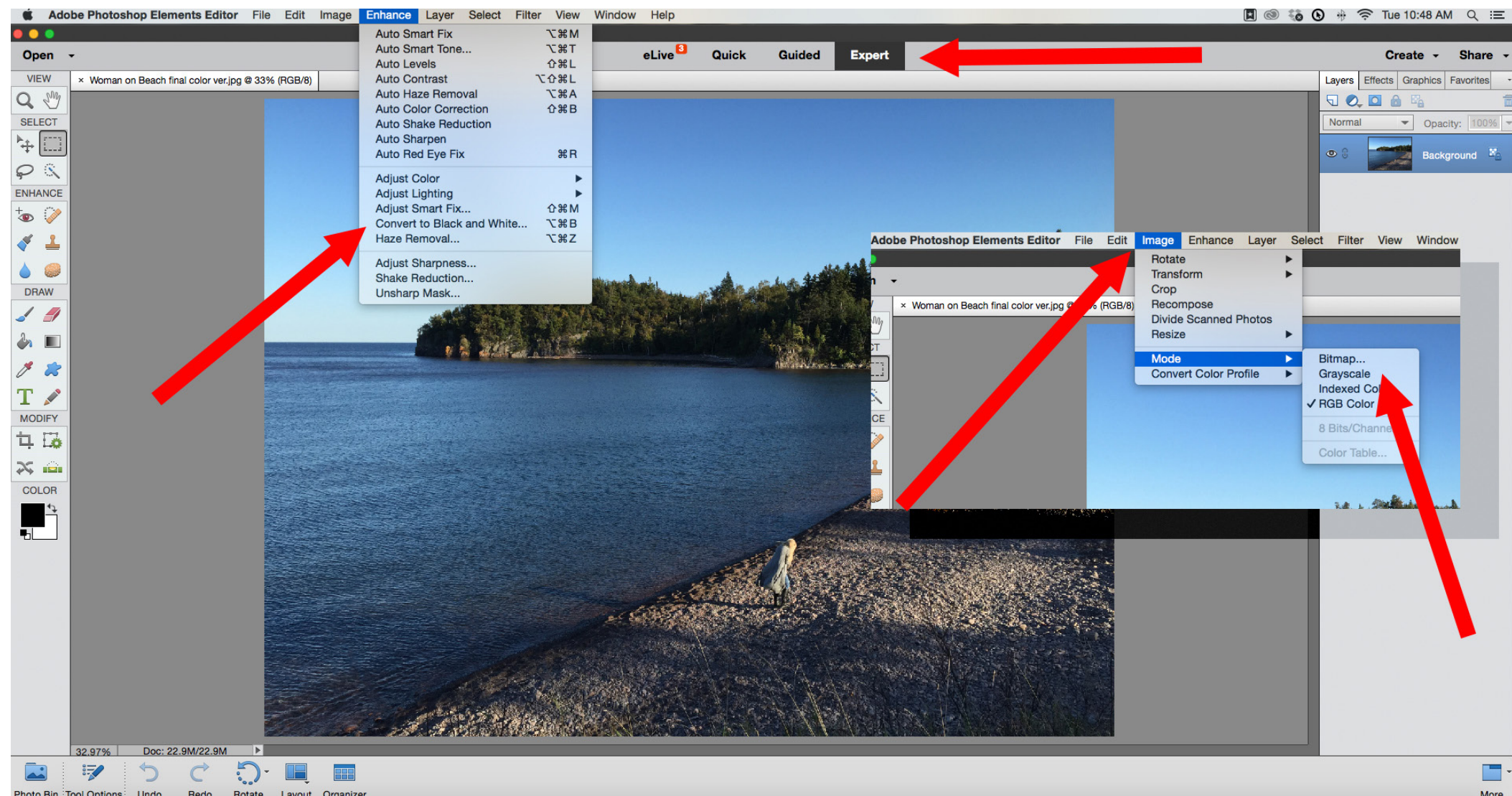


Illustration by Kent DuFault - Reference 041



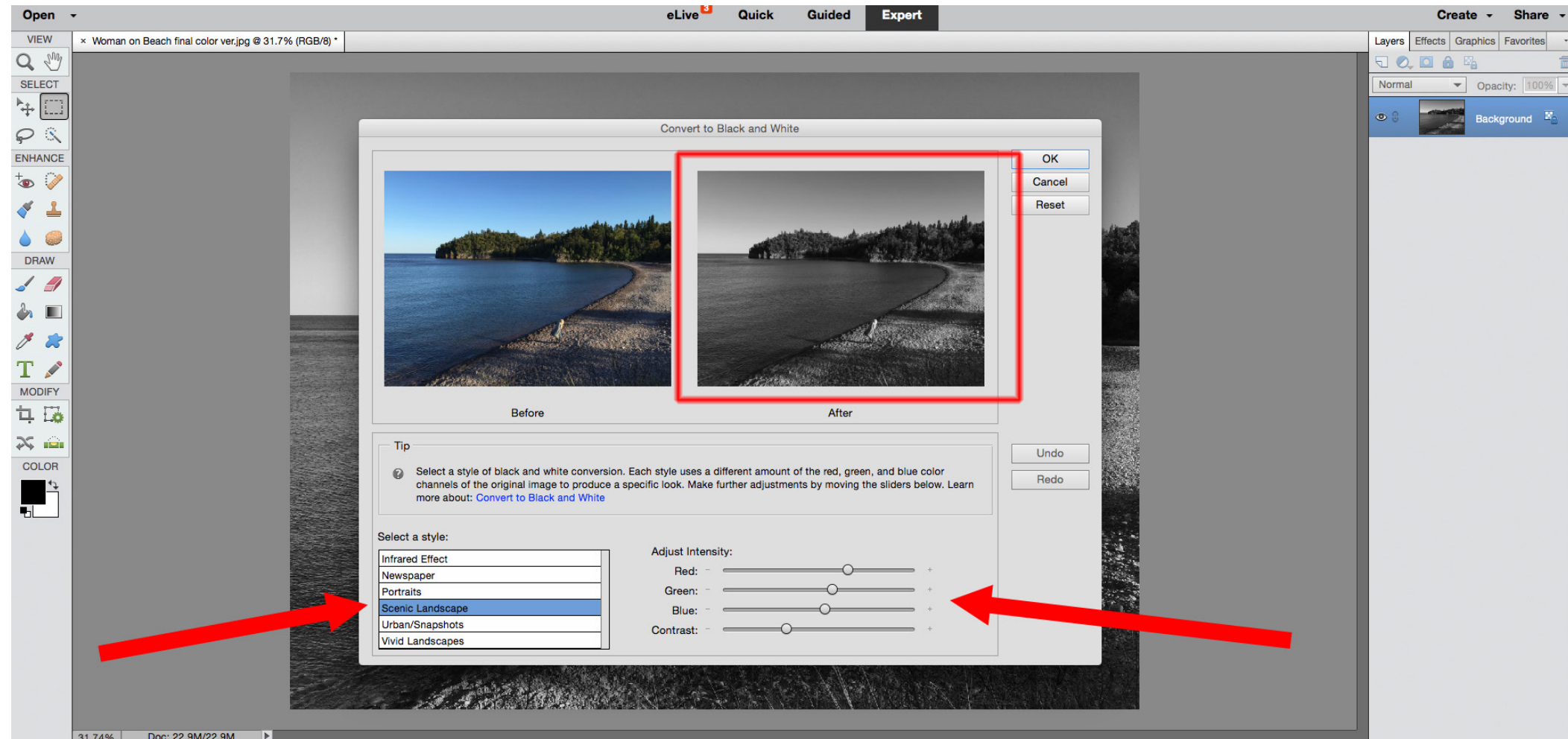


Illustration by Kent DuFault - Reference 042

Reference 042 shows you the “Convert to Black & White” dialog box. At first glance, it appears similar to Photoshop and Lightroom as it has the “Color” sliders. But here are the problems.

- ✓ You’re forced to select a “Style.” Okay. We could probably live with that.
- ✓ There is no accurate, step-by-step (incremental) way to adjust the sliders. It is simply the steadiness of your hand movement on the cursor. I tried repeatedly to match my previous completed conversions from Photoshop and Lightroom. I couldn’t get anything that was even close to using this method.

- ✓ The preview window offers only a small view of the black and white conversion. It’s true that you can move the dialog box off to the side, but you can’t resize it. I have a 24” monitor and there was no way to position the dialog box so that I could get an unobstructed view of the larger preview image behind it.

The method that I’m about to outline for you Elements users does two things.

- It will give you a slightly greater degree of control.
- It will give you a larger preview to judge your work.

Here we go...

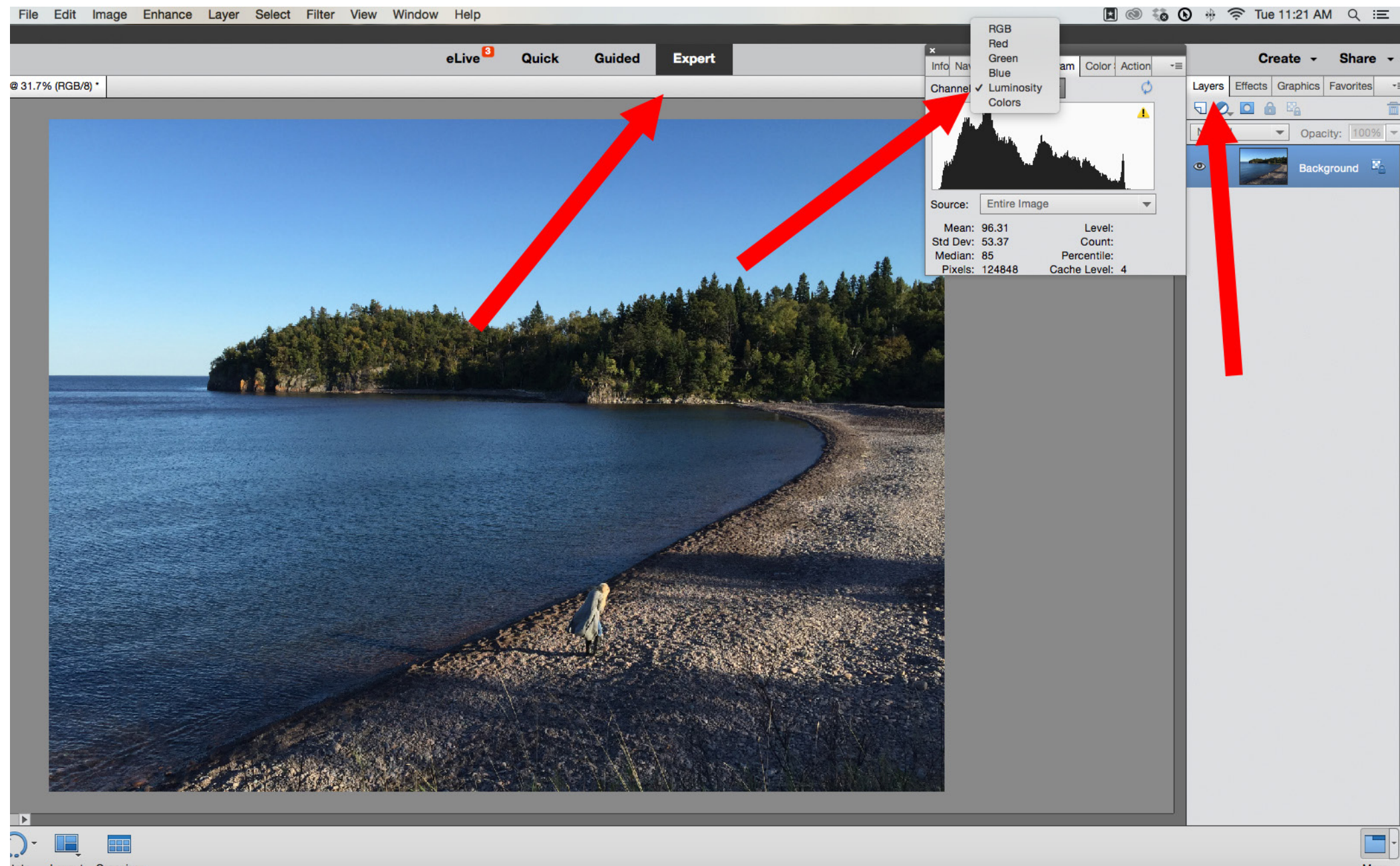


Illustration by Kent DuFault - Reference 043

**Step one:** Engage the "Expert Mode." Make sure that your "Layers" and "Histogram" are visible on the desktop. If they aren't, you will find them under the "Window" drop-down menu. Click on the "Channels" box within the histogram dialog box and set it to "Luminosity."



