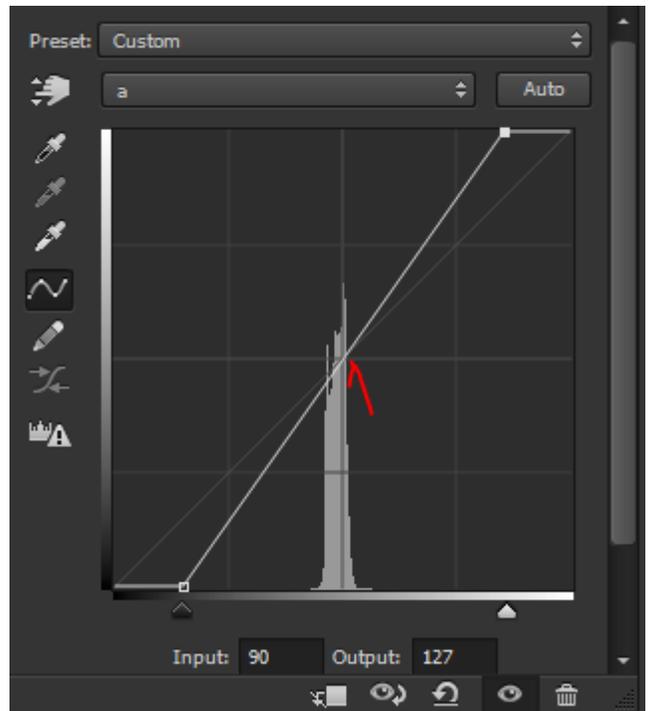


## Boost & change colors using Lab Color mode:

1. First make all your necessary adjustment in Photoshop/Lightroom to improve your composition such as Adobe Camera Raw Basic panel adjustments, cloning out unwanted objects, cropping, etc.
2. Merge all visible layers (**Ctrl+Shift+Alt+E**) and double click the layer name and rename it to **Lab Color Copy**. Right-click on the right side of the layer name and choose **Convert to Smart Object**.
3. Then double-click the smart object layer thumbnail. A new document will automatically open in a new tab or window (named **Lab Color Copy.PSB** – an Adobe Photoshop Large Document file which supports documents up to 300,000 pixels in any dimension).
4. **Convert to Lab Mode to boost colors:**

- With the new PSB document open, go to **Image>Mode>Lab Mode** and select **Lab color**.
- When you convert your image to Lab Color mode the Channels will change to show 'Lightness', 'a' and 'b'. Lightness is a black-and-white version of the image, while 'a' and 'b' channels represent all the colors. This enables you to enhance color and detail independently of one another, producing a vibrancy of color that wouldn't be possible in the RGB mode

- Depress the **Create a new fill or adjustment layer** icon at the bottom of the Layers panel and choose **Curves**. Notice the channel menu will initially display Lightness. If you depress the channels mode down-arrow you can select either the 'a' channel (green-red axis) or the 'b' channel (blue-yellow axis).
- Change the channel mode to the 'a' channel and drag the clipping sliders inward by the same amount so that the middle of the curve goes over the exact center to boost the colors. There is no set amount to move the left clipping slider, but as a guide drag the slider until the Input number reads **-90**. The image will probably turn an ugly shade of green. You'll need to even out the color shift by moving the white clipping slider the same distance inwards. In this case you would move the slider left until the Input number reads **+90**. Note: to get exact values, place your cursor inside the Input box and use the up/down arrows.



- Repeat the same for the 'b' channel. Click on the channel drop-down again and choose the 'b' channel. This channel affects the blues and yellows in the image. Once again, bring the black and white clipping sliders inward by the same amount you did for the 'a' channel.
- Click on the Curves adjustment layer visibility icon (eyeball) to view and examine the before/after image. The colors should appear richer and more vibrant. If you did not get much of a color boost, increase the endpoints of the 'a' and 'b' channels a little bit more (down to 80 if you are using input numbers). However, if the colors look too embellished, drag the sliders out a little bit (about 110 on each side). Or you can reduce the effect by decreasing the **Opacity** of the Curves Adjustment layer.