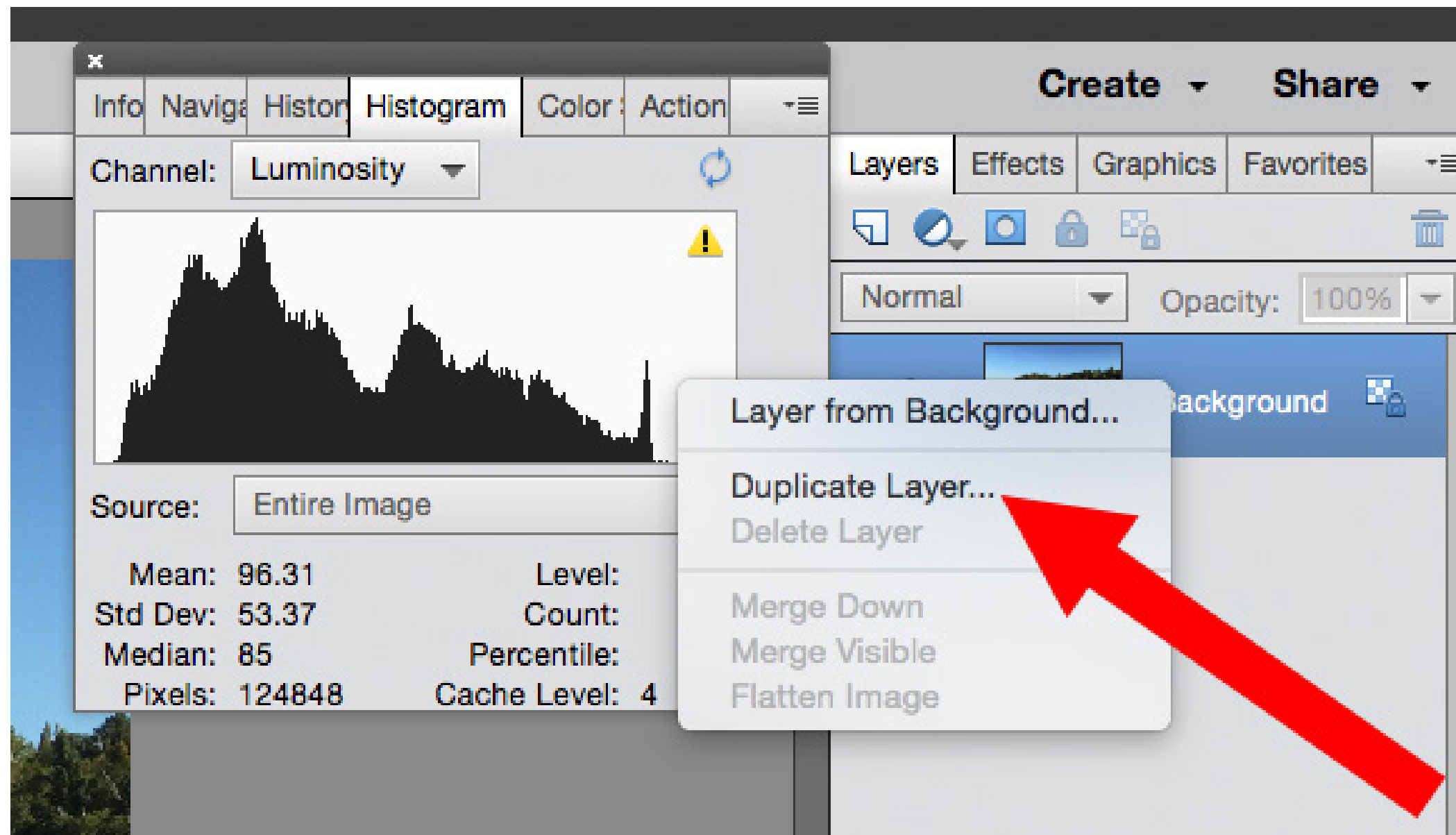


Illustration by Kent DuFault - Reference 044a

Highlight the "Background Layer" and then right click on it. Select "Duplicate Layer."

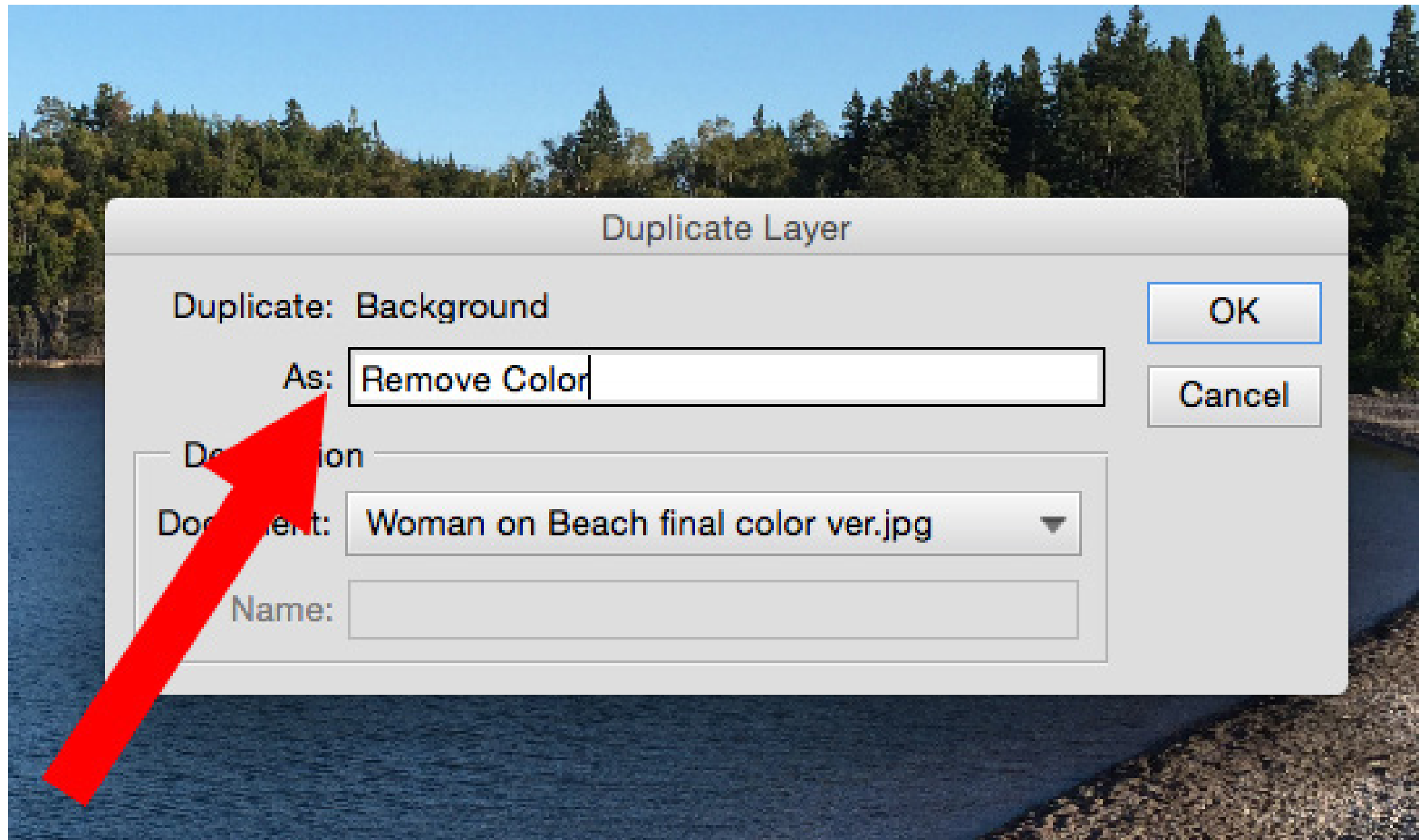


Illustration by Kent DuFault - Reference 044b

Rename your duplicate layer "Remove Color".



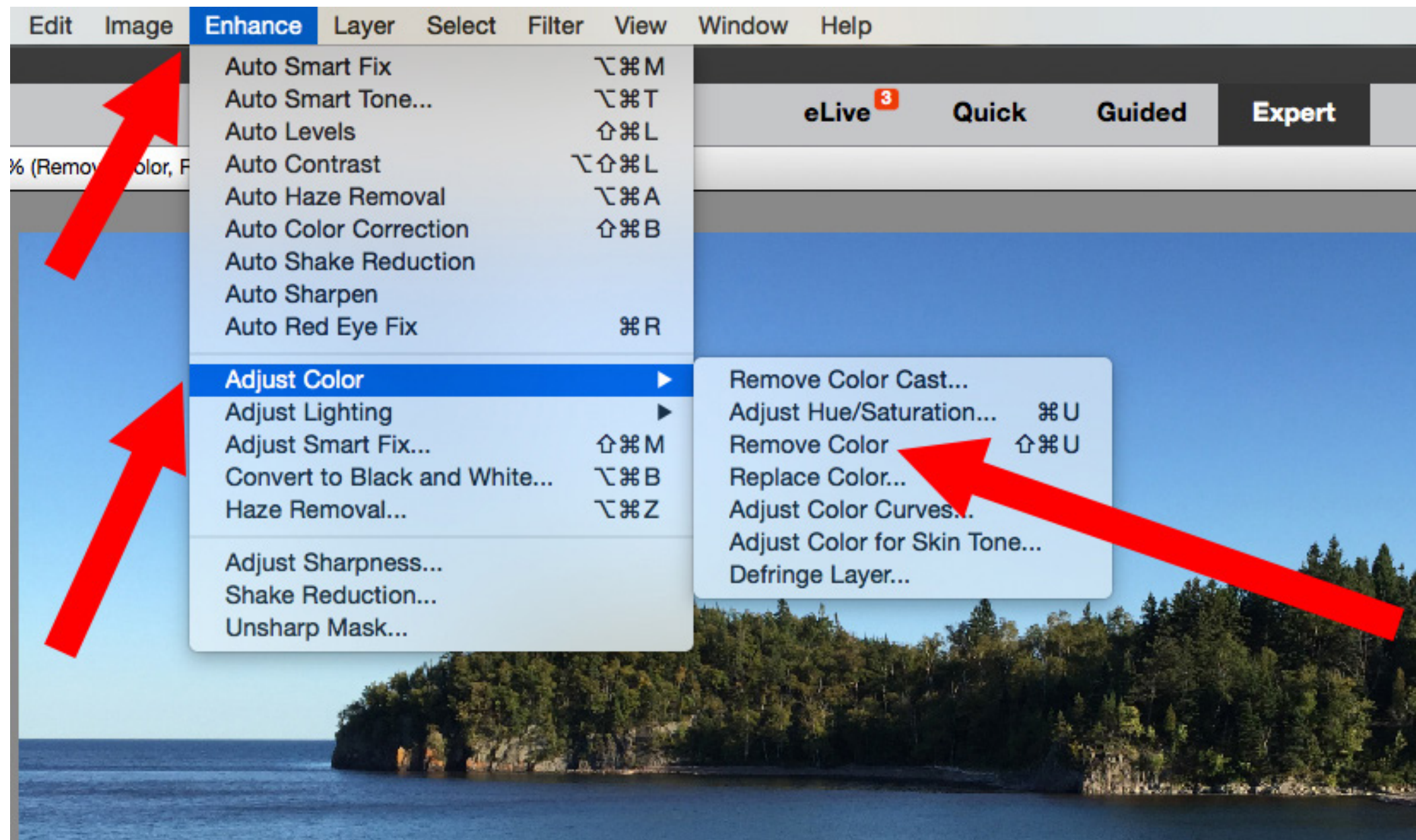
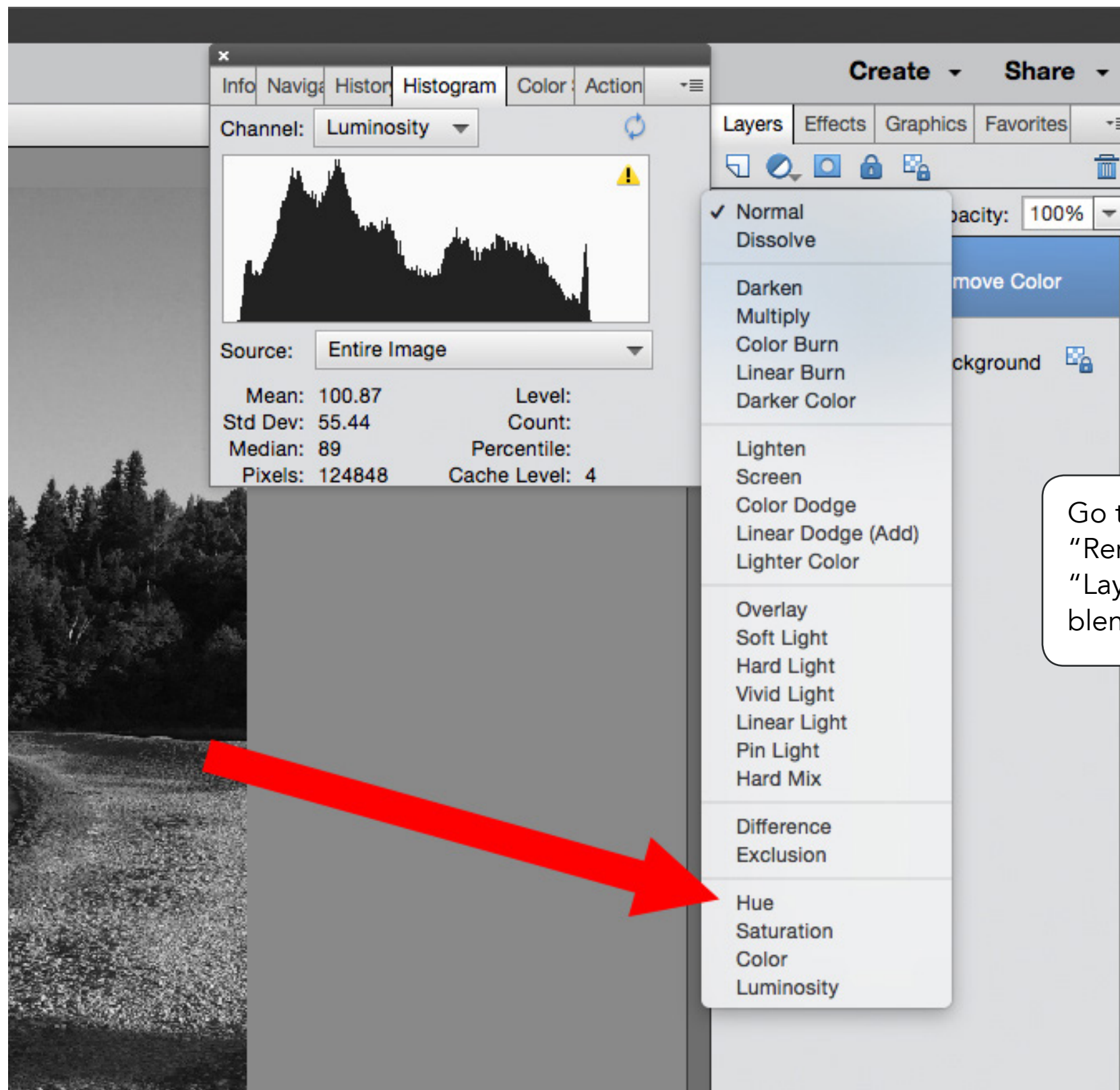


Illustration by Kent DuFault - Reference 045

Make sure that the "Remove Color" layer is highlighted. Go to the "Enhance" drop-down menu. Select "Adjust Color." Select "Remove Color."



Go to the "Layers Palette." Make sure that the "Remove Color" layer is selected. Click the "Layer Blending Modes" button. Change the blending mode from "Normal" to "Hue."

Illustration by Kent DuFault - Reference 046



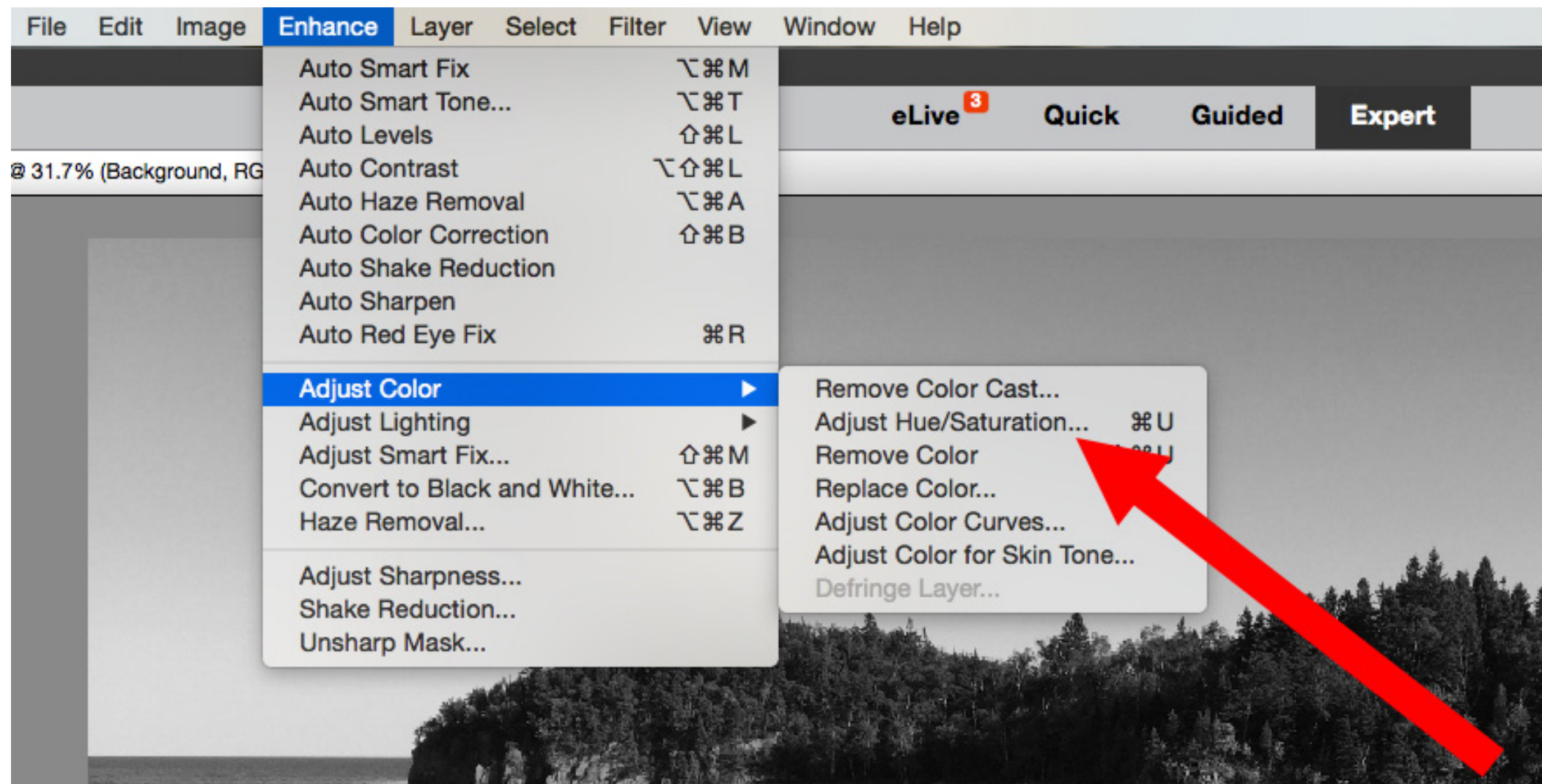


Illustration by Kent DuFault – Reference 047

Now select the "Background Layer." Open the "Enhance" drop-down menu. Select "Adjust Color." Select "Adjust Hue/Saturation."