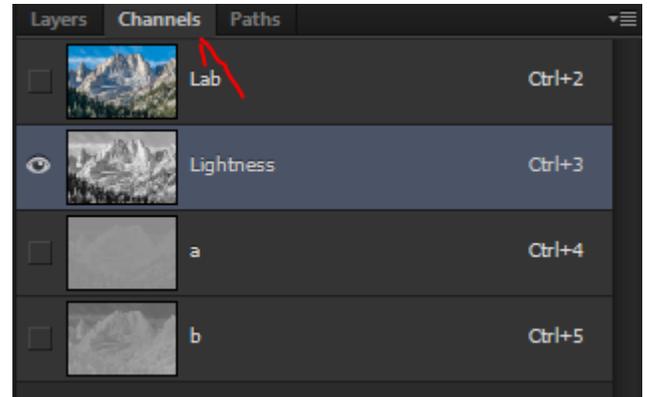
If you want to boost the colors in a certain parts of the image, highlight the Adjustment layer mask and paint black on the areas you don't want to change.

- **The enhance a single color (Red, Green, Blue & Yellow):**
  - **Boost Green:** Select the 'a' channel and drag the bottom left clipping slider to the right to increase green.
  - **Boost Red:** Select the 'a' channel and drag the bottom right clipping slider to the left to increase red.

- **Boost Blue:** Select the 'b' channel and drag the bottom left clipping slider to the right to increase blue.
- **Boost Yellow:** Select the 'b' channel and drag the bottom right clipping slider to the left to increase yellow.
- Again you can paint in black on the mask to remove the color change to areas you don't want to change. Note you can reduce the Brush Opacity (Options bar) if you want to partially remove the effect.

## 5. Dodge & Burn the Lightness channel:

- Highlight the Lab Color Copy background layer and go to the Channels panel and select **Lightness**.
- Use the Dodge and Burn tools to add depth by darkening Shadow areas and brightening highlight areas.
- To do your editing non-destructively, it's recommended to do dodging and burning on a separate layer by holding down the **Alt** key and depressing **Create new layer** icon. A dialog box will appear and select **Overlay** for the Mode and check the **Fill with Soft-Light-neutral color (50% gray)** box.
- Select the **Burn tool** (above the Pen tool) from the Tools palette and set Range to **Shadows** and Exposure to **10%**. Choose a small soft brush (depress **Ctrl+Alt** keys and right-click to quickly adjust your brush size and hardness).
- Zoom in close and paint along lines and shadow areas of the image.
- Use the **Dodge tool** to brighten highlight areas. Set Range to **Highlights** and Exposure to **10%**. Note you can hold down the **Shift+O** keys to toggle between the three toning tools (dodge, burn, & smudge).
- Each time you release the mouse button and start painting again, the amount of Dodge (or Burn) builds up.
- Click on the Lab channel to return to the color version in order to check the results of your work.



## 6. Apply Sharpening:

- You will be sharpening the Lightness channel since you will be sharpening black, gray and white pixels without sharpening color pixels.
- Make sure your Background layer is highlighted and then switch from the Layers panel to the **Channels panel** and select the **Lightness** channel only.
- Choose **Filter>Sharpen>Unsharp Mask**. Set **Amount** to 84, **Radius** to 1.2 and **Threshold** to 2. Click **OK**.
- Re-enable all channels by clicking the Lab channel and return to the Layers panel.

## 7. Close the PSB document and save changes to your original document:

- Make sure the Lab channel is highlighted or you are in the Layers panel. Then depress the 'X' (next the document file name) to close the document. A popup dialog box will open and select **Yes** to save all your adjustments back to the original document.
- In your original document, all the changes will be applied to your **Lab Color Copy** Smart Object which will revert automatically to the RGB color mode.
- Toggle the layer Eye visibility icon on and off to determine if the adjustments were too strong. To reduce the effect do the following:
  - Add a Mask to the layer by clicking on the **Add layer mask** icon at the bottom of the Layers Panel. Then select a black soft edged brush with an Opacity set to 30%.
  - With the Mask highlighted, gradually paint over the image to tone down areas of the photo.
- **Boost Contrast:**

- Click the **Create new fill or adjustment layer** icon at bottom of layers panel and choose **Curves**.
- Change the blend mode of the adjustment layer to **Luminosity** so the colors don't change.
- Create an 'S' curve by dragging down the curve in the shadow area and dragging up the curve in the highlight area.