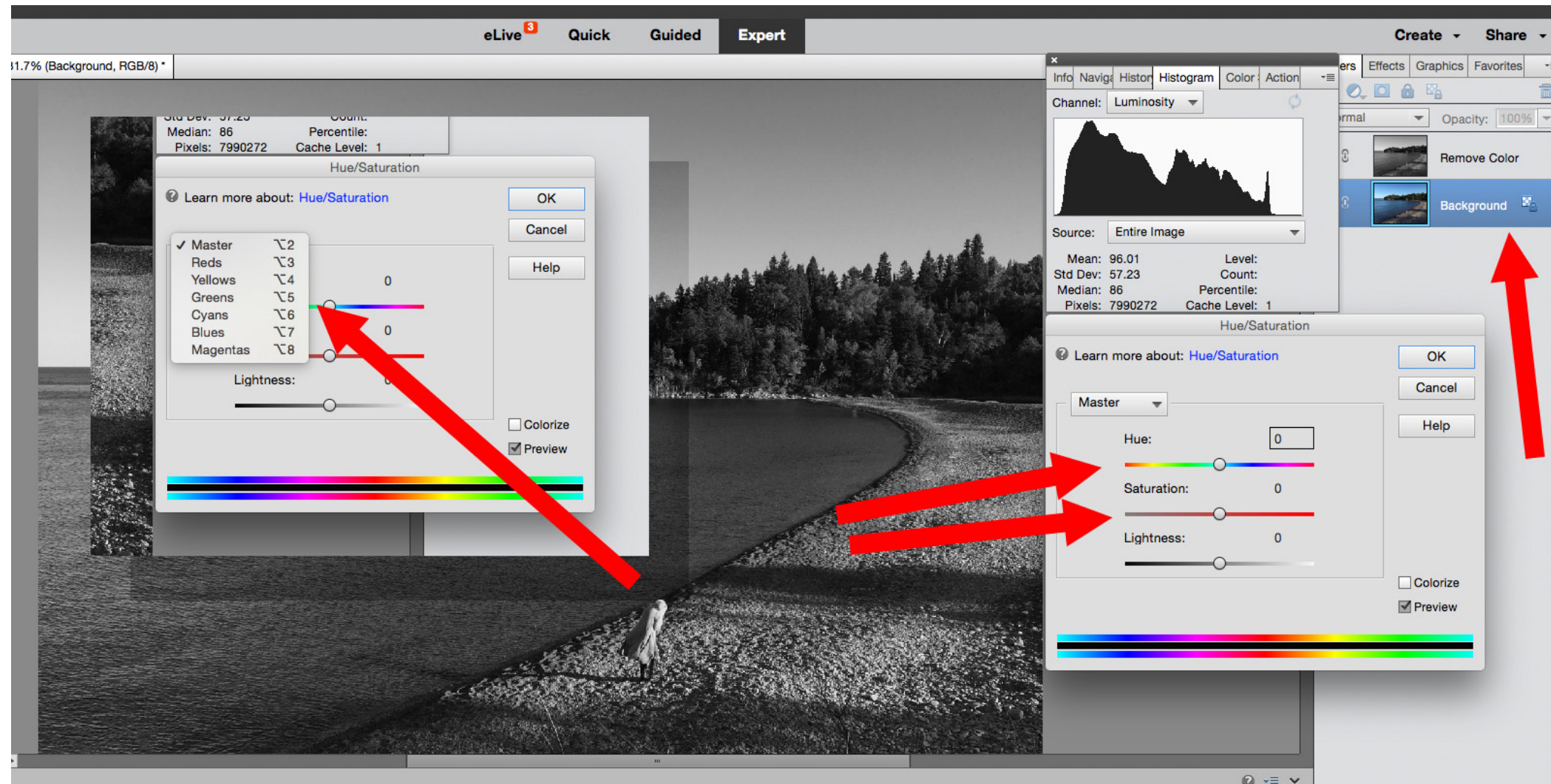
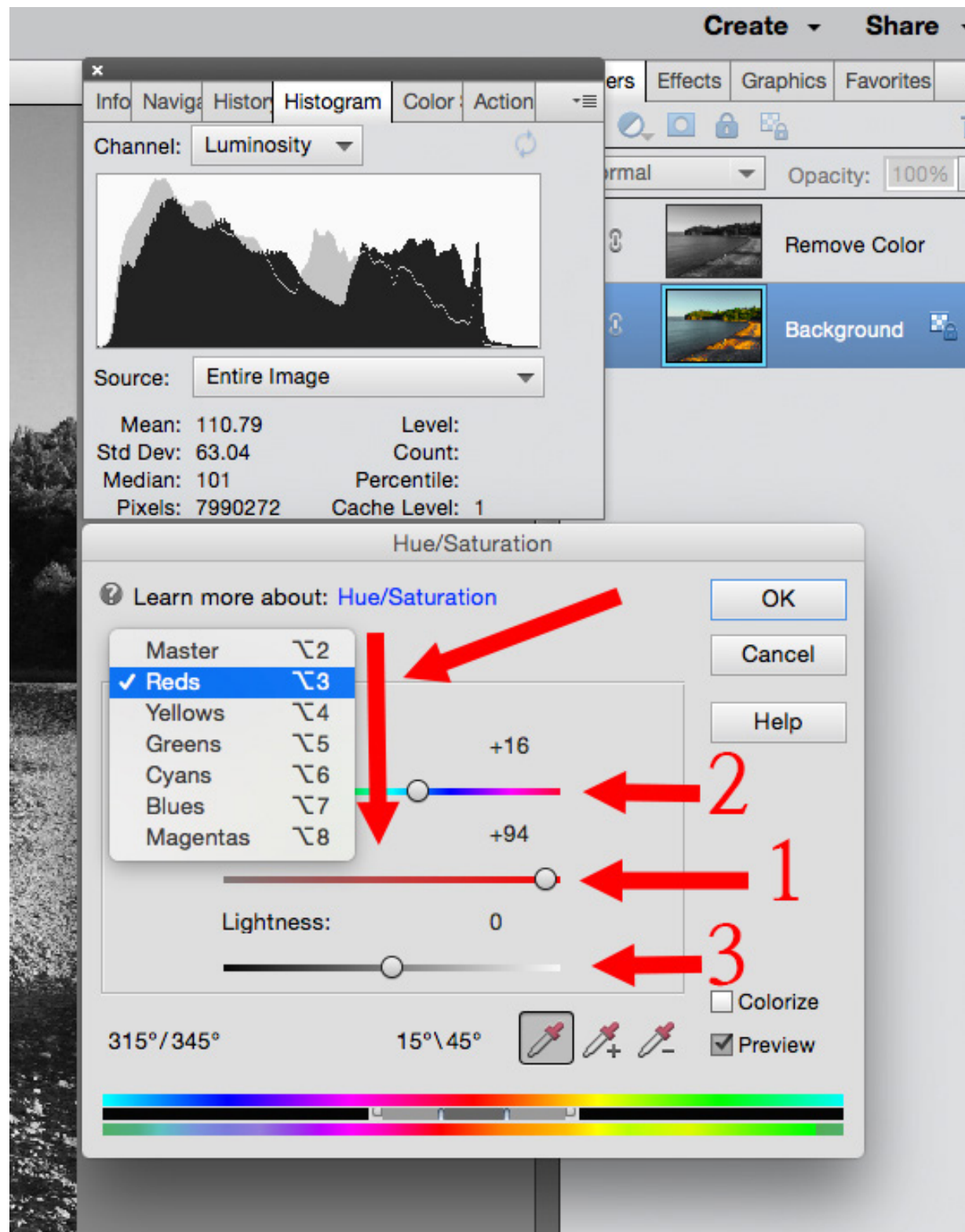


Illustration by Kent DuFault - Reference 048

In the Hue/Saturation dialog box you can select different color channels by selecting the "Master" button, and then selecting the "Color Channel" that you want to adjust. The "Hue" and "Saturation" sliders will affect your black and white image the most. The "Lightness" slider can have some effect. You can make tone adjustments to each channel. However, there isn't a benefit with working with adjacent channels like there was in Lightroom and Photoshop.

For example, remember in Lightroom where we adjusted the Yellows, but then the highlights on the woman became too bright, so we pulled back on the Reds and that reduced the tone on the woman? That doesn't work in Elements. So, while using this method, you can make more critical adjustments than the previously stated "Standard Methods." It still lacks the critical control of Photoshop or even Lightroom.





This is my methodology when working in the Hue/Saturation Window. I start in the Reds and work my way down channel by channel. In each channel, the first thing I adjust is the "Saturation." I push the slider all the way left and right, followed by a continued back and forth searching movement while watch the black and white image as well as the histogram. I want to make sure that my adjustments don't throw the histogram out of whack. After finalizing my decision there, I will adjust the "Hue" slider followed by the "Lightness" slider. I will do this from the Reds all the way down to the Magentas, one level at a time.

Illustration by Kent DuFault - Reference 049

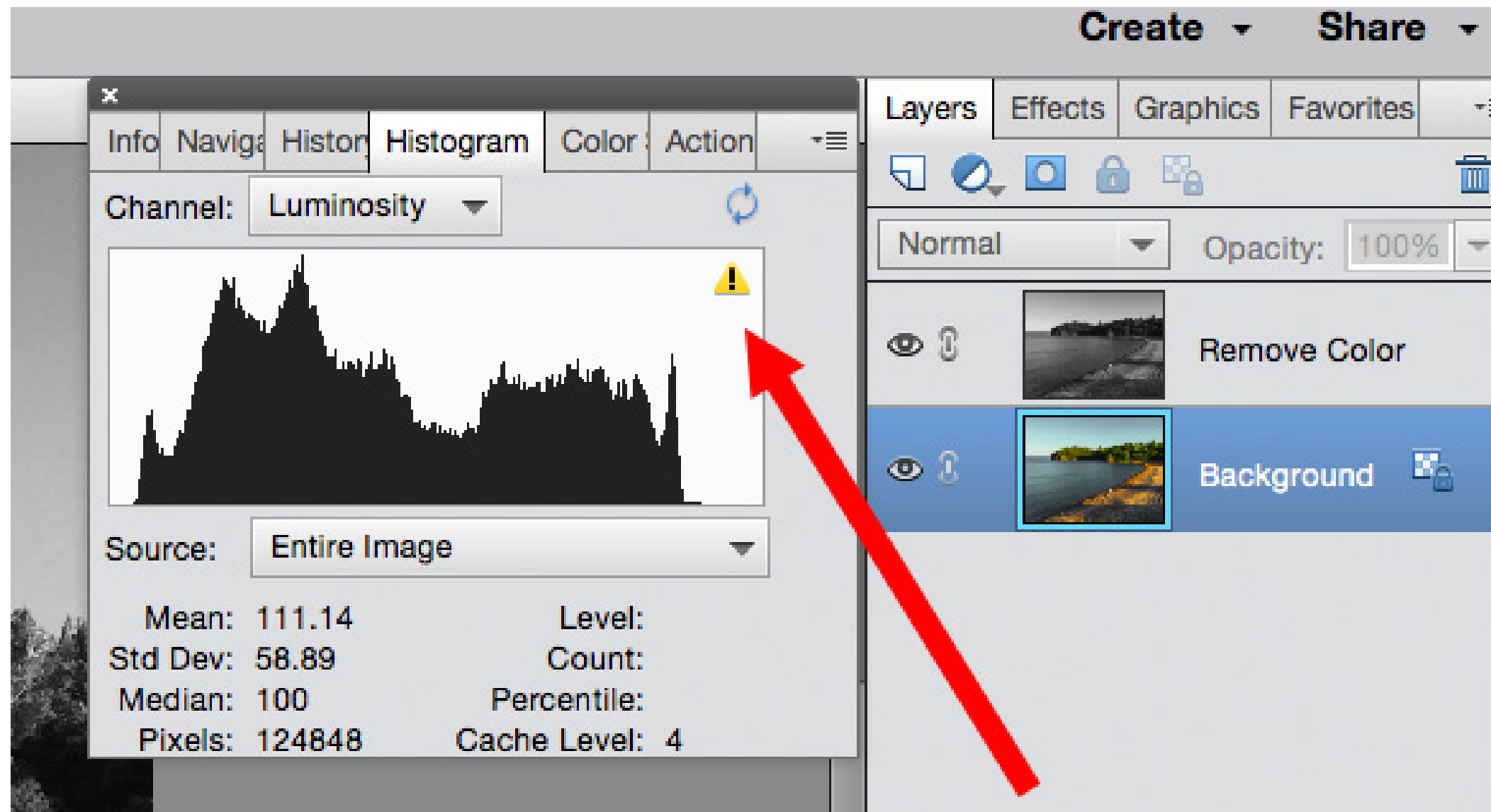


Illustration by Kent DuFault - Reference 050

**KEY LESSON:** As you're working on your file and trying different things, and perhaps undoing them, keep an eye on your histogram. If you see the icon shown in Reference 050, you want to make sure and click on it. What that icon is telling you is that you are looking at a "Cached Version" of the histogram—you are not looking at the "Current Version" of the histogram.

We have now made all of our tone adjustments. As you can see, the histogram is once again falling short of the end of the scale on both the Highlight and Shadow ends. We also had to make this final adjustment in both Photoshop and Lightroom, and now we are going to have to make the adjustment here in Elements.



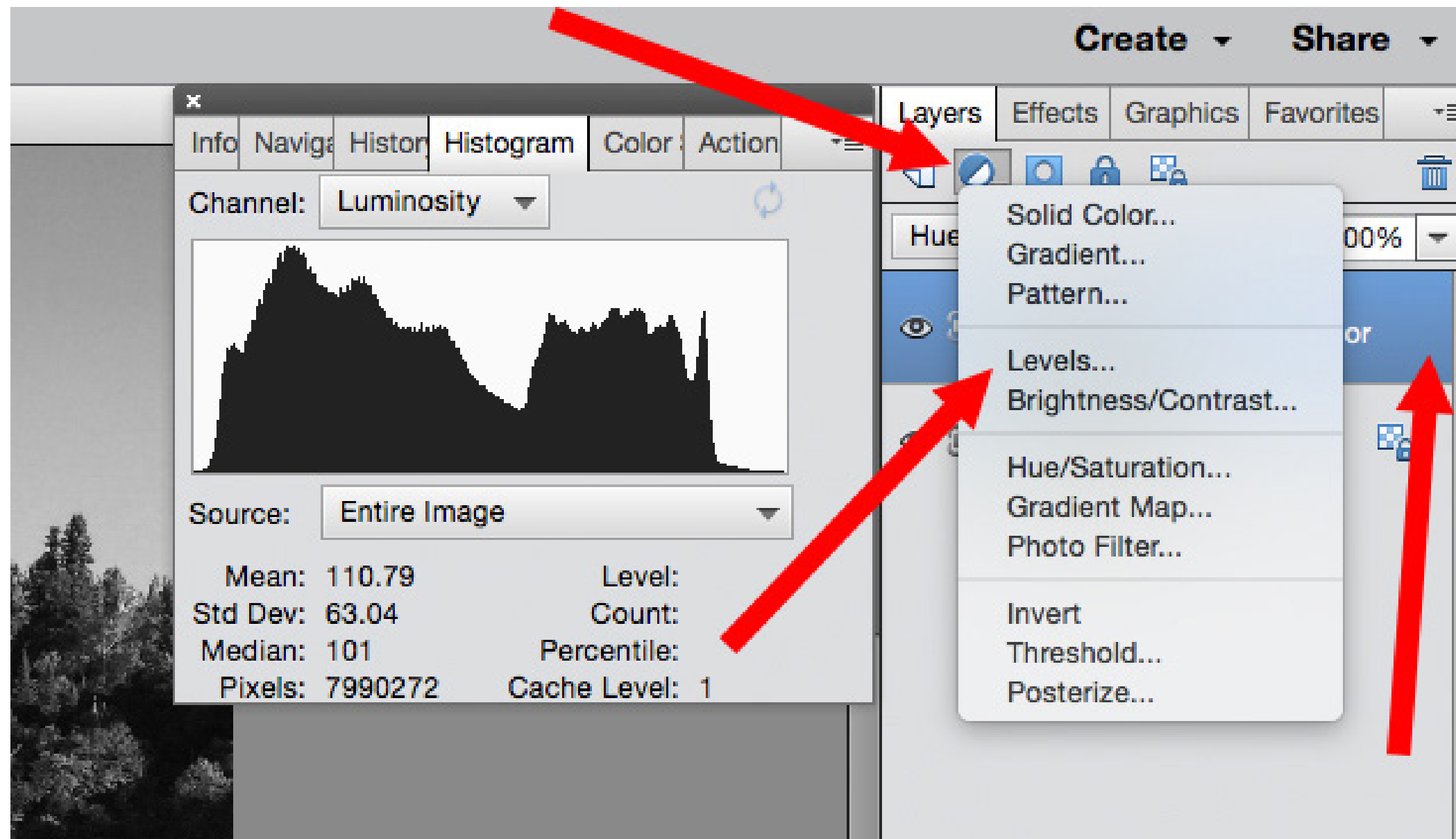


Illustration by Kent DuFault - Reference 051

Make sure that the "Remove Color" layer is selected. Create a new "Adjustment Layer" by clicking the icon next to the upper red arrow. From the drop-down menu, choose "Levels." In Photoshop, we would use Curves, however that option is not available in Adobe Elements.

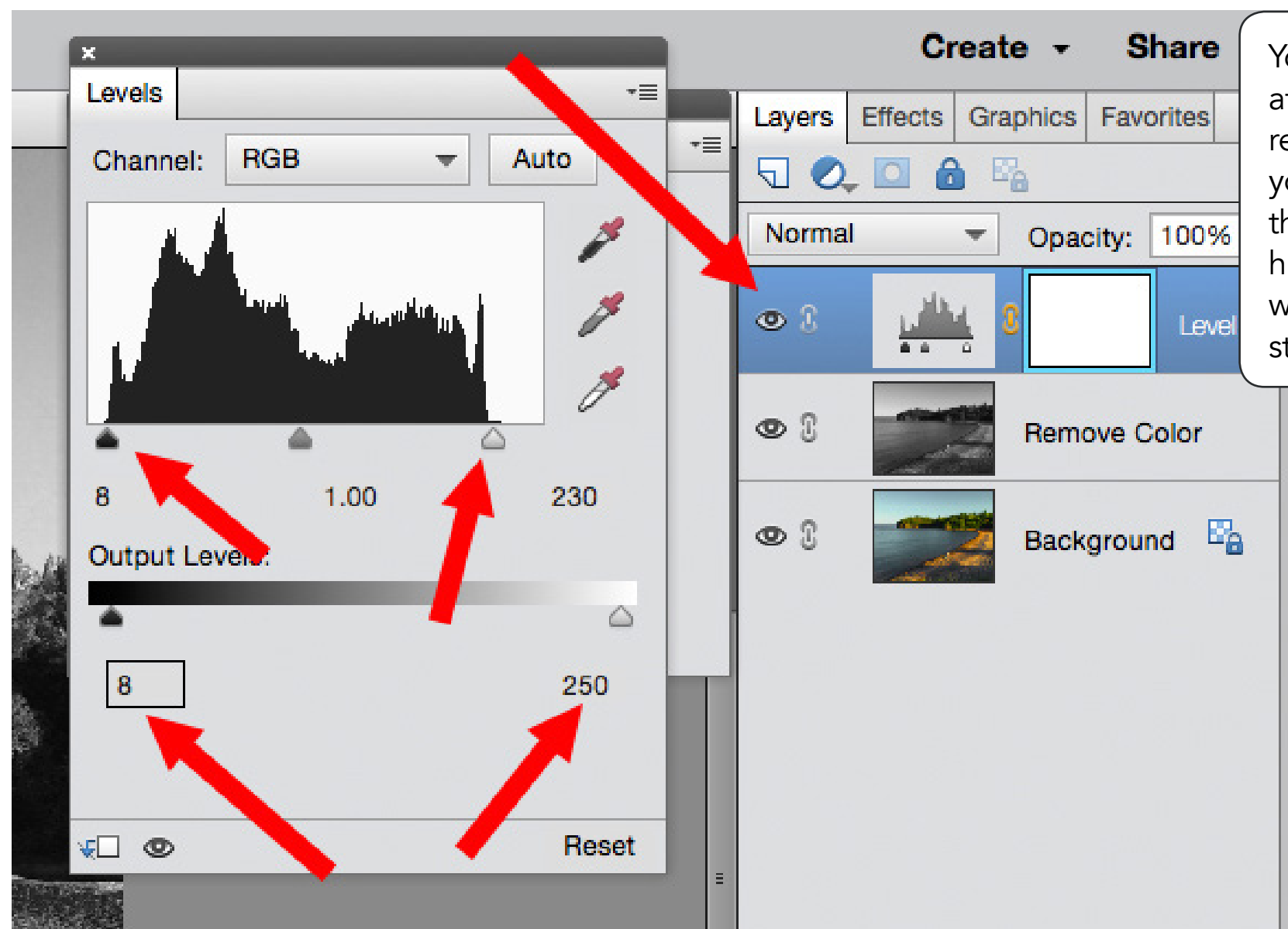


Illustration by Kent DuFault - Reference 052

Your Levels Adjustment Layer should be sitting at the top of the layer stack. Look at the two red arrows pointing at the histogram. Using your cursor, you are going to click on each of those diamond-shaped icons (shadow end and highlight end). Drag each of them inward to where the histogram currently ends. This will stretch the histogram out to a full tone range.

**KEY LESSON:** In Adobe Elements, you don't have the "Clipping Indicators" that you do in Photoshop (Raw window) and Lightroom. Here is a little trick that will prevent you from accidentally clipping either your highlights or shadows. Look at the "Output Levels" bar. First grab the "Shadows" Output Triangle on the far left. Drag it to the right until an "8" appears in the box below it. Now, go grab the "Highlights" Triangle and drag it to the left until you see a "250" in the box below it. By creating these settings, you've told Elements that no matter what the histogram looks like above, you don't want any brightness value below 8 or above 250 in your final image. This will prevent clipping.





When you've completed your adjustments, flatten the layers and save your image.

Here is my final image from Adobe Elements. How does it compare to yours?

Photograph by Kent DuFault - Image 053



## Photoshop



## Lightroom




## Elements



Photographs by Kent DuFault - Reference 054



### Self-Check Quiz

1. In Adobe Elements, should you do your color file to black and white conversion using the Grayscale Mode?
2. Name one of the three "concerns" with using the "Convert to Black & White" option.
3. What does the icon  tell you?
4. When using the color file to black and white photograph conversion process described in this guide, should you be in the "Guided Mode" or the "Expert Mode" within Adobe Elements?
5. After creating and naming your second layer, you will go to the "Enhance" drop-down menu then choose "Adjust Color." Which should you select after that, "Remove Color Cast" or "Remove Color"?

6. Which "Layer Blending Mode" will you use on your second layer in the stack?
7. When using Adobe Elements, what can you do to prevent "Clipping"?

Now this is a very interesting point. If you study the three final photographs in Reference 054, you will see clear differences between each conversion. This is despite the fact, that I did my level best to make them all look exactly the same given the tools at my disposal. Now, is one of them right and the others wrong? No. They're just different. I like the Photoshop version. Which one do you prefer?



### Recommended Reading

- [Advanced Composition](#)
- [Using Post-Production to Improve a Composition](#)



**06**

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**FINAL ASSIGNMENT**

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## Final Conversion Assignment

Below, you will find links to four very different color landscape files. I did not pick easy examples. They are going to challenge you.

Using everything that you've learned in this guide, and everything that you know about post-production and composition, I want you to do a color file to monochrome photograph conversion for each of the four images and save your results.

I want you to think of this as a professional assignment. I'm your client. I'm saying to you, "I love these four photographs. I want to reproduce them in my magazine. However, I need them to be monochrome. Do whatever you need to; just give me four awesome monochrome photographs!"



Here are the links:

[Assignment Number 1](#)



[Assignment Number 2](#)



[Assignment Number 3](#)



[Assignment Number 4](#)



I'm going to do the same four conversions using all of my knowledge about the conversion process, post-production, and composition and then I'll publish my results on the following pages.

When you're done, compare your results to mine. Don't cheat and look ahead. As you compare your results to my results, consider the following:

- ✓ Overall tonal range
- ✓ Details in highlights and shadows
- ✓ Contrast
- ✓ Levels of deepest blacks and brightest highlights
- ✓ Composition
- ✓ Mood

I will also share some of my thoughts with my published examples.





Editing by Kent DuFault - Image 055

## ASSIGNMENT 1

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Of the four assignments, my guess is that you found this one the easiest to convert into an outstanding black and white photograph.

Why do I say that?

Let's judge the original color file by what we learned in the guide.

1. Do we have directional lighting with highlights and shadows? Yes.
2. Do we have ample texture? Yes.
3. Do we have a histogram that indicates a broad sweeping level of brightness value across all of the Zones? Yes.

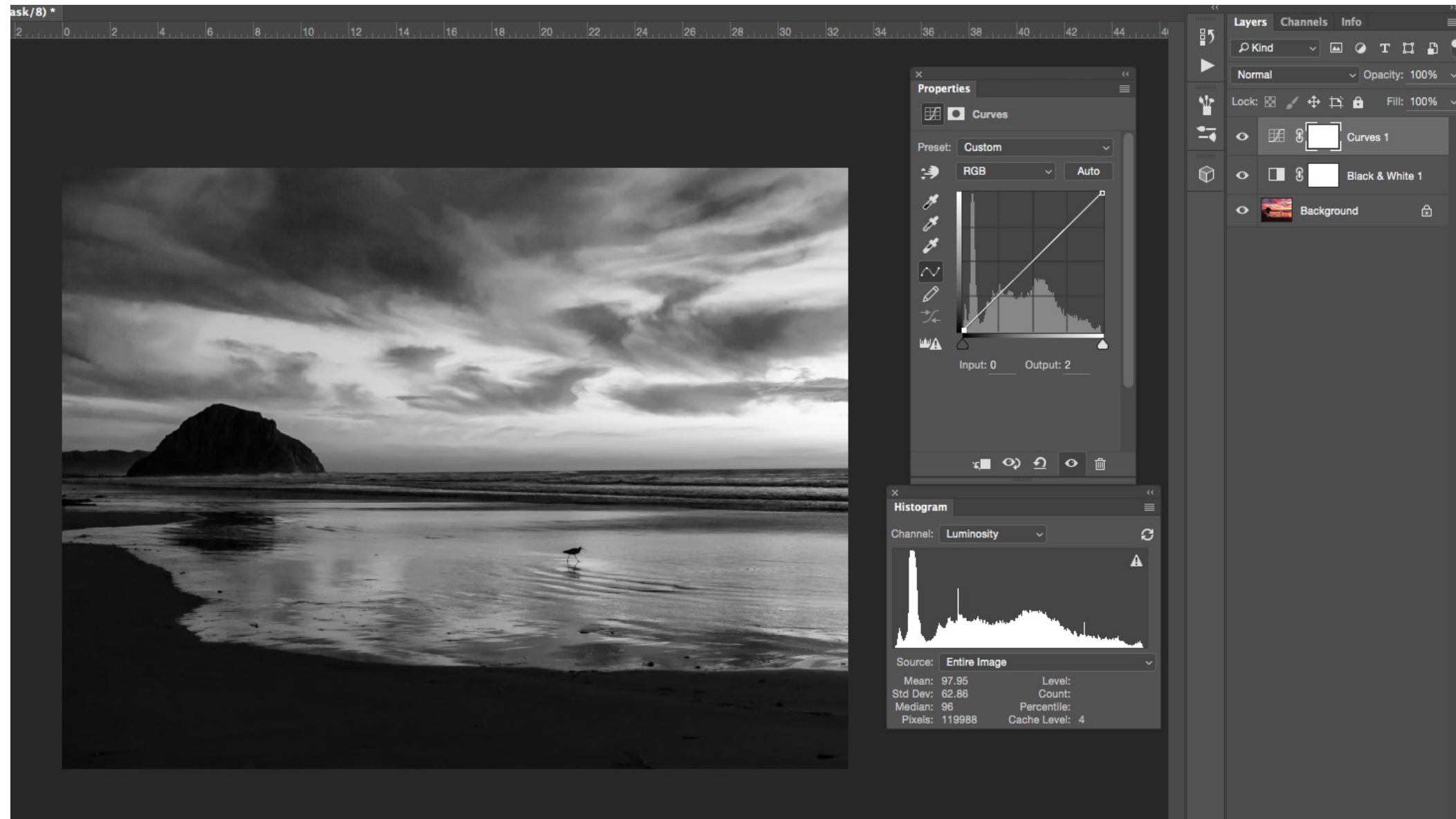


Illustration by Kent DuFault - Reference 056

Reference 056 shows you what my final histogram looked like. Take note that I put in a Curves Adjustment Layer to control my clipping. Can you spot any other post-production work?





## ASSIGNMENT 2

---

I bet your first thought when you saw my results for Assignment 2 went something like this:

"Wait a minute! This has a blue tone. That's not a true black and white photograph."

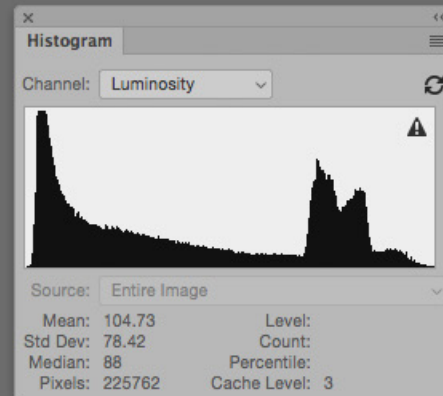
Go back and look at the assignment. It says, "Give me the best 'monochrome' photographs that you can."

I put this example in here because it can be so easy for us to put blinders on ourselves. Encourage your mind to stay open to all possibilities, even when you've been given specific parameters. I gave my version a monochrome blue tone because I felt that it helped establish a mood; it helped tell my story of cool fresh water thundering down the waterfalls.

Can you identify what other post-production work I did?

Photograph by Kent DuFault - Image 057





Here is what my final histogram looked like. Looking at the histogram, does it give you clues as to what my post-production tonal adjustments were? I brightened the water and all the mid-level tones that lead up the river to the people standing in the background. I darkened the foreground trees and rocks to form a 'frame' that pushes the viewer's eyes up that river. That's why, on the histogram, you see a 'peak' in Zones 2, 3, and 4. There is also a peak in Zones 7, 8, and 9.

Photograph and Illustration by Kent DuFault - Reference 058





Photograph by Kent DuFault - Image 059

### **ASSIGNMENT 3**

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Assignment 3 was by far the most difficult of the three assignments. Why was that? Let's take a look at the original color file and do our evaluation.





Photograph by Kent DuFault - Image 060

1. Do we have directional lighting with highlights and shadows?  
Not really. We have strong backlighting, but the majority of the light is not hitting the landscape. It's only skimming the trees at the top of the hill.
2. Do we have ample texture?  
Again, not really. There is texture there; that's for sure. But, the lighting didn't bring it out. That's something that we will have to deal with in post-production.
3. Do we have a histogram that indicates a broad sweeping level of brightness value across all of the Zones? Let's look at the original color file histogram.



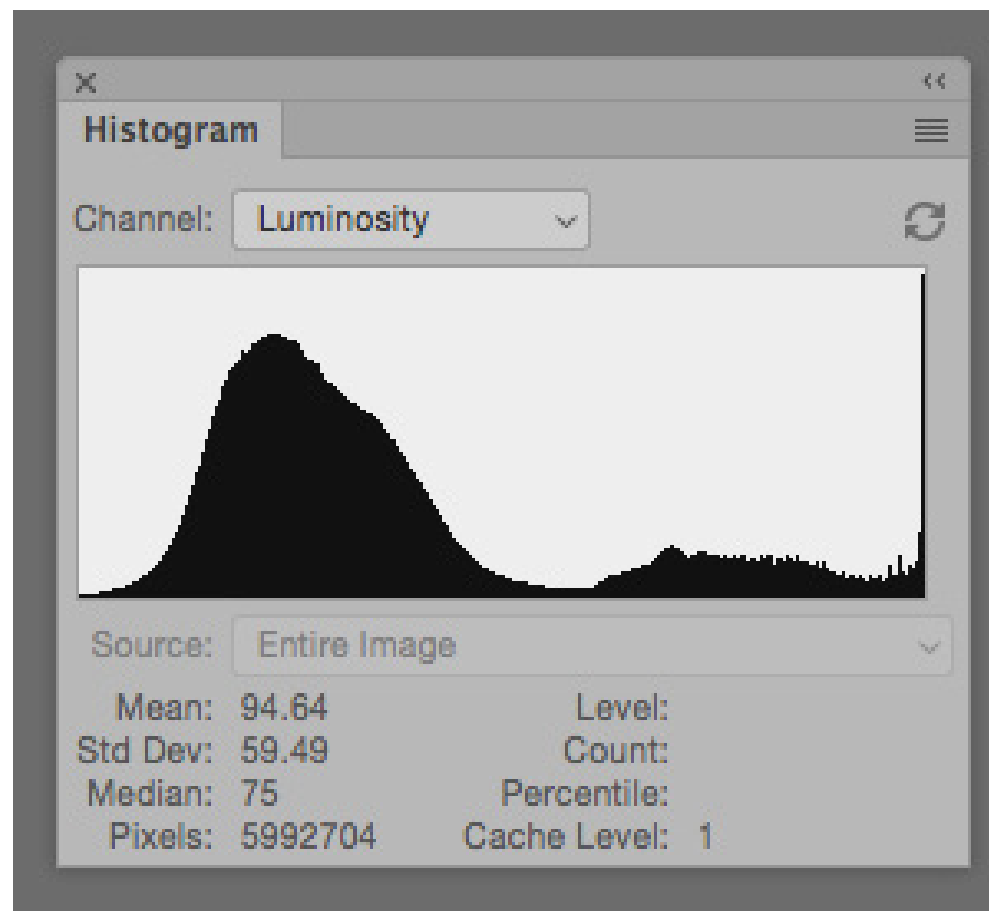
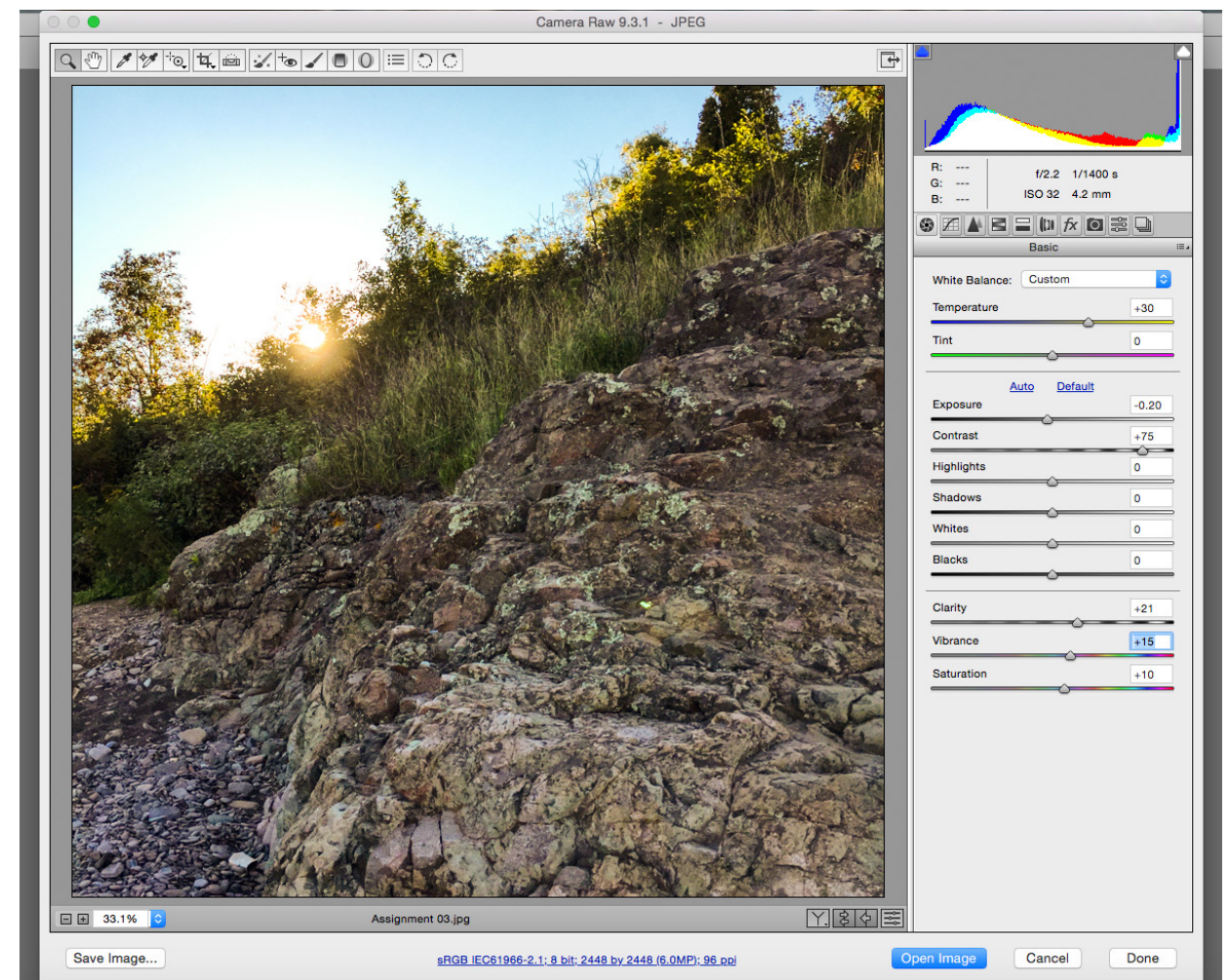


Illustration by Kent DuFault - Reference 061

The histogram tells us that the vast majority of the pixels are congregated in one area of the histogram scale. That means we do not have a broad sweeping histogram. Normally, we would consider ruling this image out.

However, we have a problem. Our client wants THIS picture.

Let's see what we can do to try and revive it...



Photograph and Illustration by Kent DuFault - Reference 062

If you are working on a less than perfect candidate for a conversion to a monochrome image (either black and white or toned), it's often helpful to tweak the color image before going about the conversion process.

Even if your tweaks don't look particularly good 'in color,' they may be just what a black and white photograph needs to sparkle in the end product!

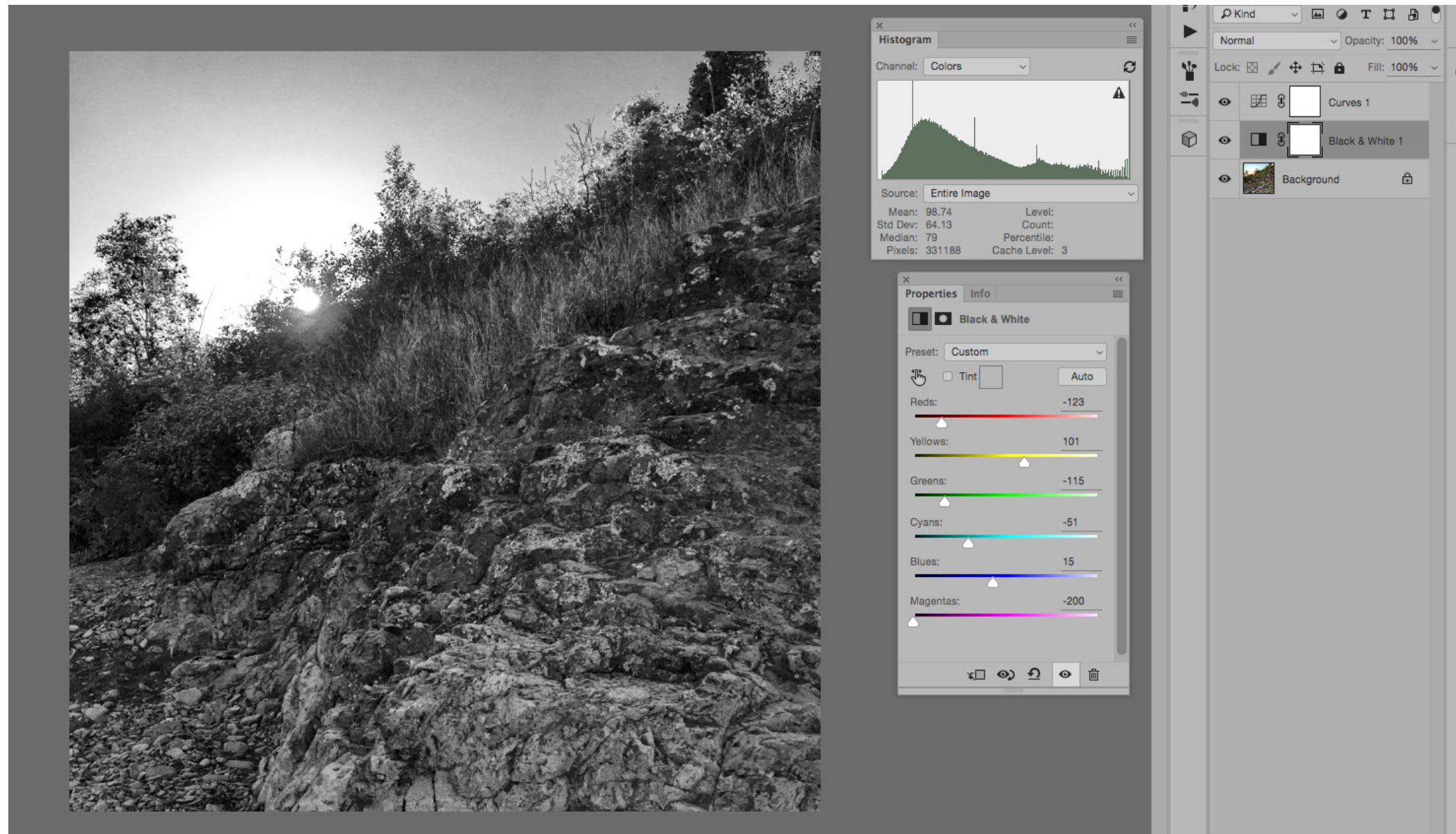


Illustration by Kent DuFault - Reference 063

Look at Reference 062. I made these adjustments in the Camera Raw Processing Window. I altered the color temperature, exposure, contrast, clarity, vibrance, and saturation. Compare that version to the original.

Now we have some contrast, texture, and a histogram that is sweeping more evenly from end to end!

Here, in Reference 063, you can see my Black & White Adjustment Layer settings. It's not looking too bad. In my opinion, it's still lacking enough contrast; I would like to improve the composition by using a composition technique called "Layering."



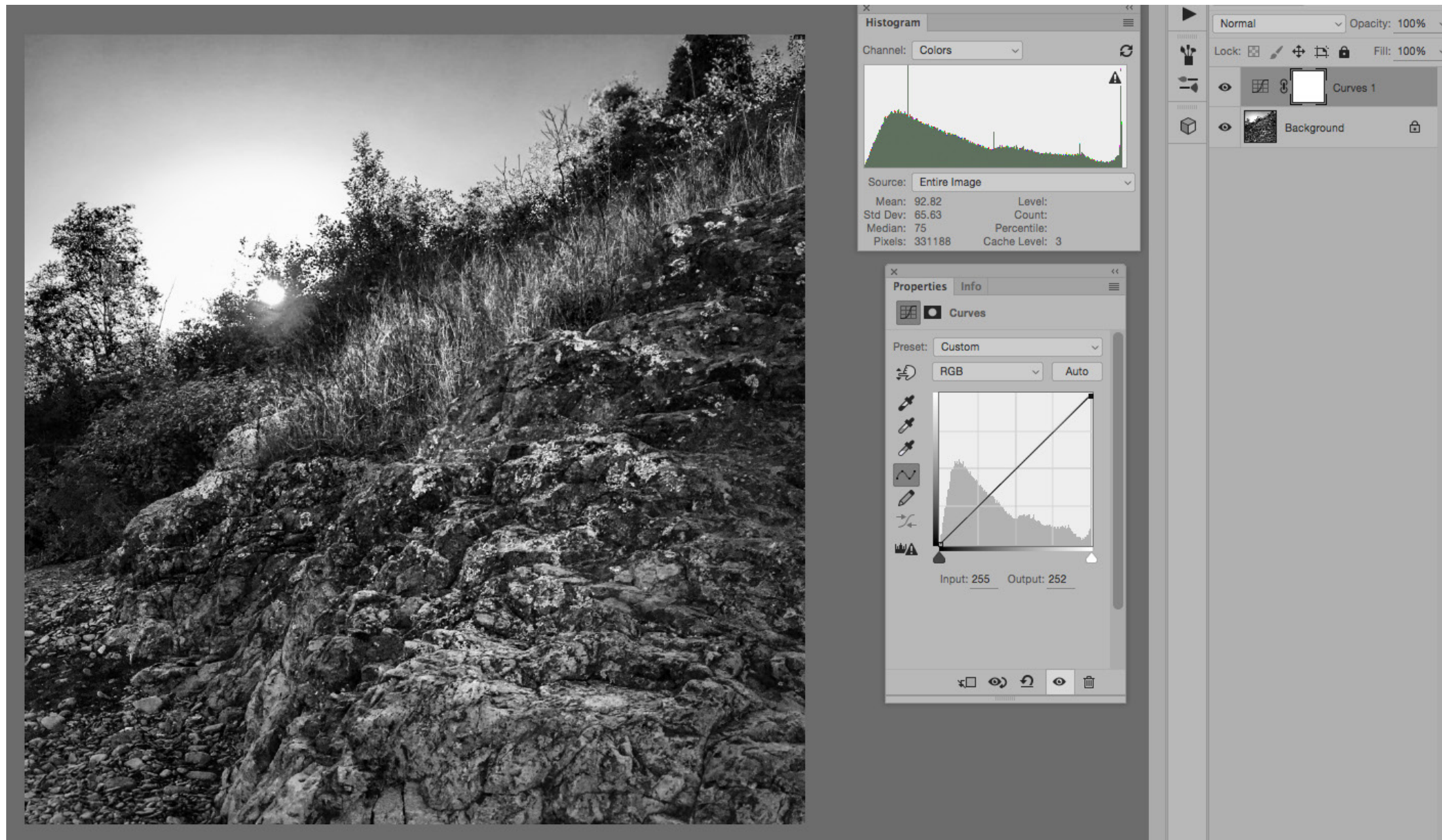



Illustration by Kent DuFault - Reference 064

To add contrast and control clipping, I added a “Curves Adjustment Layer.” I also did some touch ups on exposure and focus using the “Adjustment Brush” in the Camera Raw Filter within Photoshop. Can you spot the “Layering Effect”? Here is how it goes: dominant rocks with texture and contrast in the

foreground, followed by ‘brighter’ grass in a line, followed by the dark tree line that is almost complete black, followed by bright sun, followed by mid-tone sky as a frame, layers leading into the background.

 **KEY LESSON:** If you were to measure the sun and the close surrounding areas to it, it would measure 255 on the histogram. But wait! We're not supposed to have a 255. It lacks detail! Learning to evaluate a scene is really a primary skill for any photographer (but especially a landscape photographer). That sun is what is known as a "specular highlight." It's so bright that we really couldn't effectively look at it with our own eyes. It's supposed to be bright and blinding—that's how nature intended it. If we tried to reduce the exposure of that area to within the 255 histogram scale, it wouldn't look real. Sometimes, you're going to have a 255 or a 0. It's up to you to "read" the scene.

Finally, once again I added a slight tone to my final "monochrome" image. I added a slight sepia tone. I did so because I felt it helped lend a "warmth" to the setting sun.





Original Photograph by Matthew Hunt and Editing by Kent DuFault - Image 065

## ASSIGNMENT 4

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On the face of it, this image probably looked fairly easy to you. It definitely met our criteria for a good candidate as a black and white photograph.

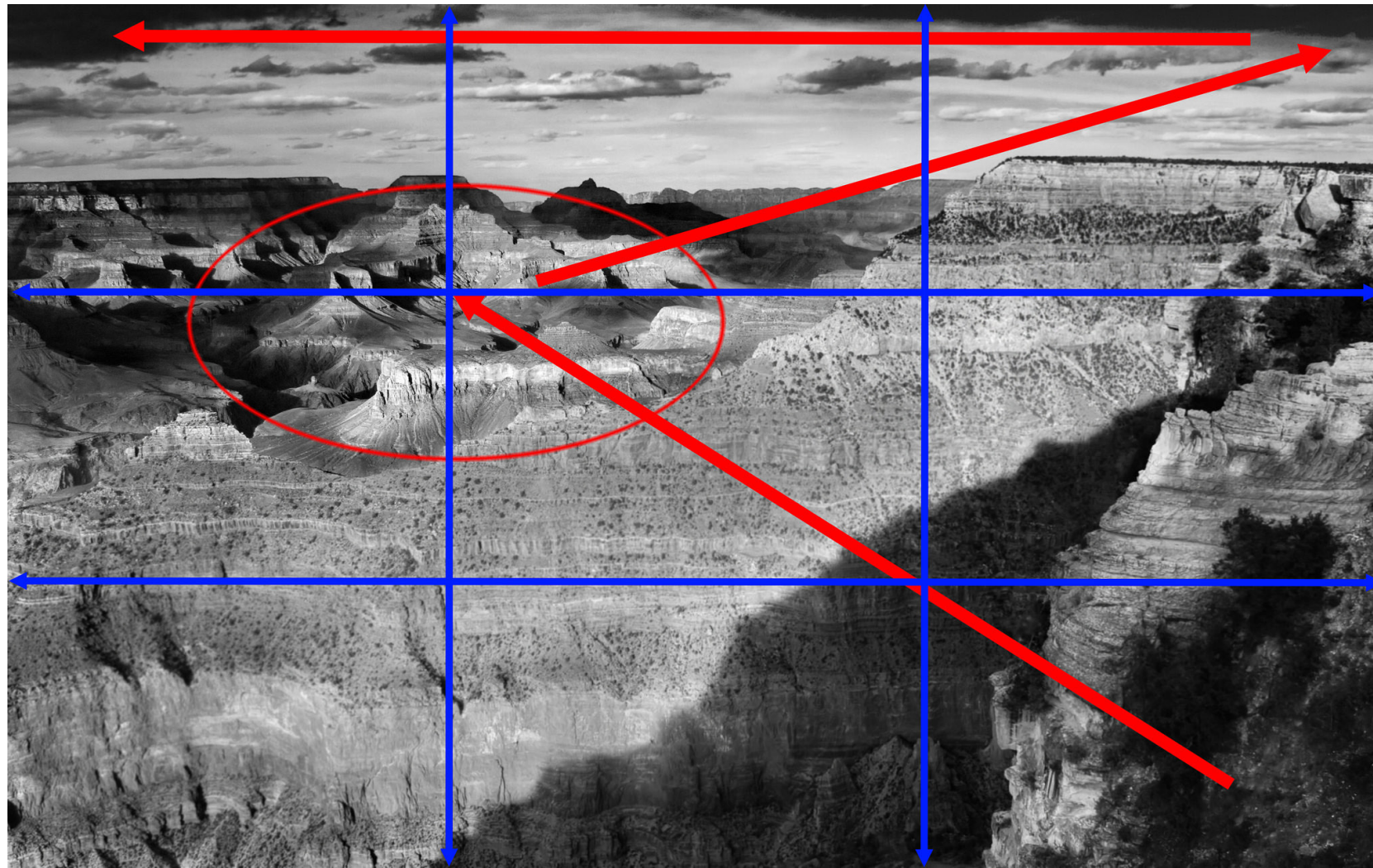
My problem with this image was how the original photograph was created. It did not have a clear compositional path through the image. Composition is just as important in a black and white photograph as it is for a color image.

So, even though the tone, texture, and lighting looked okay from the conversion process, the photograph still lacked that needed punch, or purpose, to make it excel.

It was with this photograph that I did the most post-production manipulating.

Let me show you what my plan was.





Original Photograph by Matthew Hunt and Editing by Kent DuFault - Reference 066

I decided that where the oval is located is where I wanted my viewer's eyes to come to rest. Essentially, this became my focal point and subject. How did I accomplish that in post-production? Thinking back to what we have learned about monochrome images, we know that contrast, texture, light, and tone direct the viewer's interest. Now, taking that knowledge and applying some knowledge of composition, here is what I did.

1. I placed my subject area in the Rule of Thirds "sweet spot" through cropping.
2. I established a path into and through the shot using a Z curve.
3. I set up the Z curve through the use of "compositional layering" from the foreground to the background.
4. The original photograph was sharp from front to back. I used some blurring techniques to reduce focus on the foreground and in the sky. This left my subject area as the sharpest part of the image, which will attract the viewer's eyes.



5. Finally, using the adjustment brush, I enhanced contrast in my subject area and reduced contrast outside of that area.

Here is the final histogram for Assignment 4.

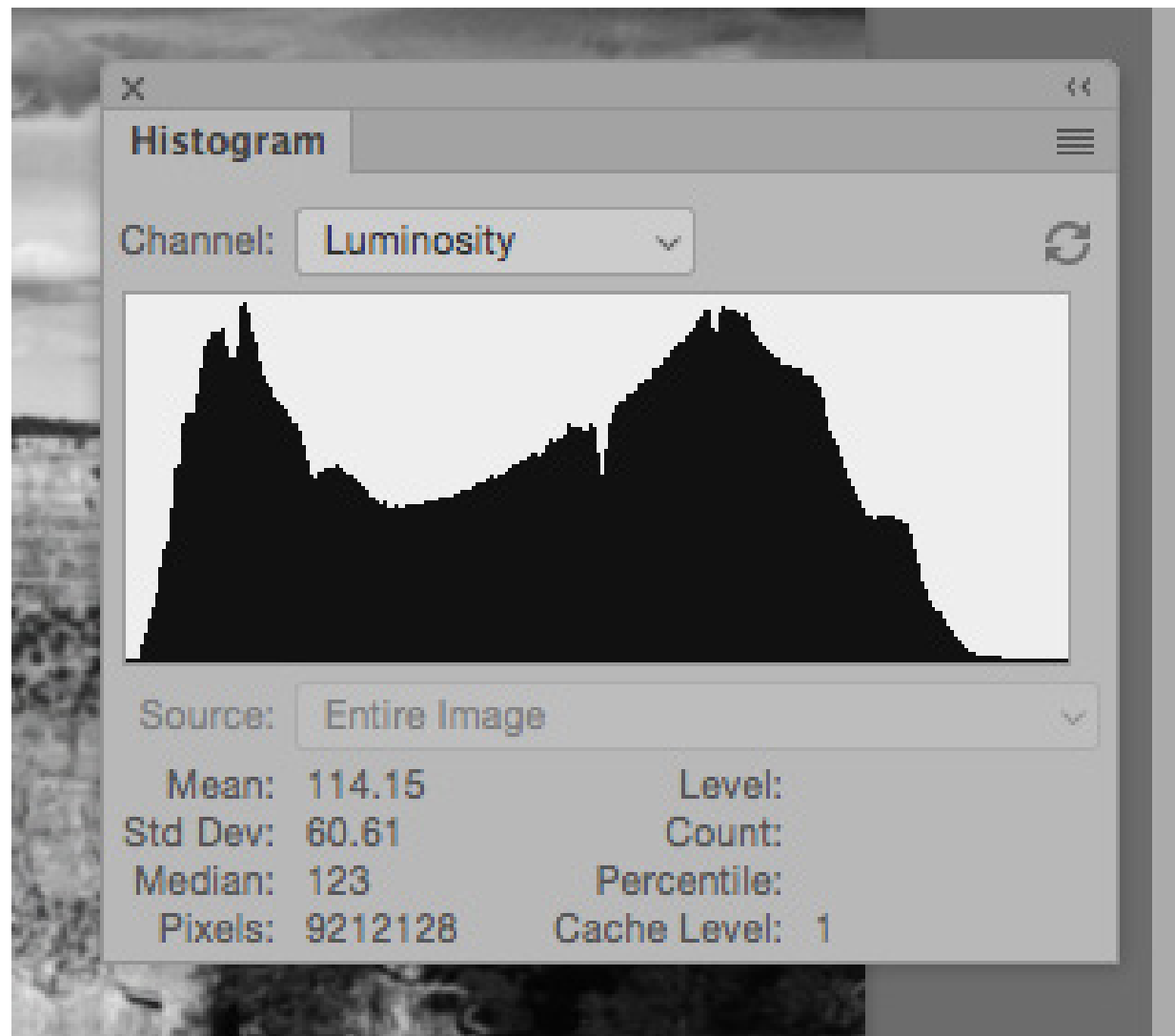


Illustration by Kent DuFault - Reference 067

## **Final Assignment Self-Check Quiz**

1. How do you control clipping?
2. Which level of the Zone System is 18% gray?
3. True or False – The tone brightness values within your monochrome image can be used as elements of composition in your final photograph.
4. If your color file is flat in contrast, can you consider it as a candidate for conversion to a monochromatic image?
5. Describe what “Layering” in composition means.
6. True or False – We never, ever, want any part of our monochrome image to fall into the 0 range of the histogram.
7. True or False – Composition is as important to a monochrome image as it is to a color image.
8. What is the definition of monochrome?
9. Does Zone 2 fall into the light end or the dark end of the Zone System scale?
10. If a histogram has a “tall hump” at one end of the scale, and the rest of the scale is flat, what does that tell you?

11. Name the best method for conversion of a color file to a monochrome image within Photoshop.
12. In Lightroom, do you control your tone values during the conversion process by using the "Basic" tab?
13. True or False – Of the three Adobe products discussed in this guide, Adobe Photoshop Elements provides the superior method for converting to a monochrome image.
14. True or False – During the conversion process, applying a red filter will cause all red objects within your image to turn darker.
15. Which of these settings, when applied to your color image file before conversion, can have a drastic effect on the final tone values: Clarity, Saturation, Sharpening, or Color Temperature?
16. True or False – A sepia image is the same as a black and white photograph.



### **For You Only**


Go back to your originally selected photographs that you saved in a folder.

Following everything that we've discussed, I'm your client. I want you to give me the best black and white photograph of each one that you can produce.

When you're done, pick the best one. Upload it to the Photzy Facebook page and tell us why you think it is your best effort.

We will give you plenty of kudos!





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Keep on shooting, folks!  
Kent

Image by Jean Hutter



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